THE NDL ORGANIZATION, INC.
P.O. Box 791
Peekskill, NY 10566
(914)737-7200 FAX (914)737-9244

printed 11-28-95

RADIOACTIVE WASTE DISPOSAL PRICE LIST

Effective December 18, 1995

DESCRIPTION	CATEGORY	ITEM	$ COST	TOTAL
SCINTILLATION MEDIA:				
30Gal Vials on Delivery	SR	DEL-30G-SR	115.00	
30Gal Vials on Removal	SR	REM-30G-SR	222.85	337.85
30Gal Vials on Delivery	SM	DEL-30G-SM	115.00	
30Gal Vials on Removal	SM	REM-30G-SM	170.90	285.90
30Gal Vials on Delivery	SX (non-radioactive)	DEL-30G-SX	115.00	
30Gal Vials on Removal	SX (non-radioactive)	REM-30G-SX	113.50	228.50
30Gal Bulk O/P on Delivery	SX (non-radioactive)	DEL-30G-SX-BLKO	115.00	
30Gal Bulk O/P on Removal	SX (non-radioactive)	REM-30G-SX-BLKO	40.25	155.25
30Gal Bulk on Delivery	SX (non-radioactive)	DEL-30G-SX-BLK	115.00	
30Gal Bulk on Removal	SX (non-radioactive)	REM-30G-SX-BLK	160.75	275.75
55Gal Vials on Delivery	SR	DEL-55G-SR	195.00	
55Gal Vials on Removal	SR	REM-55G-SR	275.60	470.60
55Gal Vials on Delivery	SM	DEL-55G-SM	195.00	
55Gal Vials on Removal	SM	REM-55G-SM	200.85	395.85
55Gal Vials on Delivery	SX	DEL-55G-SX	195.00	
55Gal Vials on Removal	SX	REM-55G-SX	114.50	309.50

Peekskill Scintillation Assessment:** ** 6.00% OF COST
On removal of catagories SX, SM, SR

213559

***NOTE:** Costs for scintillation media include cost of container. All scintillation media is subject to the 6% Peekskill Assessment on total removal costs, as shown above.

DESCRIPTION	CATEGORY	ITEM	$ COST
SITE SURCHARGE CONCRETE OVERPACKS (CLASS B & C WASTE):			
5 Gallon	D	REM-5G-O/P	113.50
30 Gallon	D	REM-30G-O/P	683.33
55 Gallon	D	REM-55G-O/P	1250.00
OIL & AQUEOUS LIQUIDS FOR INCINERATION: (includes price for metal melt of empty inner contaminated container)		REM-5/30/55-OIL	60.00/GAL
Double Walled - Outer container 5, 30, or 55 Gal		REM-5/30/55-AQL	60.00/GAL
METAL MELT		MELT-METAL	4.00/LB
RADIUM SEALED SOURCES		*****	Call for packaging & quote
GLASS FOR VITRIFICATION		*****	Available Soon
DRY & BIOLOGICAL WASTE FOR INCINERATION / STEAM REFORMING & DISPOSAL (based on gross weight of package):			
Dry Waste for Incineration & Disposal	D	REM-D-INCIN/D	9.80/LB
Biological Waste for Incineration & Disposal	R	REM-R-INCIN/D	35.00/LB
Dry Waste for Steam Reforming & Disposal	D	REM-D-STEAM/D	11.80/LB
Biological Waste for Steam Reforming & Disposal	R	REM-R-STEAM/D	28.00/LB

COMPACTION OF DRY WASTE IN STEEL DRUMS & DISPOSAL:

55 GALLON DRUMS:	ON DEL (DEL-55G-D)	ON REM	REM ITEM	TOTAL
< 100 lbs	550.00	500.00	C/D-55G-TO100	1050.00/DRUM
101 - 150 lbs	550.00	880.00	C/D-55G-101/150	1430.00/DRUM
151 - 200 lbs	550.00	1225.00	C/D-55G-151/200	1775.00/DRUM
201 - 250 lbs	550.00	1600.00	C/D-55G-201/250	2150.00/DRUM
251 - 300 lbs	550.00	2000.00	C/D-55G-251/300	2550.00/DRUM
> 300 lbs	*****	*****	C/D-55G-300+	DIRECT BURIAL PRICE
30 GALLON DRUMS:			CALL FOR QUOTE	
Compaction of Bulk DAW & Disposal			CALL FOR QUOTE	

DESCRIPTION	CATEGORY	ITEM	$ COST	TOTAL
RADIOACTIVE WASTE DISPOSAL AT BARNWELL SITE:				
5Gal on Delivery	D	DEL-5G-D	150.00	
5Gal on Removal	D	REM-5G-D	500.00	650.00
5Gal on Delivery	R	DEL-5G-R	150.00	
5Gal on Removal	R	REM-5G-R	840.00	990.00
30Gal on Delivery	D	DEL-30G-D	350.00	
30Gal on Removal	D	REM-30G-D	1415.00	1765.00
30Gal on Delivery	R	DEL-30G-R	350.00	
30Gal on Removal	R	REM-30G-R	1450.00	1800.00
55Gal on Delivery	D	DEL-55G-D	550.00	
55Gal on Removal	D	REM-55G-D	2600.00	3150.00
55Gal on Delivery	R	DEL-55G-R	550.00	
55Gal on Removal	R	REM-55G-R	2700.00	3250.00
Box Removed	D	REM-BOX-D		403.50/CU/FT

HIGH INTEGRITY CONTAINERS & DISPOSAL COSTS FOR BARNWELL SITE: CALL FOR QUOTE

DESCRIPTION	CATEGORY	ITEM	$ COST
NARM/NORM WASTE FOR DISPOSAL AT THE RICHLAND, WASHINGTON, SITE:			
Class A, Unstable:			
5Gal	D	REM-5G-AU-NARM	738.00/PAIL
2 X 5Gal	D	REM-5G-AU-NM2X	725.50/PAIL
3 X 5Gal	D	REM-5G-AU-NM3X	713.20/PAIL
4 X 5Gal	D	REM-5G-AU-NM4X	700.84/PAIL
5 X 5Gal	D	REM-5G-AU-NM5X	688.16/PAIL
>= 6 X 5Gal	D	REM-5G-AU-NM6+	675.45/PAIL
30Gal	D	REM-30G-AU-NARM	1333.36/DRUM
2 X 30Gal	D	REM-30G-AU-NM2X	1208.77/DRUM
3 X 30Gal	D	REM-30G-AU-NM3X	1184.50/DRUM
4 X 30Gal	D	REM-30G-AU-NM4X	1157.95/DRUM
5 X 30Gal	D	REM-30G-AU-NM5X	1124.20/DRUM
>= 6 X 30Gal	D	REM-30G-AU-NM6+	1099.78/DRUM

DESCRIPTION	CATEGORY	ITEM	$ COST
NARM/NORM WASTE CONT'D:			
Class A, Unstable, Cont'd:			
55Gal	D	REM-55G-AU-NARM	2288.10/DRUM
2 X 55Gal	D	REM-55G-AU-NM2X	2138.80/DRUM
3 X 55Gal	D	REM-55G-AU-NM3X	2042.55/DRUM
4 X 55Gal	D	REM-55G-AU-NM4X	1987.40/DRUM
5 X 55Gal	D	REM-55G-AU-NM5X	1933.76/DRUM
>= 6 X 55Gal	D	REM-55G-AU-NM6+	1882.40/DRUM
Class A, Sealed Sources:			
5Gal	D	REM-5G-AS-NARM	873.40/PAIL
2 X 5Gal	D	REM-5G-AS-NM2X	860.91/PAIL
3 X 5Gal	D	REM-5G-AS-NM3X	848.41/PAIL
4 X 5Gal	D	REM-5G-AS-NM4X	835.75/PAIL
5 X 5Gal	D	REM-5G-AS-NM5X	823.22/PAIL
>= 6 X 5Gal	D	REM-5G-AS-NM6+	810.55/PAIL
30Gal	D	REM-30G-AS-NARM	1428.76/DRUM
2 X 30Gal	D	REM-30G-AS-NM2X	1336.02/DRUM
3 X 30Gal	D	REM-30G-AS-NM3X	1261.15/DRUM
4 X 30Gal	D	REM-30G-AS-NM4X	1112.45/DRUM
5 X 30Gal	D	REM-30G-AS-NM5X	1086.45/DRUM
>= 6 X 30Gal	D	REM-30G-AS-NM6+	1061.45/DRUM
55Gal	D	REM-55G-AS-NARM	2614.34/DRUM
2 X 55Gal	D	REM-55G-AS-NM2X	2464.25/DRUM
3 X 55Gal	D	REM-55G-AS-NM3X	2359.10/DRUM
4 X 55Gal	D	REM-55G-AS-NM4X	2284.35/DRUM
5 X 55Gal	D	REM-55G-AS-NM5X	2236.12/DRUM
>= 6 X 55Gal	D	REM-55G-AS-NM6+	2201.75/DRUM
Class C, Sealed Sources:			
5Gal	D	REM-5G-CS-NARM	1110.20/PAIL
2 X 5Gal	D	REM-5G-CS-NM2X	1097.75/PAIL
3 X 5Gal	D	REM-5G-CS-NM3X	1083.22/PAIL
4 X 5Gal	D	REM-5G-CS-NM4X	1070.70/PAIL
5 X 5Gal	D	REM-5G-CS-NM5X	1057.56/PAIL
>= 6 X 5Gal	D	REM-5G-CS-NM6+	1045.06/PAIL
30Gal	D	REM-30G-CS-NARM	2078.76/DRUM
2 X 30Gal	D	REM-30G-CS-NM2X	1969.50/DRUM
3 X 30Gal	D	REM-30G-CS-NM3X	1887.22/DRUM
4 X 30Gal	D	REM-30G-CS-NM4X	1832.35/DRUM
5 X 30Gal	D	REM-30G-CS-NM5X	1796.70/DRUM
>= 6 X 30Gal	D	REM-30G-CS-NM6+	1768.38/DRUM

DESCRIPTION	CATEGORY	ITEM	$ COST

NARM/NORM WASTE CONT'D:

Class C, Sealed Sources, Cont'd:

55Gal	D	REM-55G-CS-NARM	3809.34/DRUM
2 X 55Gal	D	REM-55G-CS-NM2X	3510.85/DRUM
3 X 55Gal	D	REM-55G-CS-NM3X	3260.90/DRUM
4 X 55Gal	D	REM-55G-CS-NM4X	3089.55/DRUM
5 X 55Gal	D	REM-55G-CS-NM5X	2093.93/DRUM
>= 6 X 55Gal	D	REM-55G-CS-NM6+	1985.10/DRUM

SITE USE PERMITS:

All eligible customers utilizing the NDL Radioactive Categories of D and/or R for land burial at the Barnwell, SC site must obtain a Transport Permit from the SC Dept. of Health & Environmental Control. NDL has blank applications and will provide requested assistance at no charge. The Richland, WA site is also available to out-of-compact generators for radium disposal, on a case-by-case basis.

Barnwell, SC: Permit up to a max of 75 cu.ft.	ADD-PERMIT-SC	200.00
Barnwell, SC: Permit for 75+ cu.ft.	ADD-PERMIT-SC+	1500.00
Richland, WA	ADD-PERMIT-WA	375.00

WASTE STORAGE:

Generators utilizing NDL's waste storage services must be pre-approved and have a signed contract in place

Monthly Charge	STORAGE	13.90/CU.FT/MO.
Minimum Charge	STORAGE-MIN	10.00/MO.

DESCRIPTION	ITEM	$ COST
SURCHARGES AND OTHER CHARGES:		
(Surcharges and other charges may be billed seperately after the container has been received by NDL)		
Additional Removal Charge on Non-NDL Drums:		
30Gal SR, SM, or SX	ADD-30G-NONNDLS	103.00/DRUM
55Gal SR, SM, or SX	ADD-55G-NONNDLS	179.00/DRUM
5Gal D or R	ADD-5G-NONNDLD	146.50/DRUM
30Gal D or R	ADD-30G-NONNDLD	338.00/DRUM
55Gal D or R	ADD-55G-NONNDLD	534.00/DRUM
Additional Removal Charge on Conversion of previously purchased SDC drum:		
5Gal Converted to SM/SR/SX	ADD-5G-TOSCINT	72.49/DRUM
5Gal Converted to D or R	ADD-5G-TOD/R	146.50/DRUM
30Gal Converted to SM/SR/SX	ADD-30G-TOSCINT	73.85/DRUM
30Gal Converted to D or R	ADD-30G-TOD/R	308.85/DRUM
55Gal Converted to SM/SR/SX	ADD-55G-TOSCINT	145.25/DRUM
55Gal Converted to D or R	ADD-55G-TOD/R	500.25/DRUM
Curie Surcharge:		
0 - 100 Ci	*****	NO CHARGE
100+ Ci	ADD-CURIE-100+	CALL FOR QUOTE
Weight Surcharge:		
Up to 400 lbs/container	*****	NO CHARGE
400+ lbs up to container limit	ADD-WEIGHT	0.50/LB
Zone Charges:		
Outside Service Area	ADD-ZONE	25.00/ZONE
Shipping & Handling Charges:		
For meters and/or NDL containers shipped via UPS or Common Carrier	ADD-SHIPPING	AS APPLICABLE
Return Drum Charge:		
For improperly packaged drums, at the discretion of NDL	ADD-RETURN	25.00/DRUM
Intercompany Transfer Charge With Other Service (with no other service will be charged tariff rates):		
Note: Fee based on separate	ADD-TRANS-LABOR	40.00/HR/MAN
charges for man hours and truck hours	ADD-TRANS-TRUCK	20.00/HR/TRUCK
MINIMUM CHARGE	ADD-TRANS-MIN	150.00/TRANSFER
Travel Expenses	ADD-TRAVEL	AS APPLICABLE

DESCRIPTION	ITEM	$ COST
HEALTH PHYSICS SERVICES:		
NDL Leak Test (includes two leak tests)	HPS-LEAKTST-TO2	120.00 MINIMUM
Each additional after two leak tests	HPS-LEAKTST-ADD	60.00/TEST
Leak Test Kit	HPS-LEAKTST-KIT	25.00/KIT
Gas Proportional Counting (windowless) wipes:		
1 to 10	HPS-GAS-1TO10	12.50/SAMPLE
11 to 20	HPS-GAS-11TO20	11.50/SAMPLE
21 +	HPS-GAS-21+	10.00/SAMPLE
Gross Alpha/Beta (water and soil)	HPS-ALP/BET-WS	65.00/SAMPLE
Liquid Scintillation Spectrometry:		
1 to 5	HPS-LSS-1TO5	20.00/SAMPLE
6 to 10	HPS-LSS-6TO10	18.50/SAMPLE
11 to 15	HPS-LSS-11TO15	14.50/SAMPLE
16 to 20	HPS-LSS-16TO20	12.50/SAMPLE
21 to 30	HPS-LSS-21TO30	10.00/SAMPLE
31 to 50	HPS-LSS-31TO50	9.50/SAMPLE
51 +	HPS-LSS-51+	9.00/SAMPLE
Air Sampling Collection (plus analysis/field labor)	HPS-AIR	65.00/SAMPLE
Germanium Gamma Spectroscopy (HPGe)	HPS-GSS-NONFLD	110.00/SAMPLE
Germanium Gamma Spectroscopy (HPGe) Field Svc	HPS-GGS-FLD-1	550.00/1 SAMPLE
Additional Samples	HPS-GGS-FLD-ADD	125.00/SAMPLE
Gamma Check on Equipment	HPS-GAMMACHECK	10.00/EACH
G-M Ionization Chamber (per unit):		
Survey meter rental fee - day	HPS-METER-DAY	25.00/DAY
Survey meter rental fee- week	HPS-METER-WEEK	75.00/WEEK
Survey meter rental fee - month	HPS-METER-MONTH	195.00/MONTH
Class C or D Personal Protective Equipment	HPS-C/D-PPE	40.00/MAN-DAY
*Senior Health Physicist	HPS-LABOR-SHP	110.00/HR
*Health Physicist	HPS-LABOR-HP	95.00/HR
*Senior HP Tech	HPS-LABOR-SHPT	60.00/HR
*HP Tech	HPS-LABOR-HPT	47.50/HR
*Decon Tech	HPS-LABOR-DT	37.50/HR
***NOTE:** HP Services - For Holidays, Weekends, after working hrs, or on an Emergency Basis, charges are Time plus 1/2. Hourly rates are based on portal to portal.	HPS-LABOR-ADD	TIME PLUS 1/2

DESCRIPTION	ITEM	$ COST
CALIBRATION SERVICES:		
Pick up of Radiation Survey Meters with with other service call (no service will prompt zone charges, if applicable.)	CALL-PICKUP-N/C	NO CHARGE
Calibration of Radiation Survey Meters (to 4 scales; sent to NDL or picked up with other service call; sent back to customer w/shipping chgs)	CAL-RECD	65.00/METER
Calibration of Radiation Survey Meters (to 4 scales; sent to NDL or picked up with other service call; delivered back to customer with service)	CAL-DEL-W/SVC	65.00/METER
Calibration of Radiation Survey Meters (to 4 scales; picked up or delivered with no other service)		
1 meter	CAL-DEL-1-W/NS	85.00/METER
2 meters	CAL-DEL-2-W/NS	80.00/METER
3 meters	CAL-DEL-3-W/NS	75.00/METER
4 or more meters	CAL-DEL-4+-W/NS	70.00/METER
Calibration of Meters While Waiting (to 4 scales)	CAL-WAIT	90.00/METER
Additional Scales, after 4	ADD-SCALES	12.00/SCALE
Meter Bench Charge/Estimate Inspection (If meter is repaired, bench charge is credited to repair)	CAL-BENCH	30.00/METER
Labor Charge for Repair of Meter	CAL-LABOR	60.00/HOUR
STANDARD CALIBRATION REPAIR PARTS: (Cost of Parts depend on manufacturer & availablilty)		
412 Battery	PARTS-BAT-412	*****
504 Battery	PARTS-BAT-504	*****
505 Battery	PARTS-BAT-505	*****
6 Volt Battery	PARTS-BAT-6V	*****
9 Volt Battery	PARTS-BAT-9V	*****
AA Battery	PARTS-BAT-AA	*****
C-Cell Battery	PARTS-BAT-CCELL	*****
D-Cell Battery	PARTS-BAT-DCELL	*****
Battery Kit	PARTS-BAT-KIT	*****
Cable	PARTS-CABLE	*****
Glass with Bezel	PARTS-GLASSBEZL	*****
GM Tube	PARTS-GM/TUBE	*****
Meter Assembly	PARTS-METERASSM	*****
Miscellaneous	PARTS-MISC	*****

DESCRIPTION	ITEM	$ COST
CONTAINERS FOR WASTE:		
B-25 Metal Box (90 cu. ft.)	DEL-B-25-BOX	495.00/EACH
SDC (Storage/Decay/Collection) Containers (also used for Oil or Aqueous Liquid for incineration):		
1Gal Steel SDC Pail (Not For Disposal)	DEL-1G-SDC	10.75/EACH
5Gal Steel SDC Pail (Not For Disposal)	DEL-5G-SDC	13.50/EACH
30Gal Steel SDC Drum (Not For Disposal)	DEL-30G-SDC	61.15/EACH
55Gal Steel SDC Drum (Not For Disposal)	DEL-55G-SDC	79.75/EACH
2R Containers:		
6" X 14"	DEL-2R-6X14	395.36/EACH
6" X 10"	DEL-2R-6X10	283.58/EACH
4 X 6"	DEL-2R-4X6	210.20/EACH
4 X 6" with 1" thick lead shield	DEL-2R-4X6X1	509.85/EACH
85 Gal Steel Salvage Drum :		
Category D	DEL-85G-D	109.65/EACH
Category R	DEL-85G-R	109.65/EACH
38.5 Gal GRT-4 w/waxed bottom:		
Category D	DEL-38.5-FIBR-D	29.90/EACH
Category R	DEL-38.5-FIBR-R	29.90/EACH
37.5 Gal GRT-3 Fiber Container:		
Category D	DEL-37.5-FIBR-D	27.30/EACH
Category R	DEL-37.5-FIBR-R	27.30/EACH
33.5 Gal Fiber Container:		
Category D	DEL-33.5-FIBR-D	24.50/EACH
Category R	DEL-33.5-FIBR-R	24.50/EACH
19.5 Gal ERT Fiber Container:		
Category D	DEL-19.5-FIBR-D	17.05/EACH
Category R	DEL-19.5-FIBR-R	17.05/EACH
13 Gal ART-1.5 Fiber Container:		
Category D	DEL-13G-FIBR-D	14.80/EACH
Category R	DEL-13G-FIBR-R	14.80/EACH
5 Gal YRT-1 Fiber Container:		
Category D	DEL-5G-FIBR-D	12.80/EACH
Category R	DEL-5G-FIBR-R	12.80/EACH

DESCRIPTION	ITEM	$ COST
MISCELLANEOUS SUPPLIES:		
5Gal Ring & Bolt	SUP-5G-RING/BLT	9.75/EACH
Slaked Lime (50 lbs)	SUP-LIME	11.55/BAG
Rad-lite (vermiculite)	SUP-RADLITE	12.40/BAG
Chem-sil 30/30 (perlite)	SUP-CHEMSIL	12.50/BAG
Alpha-Dri Bags	SUP-ALPHA-DRI	36.25/EACH
Bills of Lading	SUP-BILLSLADING	0.55/EACH
Cement Solidification Bottles (solidifies 1 liter):		
1 - 12 Bottles	SUP-CMNT-1TO12	10.25/EACH
13 - 24 Bottles	SUP-CMNT-13TO24	9.45/EACH
25 + Bottles	SUP-CMNT-25+	8.65/EACH
55Gal 17H Steel Drum Lid	SUP-55G-LID	13.15/EACH
30Gal 17H Steel Drum Lid	SUP-30G-LID	10.50/EACH
55/30 Gal Rings for 17H Steel Drums	SUP-55/30G-RING	10.50/EACH
Bolts & Nuts for 17H 55/30 rings	SUP-55/30G-N/B	0.75/EACH
5Gal Roll 4 mil Polybags	SUP-5G-POLY	VARIES
55/30Gal Roll 4 mil Polybags	SUP-55/30G-POLY	53.55/ROLL
2" Polytape (330' Roll)	SUP-POLY-ROLL	11.75/ROLL
2" Polytape Dispenser	SUP-POLY-DISP	20.05/EACH
LABELS:		
Fragile This End Up (Roll of 500)	SUP-LAB-FRAGILE	54.10/ROLL
Category SP (Roll of 500)	SUP-LAB-CATSP	68.25/ROLL
Category D (Roll of 500)	SUP-LAB-CATD	68.25/ROLL
Category R (Roll of 500)	SUP-LAB-CATR	68.25/ROLL
Category SM	SUP-LAB-CATSM	.55/EACH
Radioactive Material, Instruments & Articles UN2911 (Roll of 500)	SUP-LAB-UN2911	63.00/ROLL
Radioactive Material, Limited Quantity, N.O.S. UN2910 (Roll of 500)	SUP-LAB-UN2910	63.00/ROLL
Radioactive Material, Special Form, N.O.S. UN2974 (Roll of 500)	SUP-LAB-UN2974	63.00/ROLL
Radioactive Material N.O.S. UN2982 (Roll of 500)	SUP-LAB-UN2982	63.00/ROLL
Radioactive White I Labels - UN2982 (Roll of 500)	SUP-LAB-UN2982W	63.00/ROLL
Class A Unstable (Roll of 500)	SUP-LAB-CLA	63.00/ROLL
EMPTY (Roll of 500)	SUP-LAB-EMPTY	63.00/ROLL
US DOT 7A Type A (Roll of 500)	SUP-LAB-USDOT	63.00/ROLL
CAUTION-RADIOACTIVE MATERIALS (w/SYMBOL) 6" x 6"	SUP-LAB-CAUTION	0.35/EACH
CAUTION-RADIOACTIVE MATERIALS (INCIN)	SUP-LAB-INCIN	0.70/EACH
Medical Waste (Roll of 500)	SUP-LAB-MEDICAL	105.00/ROLL

NDL TRANSPORT TARIFF
Contract Carriage
RADIOACTIVE AND/OR HAZARDOUS RATES

ITEM 1 - STRAIGHT TRUCK - (Less than Truckload):

MILES	ITEM	PICK-UP & DELIVERY CHARGE (see note 2)	+	ITEM	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	TAR-SPD-1-50	$ 97.29	+	TAR-SLH-1-50	$ 0.80
51 TO 100	TAR-SPD-51-100	121.91	+	TAR-SLH-51-100	0.85
101 TO 150	TAR-SPD-101-150	193.11	+	TAR-SLH-101-150	0.90
151 TO 200	TAR-SPD-151-200	244.74	+	TAR-SLH-151-200	0.95
201 TO 250	TAR-SPD-201-250	330.09	+	TAR-SLH-201-250	1.00
251 TO 300	TAR-SPD-251-300	413.28	+	TAR-SLH-251-300	1.05
301 TO 350	TAR-SPD-301-350	497.28	+	TAR-SLH-301-350	1.10
351 TO 400	TAR-SPD-351-400	580.25	+	TAR-SLH-351-400	1.15
401 TO 450	TAR-SPD-401-450	659.74	+	TAR-SLH-401-450	1.20
451 TO 500	TAR-SPD-451-500	675.59	+	TAR-SLH-451-500	1.25
501 TO 550	TAR-SPD-501-550	691.45	+	TAR-SLH-501-550	1.30
551 TO 600	TAR-SPD-551-600	705.29	+	TAR-SLH-551-600	1.35
601 TO 650	TAR-SPD-601-650	719.40	+	TAR-SLH-601-650	1.40
651 TO 700	TAR-SPD-651-700	733.79	+	TAR-SLH-651-700	1.45
701 TO 750	TAR-SPD-701-750	750.57	+	TAR-SLH-701-750	1.50
751 TO 800	TAR-SPD-751-800	773.09	+	TAR-SLH-751-800	1.55
801 TO 850	TAR-SPD-801-850	804.03	+	TAR-SLH-801-850	1.60
851 TO 900	TAR-SPD-851-900	836.19	+	TAR-SLH-851-900	1.65
901 TO 950	TAR-SPD-901-950	861.28	+	TAR-SLH-901-950	1.70
951 +	TAR-SPD-951+	887.12	+	TAR-SLH-951+	1.75

MINIMUM CHARGE PER SHIPMENT IS $ 325.00 TAR-S- MINIMUM

NDL TRANSPORT TARIFF, CONT'D
RADIOACTIVE AND/OR HAZARDOUS RATES

ITEM 2 - TRACTOR TRAILER - (Truckload):
(MAXIMUM WEIGHT PER SHIPMENT = 42,000 LBS):

MILES	ITEM	PICK-UP & DELIVERY CHARGE (see note 2)	+	ITEM	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	TAR-TPD-1-50	$ 472.88	+	TAR-TLH-1-50	$ 1.15
51 TO 100	TAR-TPD-51-100	594.09	+	TAR-TLH-51-100	1.20
101 TO 150	TAR-TPD-101-150	711.03	+	TAR-TLH-101-150	1.25
151 TO 200	TAR-TPD-151-200	820.70	+	TAR-TLH-151-200	1.30
201 TO 250	TAR-TPD-201-250	927.21	+	TAR-TLH-201-250	1.35
251 TO 300	TAR-TPD-251-300	1045.03	+	TAR-TLH-251-300	1.40
301 TO 350	TAR-TPD-301-350	1156.89	+	TAR-TLH-301-350	1.45
351 TO 400	TAR-TPD-351-400	1232.50	+	TAR-TLH-351-400	1.50
401 TO 450	TAR-TPD-401-451	1285.71	+	TAR-TLH-401-450	1.55
451 TO 500	TAR-TPD-451-500	1444.06	+	TAR-TLH-451-500	1.60
501 TO 550	TAR-TPD-501-550	1458.86	+	TAR-TLH-501-550	1.65
551 TO 600	TAR-TPD-551-600	1539.74	+	TAR-TLH-551-600	1.70
601 TO 650	TAR-TPD-601-650	1584.45	+	TAR-TLH-601-650	1.75
651 TO 700	TAR-TPD-651-700	1663.31	+	TAR-TLH-651-700	1.80
701 TO 750	TAR-TPD-701-750	1747.57	+	TAR-TLH-701-750	1.85
751 TO 800	TAR-TPD-751-800	1796.78	+	TAR-TLH-751-800	1.90
801 TO 850	TAR-TPD-801-850	1896.60	+	TAR-TLH-801-850	1.95
851 TO 900	TAR-TPD-851-900	1986.02	+	TAR-TLH-851-900	2.00
901 TO 950	TAR-TPD-901-950	2075.12	+	TAR-TLH-901-950	2.05
951 +	TAR-TPD-951+	2122.58	+	TAR-TLH-951+	2.10

MINIMUM CHARGE PER SHIPMENT IS $ 625.00 TAR-T- MINIMUM

TARIFF NOTES (RADIOACTIVE & HAZARDOUS RATES): **ITEM**

1- Overweight shipments:

Straight Truck: if over 300 lbs., add $ 0.10/lb. or fraction	ADD-TAR-S-301+
Tractor Trailer: if over 42,000 lbs., add $ 1.75/CWT or fraction, up to a maximum of 45,000 lbs.	ADD-TAR-T-42001

2- Mileage travelled from NDL's terminal in Peekskill, NY, to point of pick-up or delivery. *****

3- Mileage travelled from point of origin of shipment to point of destination *****

4 - **Exclusive use shipments:**

Straight Truck: additional charge of $ 125.00/shipment	ADD-TAR-S-EXCL
Tractor Trailer: additional charge of $ 300.00/shipment	ADD-TAR-T-EXCL

5- **Detention of vehicle:** after 1 hr., detention of vehicle & driver are:

Straight Truck: $ 24.75/hr.	ADD-S-DEMURAGE
Tractor Trailer: $ 34.20/hr.	ADD-T-DEMURAGE

6- **Vehicle ordered and not used:** If the shipper requests service and a vehicle is dispatched, and the order for service is cancelled after arrival of vehicle at origin point, the carrier will assess the applicable minimum charge or pick-up and delivery charge, but no line-haul rate. No charge will be assessed if the request for service is cancelled prior to the vehicle being dispatched. *****

7- **Re-Delivery:** When, through no fault of the carrier, a shipment cannot be delivered when tendered, or after the carrier has made reasonable efforts to effect delivery, and re-delivery is requested, charges for each additional delivery will be assessed at the rates named in the above schedules, applicable from point of origin to final destination, in addition to accrued freight and other lawful charges. *****

8- **Multiple Stops:** Where the shipper of consignee request to perform multiple stops, such service will be performed subject to the following:

A) The line-haul transportation rate will be assessed from the point of origin to the most distant point of destination.

B) Each stop-off will be charged as follows (excluding origin & final destination):

Straight Truck: $ 45.00/stop	ADD-S-MULTIPLE
Tractor Trailer: $ 60.00/stop	ADD-T-MULTIPLE

C) Point of origin, destination, and all intermediate stops must be listed on one bill of lading

9- **Refused or undelivered shipments:** All shipments refused by the consignee, for any reason beyond the carrier's control, will be returned to the shipper. The charge for such shipment will be the applicable rate from origin to destination, plus 2/3 of the applicable rate from the refused destination to the shipper's original point of origin. The carrier will notify the shipper within 16 normal business hours of such non-delivery for refusal to accept the shipment. Normal business hours are defined as the hours between 9:00 AM and 5:00 PM, Mon. through Fri., excluding national and carrier holidays. ADD-S-REFUSED
If re-delivery is requested, the charge will be as specified in item 7. ADD-T-REFUSED

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Prevention & Response
50 Wolf Road
Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Local Emergency Planning Committee
c/o Civil Preparedness Office
140 15th Street
Mineola, NY 11501

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Hicksville Fire Department
E. Marie Street
Hicksville, NY 11801

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Syosset Fire Department
Cold Spring Road
Syosset, NY 11791

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Westbury Fire Department
Maple Avenue
Westbury, NY 11590

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440-02-0 Trade Secret ☐ Chem Name: Nickel Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-47-3 Trade Secret ☐ Chem Name: Chromium Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-48-4 Trade Secret ☐ Chem. Name: Cobalt Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI MANAGER FACILITIES 2/28/92
Name and Official Title (Owner/Operator or Ranking Elected Official) Signature Date Signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #:
Date Received:

Owner/Operator Name
Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440-02-0 Trade Secret ☐ Chem Name: Nickel Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type / Pressure / Temperature: D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-47-3 Trade Secret ☐ Chem Name: Chromium Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-48-4 Trade Secret ☐ Chem. Name: Cobalt Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri Date Signed: 2/28/92

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of sites and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7429090 Trade Secret ☐ Chem Name: Aluminum Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type / Pressure / Temperature: D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 1344251 Trade Secret ☐ Chem Name: Aluminum Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 1314234 Trade Secret ☐ Chem Name: Zirconium Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) ☐	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title (owner, operator, or authorized representative)

Signature: Joseph Macri Date Signed: 2/28/92

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516)334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440-50-8 Trade Secret ☐ Chem. Name: Copper Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐
CAS 7440-02-0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐
CAS 7440-48-4 Trade Secret ☐ Chem. Name: Cobalt Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — MANAGER FACILITIES — Joseph Macri — 2/28/92

Name and official title of owner/operator OR owner/operator's authorized representative — Signature — Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7440473 Trade Secret ☐ Chem Name: Chromium Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Storage Codes: N 1 4 Stock Warehouse	☐
CAS 7429905 Trade Secret ☐ Chem Name: Aluminum Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Storage Codes: N 1 4 Stock Warehouse	☐
CAS 1344281 Trade Secret ☐ Chem Name: Aluminum Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Storage Codes: N 1 4 Stock Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — Name and Title of owner/operator or owner/operator's authorized representative
MANAGER FACILITIES
Signature: Joseph Macri
Date signed: 2/28/92

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY ID #: Date Received:

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516)334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800)424-9300 CHEMTREC

Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 108952 Trade Secret ☐ Chem Name: Phenol Check all that apply: Pure X, Mix X, Solid ☐, Liquid X, Gas ☐, EHS X EHS Name: Phenol	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 02 Avg. Daily Amount (code): 02 No. of Days On-site (days): 365	Type: F, Pressure: 1, Temperature: 4 Stock Warehouse	☐
CAS ☐ Trade Secret ☐ Chem Name: Check all that apply: Pure ☐, Mix ☐, Solid ☐, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic) ☐	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐
CAS ☐ Trade Secret ☐ Chem Name: Check all that apply: Pure ☐, Mix ☐, Solid ☐, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic) ☐	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI — MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri — Date signed: 2/28/92

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

know how the waste was managed by the receiving facility you must contact them in order to find out. Blank values are not permitted.

Box D: Off-site availability code

Review the codes listed below. Enter the code that best describes the availability of the off-site facility for commercial hazardous waste management.

Code	Off-site availability
1	The off-site facility is a commercial treatment, storage or disposal facility.
2	The off-site facility is available only to firms owned by the same company.
8	Don't know.

Box E: Total quantity shipped in 1993

Enter the total quantity of the waste shipped to the facility during 1993. Report in the same unit of measure entered in Section II, Box C. Shipment quantities should equal the total quantity recorded on Hazardous Waste Manifests for this site during 1993, unless there were rejections or other complications.

Section IV: New Waste Reduction Activities in 1993

Section IV requests information on any **new** activities undertaken during 1993 that **resulted** in waste reduction. Detailed definitions of waste reduction and its component parts, source reduction, and recycling, are provided below.

Waste reduction means the reduction, to the extent feasible, of hazardous waste that is generated or subsequently treated, stored, or disposed. It includes any source reduction or recycling activity undertaken by a generator that results in: (1) the reduction of total volume or quantity of hazardous waste; (2) the reduction of toxicity of hazardous waste; or (3) both, as long as the reduction is consistent with the goals of minimizing present and future threats to human health and the environment.

Source reduction means any practice which: (1) reduces the amount of any hazardous substance, pollutant, or contaminant entering any waste or otherwise released into the environment (including fugitive emissions) prior to recycling, treatment, or disposal; and (2) reduces the hazards to public health and the environment associated with the release of such substances, pollutants, or contaminants. The term includes equipment or technology modifications, process or procedure modifications, reformulation or redesign of products, substitution of raw materials, and improvements in housekeeping, maintenance, training, or inventory control. Source reduction does not include any practice that alters the physical, chemical or biological characteristics or the volume of a hazardous substance, pollutant, or contaminant through a process or activity which itself is not integral to and necessary for the production of a product or the provision of a service.

Recycling means the use or reuse of waste as an effective substitute for a commercial product, or as an ingredient or feedstock in an industrial process. It also refers to the reclamation of useful constituent fractions within a waste material or the removal of contaminants from a waste to allow it to be reused. As used in this report, recycling implies use, reuse, or reclamation of a waste, either on site or off site, after it has been generated.

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
S/C Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC

Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Container Type / Temperature / Pressure	Storage Locations	Optional
CAS 7429-90-5; Trade Secret ☐ Chem. Name: Aluminum Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories Warehouse Warehouse	☐
CAS 1344-28-1; Trade Secret ☐ Chem. Name: Aluminum Oxide Check all that apply: Pure ☐, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories Warehouse Warehouse	☐
CAS 7439-89-6; Trade Secret ☐ Chem. Name: Iron Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories, Warehouse Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
S/C Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure ☐ Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name: Chromium Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐
CAS 1314 23 4 Trade Secret ☐ Chem. Name: Zirconium Oxide Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) ☐ Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0339

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 26099718 Trade Secret ☐ Chem. Name: Polyester "POB" Check all that apply: Pure ☒ Mix ☒ Solid ☒ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☒ Immediate (acute) ☒ Delayed (chronic)	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type / Temperature / Pressure N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safe
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name: Chromium Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 7440 48 4 Trade Secret ☐ Chem. Name: Cobalt Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact
Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safe
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7429 90 5; Trade Secret ☐ Chem. Name: Aluminum Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 1344 28 1; Trade Secret ☐ Chem. Name: Aluminum Oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 1314 23 4; Trade Secret ☐ Chem. Name: Zirconium Oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) ☐ Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Waerhouse, Production Floor	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 26099-71-8 Trade Secret ☐ Chem. Name: Polyester "POB" Homopolymer Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 1308-38-9 Trade Secret ☐ Chem. Name: Chromium oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS ____ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐, Mix ☐, Solid ☐, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

QUERY:PBINV
DATE: 2/18/98
PAGE: 1

B/P Cd	Item No	Item Description	On Hand
	12PB90090	CYCLONE PRODUCT (AE7553-1)	.00
	12PB90092	-80 MESH CHAMBER PRODUCT	.00
	12PB90094	CoNiCrAlY-BN POLY COMP POWDER	.00
H	12PB03302	STAINLESS STEEL POWDER	.00
H	12PB03310	STAINLESS STEEL POWDER	15,400.00
H	12PB05270	TUNGSTEN CARBIDE PWDR	.00
H	12PB05477	COBALT NICKEL CHROMIUM ALLOY	.00
H	12PB06340	ZIRCONIA POWDER	.00
H	12PB06898	TITANIUM DIOXIDE POWDER	.00
H	12PB06906	TANTALUM PWDR	.00
H	12PB09260	NICKEL-CHROMIUM ALLOY POWDER	3,040.00
H	12PB09261	MOLYBDENUM POWDER	.00
H	12PB09262	CHROMIUM CARBIDE POWDER	5,172.00
H	12PB09263	ALUMINUM OXIDE POWDER	100.00
H	12PB09264	WHITE ALUMINIA POWDER	.00
H	12PB09265	ZIRCONIA POWDER	.00
H	12PB09633	TITANIUM HYDRIDE POWDER	.00
H	12PB09768	NICKEL POWDER	1,322.76
H	12PB09969	NICKEL CLAD CHROMIUM CARBIDE	1,540.00
H	12PB10181	TUNGSTEN CARBIDE POWDER	.00
H	12PB10548	COBALT ALLOY POWDER	3,331.00
H	12PB10706	COBALT BASE POWDER	.00
H	12PB10707	TUNGSTEN CARBIDE	661.38
H	12PB10709	NICKEL CHROMIUM ALLOY	1,700.00
H	12PB10894	ALUMINUM OXIDE POWDER	3,500.00
H	12PB10898	TUNGSTEN CARBIDE POWDER	.01
H	12PB11263	ALUMINUM BRONZE POWDER	2,000.00
H	12PB11394	WHITE ALUMINUM OXIDE	.00
H	12PB12009	TUNGSTEN CARBIDE COBALT POWDER	6,695.00
H	12PB12107	ALUMINUM POWDER	.00
H	12PB12188	CELLULOSE GUM	1,715.66
H	12PB12222	ALUMINA POWDER	1,265.00
H	12PB12287	ZIRCONIUM OXIDE POWDER	28,870.00
H	12PB12289	CALCIUM CARBONATE	475.00
H	12PB12399	WHITE ALUMINA POWDER	.00
H	12PB13141	SILICON ALUM. ALLOY PWDR.	5,878.00
H	12PB13202	NICKEL GRAPHITE POWDER	.00
H	12PB13262	NICKEL GRAPHITE POWDER	.00
H	12PB13568	NICKEL GRAPHITE POWDER	.00
H	12PB13789	ALUMINUM POWDER	.00
H	12PB13810	NICKEL/CHROMIUM ALLOY POWDER	.00
H	12PB13972	NICKEL CLAD ALUMINUM POWDER	150.00
H	12PB14008	NICKEL CLAD ALUMINUM POWDER	545.75
H	12PB14465	NICKEL CHROMIUM ALLOY POWDER	.00
H	12PB14466	NICKEL CHROMIUM ALLOY POWDER	.00
H	12PB14568	CHROMIUM OXIDE POWDER	1,520.00
H	12PB14755	CHROMIUM OXIDE POWDER	.00
H	12PB14888	TUNGSTEN CARBIDE COBALT POWDER	4,680.00
H	12PB15466	GRAY ALUMINUM OXIDE POWDER	250.00

QUERY:PBINV
DATE: 2/18/98
PAGE: 2

B/P Cd	Item No	Item Description	On Hand
H	12PB15577	ALUMINUM BRONZE POWDER	.00
H	12PB19074	MOLYBDENUM POWDER	.00
H	12PB19472	WHITE CAST IRON POWDER	.00
H	12PB20021	NICKEL GRAPHITE POWDER	.00
H	12PB20024	NICKEL GRAPHITE POWDER	.00
H	12PB21070	NICKEL GRAPHITE POWDER	2,480.17
H	12PB21862	ACETIC ACID	990.00
H	12PB23137	LOW CARBON STEEL POWDER	.00
H	12PB23538	EKONOL POLYESTER POWDER	3,082.00
H	12PB23551	WC/CO POWDER	.00
H	12PB24137	ALUMINUM POWDER	.00
H	12PB25775	T-400 POWDER	.00
H	12PB26109	COBALT ALLOY POWDER	.00
H	12PB26442	METHANOL	412.50
H	12PB26623	NICKEL GRAPHITE POWDER	.00
H	12PB28752	NI CHROMIUM ALUMINUM BENTONITE	.00
H	12PB28908	NICKEL GRAPHITE POWDER	.01
H	12PB29811	COBALT BASE NICKEL CHROMIUM	582.00
H	12PB29909	ACRYLOID RESIN	312.00
H	12PB30310	CHROME CARBIDE/NI. CHROME COM	270.00
H	12PB30656	T-800 POWDER	600.00
H	12PB32126	CHROMIUM CARBIDE POWDER	4,149.00
H	12PB32625	STAINLESS STEEL POWDER	1,402.00
H	12PB32661	MAGNESIUM OXIDE POWDER	12,427.00
H	12PB32728	ZIRCONIUM OXIDE POWDER	735.00
H	12PB32731	NOPCOSPERSE 44	1,094.00
H	12PB32933	MAGNESIUM ZIRCONATE POWDER	.00
H	12PB33987	ALUMINUM BRONZE POWDER	.00
H	12PB34003	ZIRCONIUM OXIDE POWDER	43,370.50
H	12PB34155	NICKEL ALUMINUM ALLOY POWDER	.00
H	12PB34417	COBALT POWDER	11.00
H	12PB34621	ALUMINUM BRONZE POWDER	.00
H	12PB34660	ALUMINUM BRONZE POWDER	.00
H	12PB36371	TUNGSTEN CARBIDE COBALT POWDER	.00
H	12PB36641	BENTONITE POWDER	.00
H	12PB37394	CAST IRON POWDER	10,559.00
H	12PB37440	BABBITT POWDER	.00
H	12PB37477	NI CR TUNGSTEN MOLYBDENUM PWDR	.00
H	12PB37557	THALO BLUE 333	6.00
H	12PB37558	TFM 522G MASKING MATERIAL	275.00
H	12PB37575	ALUMINUM POWDER	.00
H	12PB37770	CERIUM OXIDE POWDER	23.38
H	12PB37885	NI CR TUNGSTEN MOLYBDENUM PWDR	565.00
H	12PB38391	CHROMIUM OXIDE	.00
H	12PB39445	CHROMIUM OXIDE	.00
H	12PB39803	COBALT CHROMIUM ALLOY POWDER	.00
H	12PB40055	NI COBALT CHROMIUM ALUM YTTRIA	.00
H	12PB40785	NICKEL CHROMIUM ALLOY	.00
H	12PB40981	FINE CHROME OXIDE	.00
H	12PB42192	IRON CHROMIUM BORON SILICON	.00
H	12PB42353	STAINLESS STEEL POWDER	1,744.00
H	12PB42358	INCO 625 POWDER	.00
H	12PB42365	NICKEL CHROMIUM POWDER	2,006.00

QUERY:PBINV
DATE: 2/18/98
PAGE: 3

B/P Cd	Item No	Item Description	On Hand
H	12PB42380	TUNGSTEN CARBIDE COBALT POWDER	.00
H	12PB42396	CR CARBIDE NI CHROMIUM POWDER	.00
H	12PB42413	COPPER POWDER	.00
H	12PB43602	NICKEL BASE POWDER	3,080.00
H	12PB43842	HIGH PURITY MONOCLINE ZIRCONIA	25,296.00
H	12PB44298	NICKEL CHROMIUM ALM ALLOY VF	.00
H	12PB44299	NICKEL CHROMIUM ALUMINUM FINE	876.00
H	12PB44300	CALCINED CLAY	200.00
H	12PB44390	COBALT MOLY CHROMIUM SILICON	.00
H	12PB45946	CMC 761	.00
H	12PB46077	ZIRCONIUM OXIDE POWDER	1,170.00
H	12PB46455	NICKEL ALUMINUM ALLOY	.00
H	12PB46804	CHRM CARB/NIC CHRM (SINTERED)	.00
H	12PB46845	CERIA YTTR STAB ZIRC OXIDE	.00
H	12PB48226	IRON-MOLYBDENUM	469.00
H	12PB49304	EKONOL POLYESTER POWDER	1,204.00
H	12PB49634	ALUMINUM BRONZE POWDER (NS)	.00
H	12PB50410	BORON NITRIDE POWDER	90.00
H	12PB90036	ZIRCONIUM OXIDE POWDER	3,368.29
H	12PB90123	CHROMIUM CARBIDE POWDER	1,000.00
H	12PB90132	SILICON ALUMINUM ALLOY POWDER	80.00
H	12PB90134	CHROMIUM CARBIDE BRIQUET	3,000.00
H	12PB90135	17% COBALT PWDR, SINT-CRUSHED	9,428.00
H	12PB90143	TUNGSTEN CARBIDE POWDER	688.00
H	12PD40510	BOTTLE LABEL (ALL)	350,725.03
H	12PD42096	BLANK PWDR LABEL (DJ-BLU)	.00
H	12PD42097	BLANK PWDR LABEL (DJ-RED)	.00
H	12PD42098	BLANK PWDR LABEL (DJ-GRN)	.00
H	12PD42099	BLANK PWDR LABEL (DJ-ORG)	.00
H	12PD45811	SPECIAL LABEL-312NS/314NS PWDR	.00
H	12PD49938	LABEL (1-GAL RND BTL LASER)	.00
H	12PD90059	PRINTER RIBBON	130.72
H	13PB12069	CARBONYL NICKEL POWDER	6,820.00
H	51Q90129	BOTTLE LABEL D3007 12.5	.00
H	52Q90129	BOTTLE LABEL D3007 12.5	.00
Q	12PB06908	NICKEL BASE SELF-FLUX ALY PWDR	.00
Q	12PB09075	NICKEL OXIDE POWDER	.00
Q	12PB10659	MAGNESIUM-ZIRCONATE POWDER	.00
Q	12PB10708	CHROMIUM CARBIDE POWDER	.00
Q	12PB11334	OFF-SIZE MOLYBDENUM POWDER	.00
Q	12PB21137	WHITE CAST IRON POWDER	.00
Q	12PB26585	MAGNESIA ALUMINA SPINEL	.00
Q	12PB31313	EPOXY POWDER	.00
Q	12PB32195	ZIRCONIUM POWDER	.00
Q	12PB32624	STAINLESS STEEL COMP POWDER	.00
Q	12PB36874	COPPER NICKEL INDIUM POWDER	.00
Q	12PB40654	COBL NIC CHRM ALUM YTTR	.00
Q	12PB46465	POLY VINYL PYRROLIDONE (LIQ)	.00
Q	12PB47421	CHROMIUM OXIDE POWDER	3,420.00

QUERY:PBINV
DATE: 2/18/98
PAGE: 4

B/P Cd	Item No	Item Description	On Hand
Q	12PB49123	ZIRCONIUM IV 2,2 POWDER	67.00
Q	12PB49150	NIC CHRM/ALUM BENT (G)	.00
Q	12PB49305	EKONOL POLYESTER POWDER	.00
Q	12PB90011	NICKEL BASE SELF-FLUX ALY PWDR	.00
Q	12PB90091	USE 12PB90093	.00
V	12PB14563	TUNG. CARB. NICKEL	.00
V	12PB15764	NIC-ALUM-MOLY	.00
V	12PB21773	STEEL/ALUM/MOLY PWDR	.00
V	12PB21774	IRON/ALUMINUM/MOLYBDENUM	.00
V	12PB22804	75% ALUM/25% GRAPHITE	.00
V	12PB31801	ALUM./GRAPHITECOMP. PWD.	2,167.00
V	12PB32765	ALUM/STAINLESS STEEL	.00
V	12PB37393	IRON/MOLY/ALUM COMP	.00
V	12PB49445	ALUM-SILICON ALLOY PWDR	.00
V	12PB50409	AL SILICON BORON NITRIDE COMPS	.00
V	12PB90125	NIC-CHRM-ALUM-COBL-YTTR	.00
W	12PB10870	OVEN TUNGSTEN CARB.-COBALT	1,470.00
W	12PB11224	TUNGSTEN CARB. COBALT	.00
W	12PB12226	TITANIA ALUMINA POWDER	12,126.00
W	12PB14770	TUNG. CARB. 17% COBALT	.00
W	12PB14853	TUNG. CARB. 17% COBALT	.00
W	12PB14895	TUNG. CARB. 17% COBALT	.00
W	12PB14896	TUNG. CARB. 17% COBALT	.00
W	12PB19587	YTTRIA STAB ZIRC OXIDE (NS)	.00
W	12PB26619	TUNG. CARB. SF ALLOY (OVEN)	3,412.00
W	12PB29205	W.C/17% COBALT	.00
W	12PB29206	W.C/17% COBALT	.00
W	12PB33677	ZIRC./TI/YTT COMP. POWDER	.00
W	12PB42960	TUNG CARB/COBL	.00
W	12PB44301	NICKEL CHROMIUM ALUMINUM CLAY	.00
W	12PB44302	NICKEL CHROMIUM ALM COMPOSITE	.00
W	12PB46131	SPRAY DRIED PRECURSOR	.00
W	12PB49485	TUNGS CARBIDE 17% COBALT PWDR	.00
W	12PB50079	SINTERED MOLYBDENUM POWDER	.00
W	12PB90098	RECLAIMED TUNG CARB. 17% COBLT	2,000.00
W	12PB90165	SINTERED TUNG CARB 17% COBALT	.00
X	12PB48697	WHITE CAST IRON POWDER	.00
X	12PB90093	CoNiCrAlY-BN POLY COMP POWDER	23.00

QUERY:PBINV
DATE: 2/18/98
PAGE: 5

B/P Cd	Item No	Item Description	On Hand
Y	12PB32737	MAG ZIRC PWDR (INTERIM/OVEN)	.00
Y	12PB32741	MAGNESIUM ZIRCONATE NS (HOSP)	.00
Y	12PB33090	YTTR/STAB/ZIRC/OXIDE-NS-(HOSP)	.00
Y	12PB36416	YTTR/STAB/ZIRC/OXIDE-NS-(HOSP)	.00
Y	12PB36789	CERIA/YTTR STAB ZIRC OXIDE (H)	.00
Y	12PB40881	YTTRIA STAB ZIRC OXIDE (NS)	.00
Y	12PB46133	YTTR/STAB/ZIRC/OXIDE-NS-(SINT)	.00
Y	12PB47117	CERIA/YTTR STAB ZIRC OXIDE	.00
Y	12PB48599	YTTR/STAB/ZIRC/OXIDE-NS-(HOSP)	.00
Y	12PB90009	YTTR/STAB/ZIRC/OXIDE-NS-(HOSP)	.00
Y	12PB90019	YTTR/STAB/ZIRC/OXIDE-NS-(HOSP)	.00
Y	12PB90029	CALCIUM SILICATE-(HOSP)	.00
5	12PB10871	OFF-SIZE TUNG-CARB/COBL (OVEN)	504.29
5	12PB10875	OFF-SIZE TUNG-CARB (OVEN)	1,010.00
5	12PB11002	OFF-SIZE MOLY PWDR	.00
5	12PB11003	OFF-SIZE MOLY PWDR	.00
5	12PB11335	OFF-SIZE TUNG-CARB/COBL (OVEN)	.00
5	12PB11386	OFF-SIZE TUNG-CARB (OVEN)	.00
5	12PB12228	OFF-SIZE TITANIUM/ALUM	.00
5	12PB12291	OFF-SIZE ZIRCONIUM	115.00
5	12PB12292	OFF-SIZE ZIRCONIUM	5.00
5	12PB12714	OFF-SIZE TUNG-CARB/COBL (OVEN)	.00
5	12PB14331	OFF-SIZE TUNG-CARB/COBL	45.00
5	12PB14332	OFF-SIZE TUNG-CARB/COBL	1,052.70
5	12PB14333	OFF-SIZE TUNG-CARB/COBL	.00
5	12PB14893	OFF-SIZE TUND-CARB/COBL	939.00
5	12PB14894	OFF-SIZE TUND-CARB/COBL WASHDW	.00
5	12PB19588	OFF-SIZE YTTR STAB ZIRC	1,020.00
5	12PB19589	OFF-SIZE YTTR STAB ZIRC	360.00
5	12PB32732	OFF-SIZE MAG/ZIRC	.00
5	12PB32733	OFF-SIZE MAG/ZIRC	.00
5	12PB33085	OFF-SIZE YTTR STAB ZIR OXIDE	.00
5	12PB33086	OFF-SIZE YTTR STAB ZIR OX(CYC)	.00
5	12PB34564	OFF-SIZE OVEN BY PRODUCT (ZTY)	.00
5	12PB34565	OFF-SIZE OVEN BY PRODUCT (ZTY)	125.00
5	12PB36411	OFF-SIZE YTTR STAB ZIR OX(CHM)	815.00
5	12PB36412	OFF-SIZE YTTR STAB ZIR OX(CYC)	300.00
5	12PB37791	OFF-SIZE CER YTTR ZIRC OXD	55.00
5	12PB37792	OFF-SIZE CER YTTR ZIRC OXD	135.00
5	12PB40877	OFF-SIZE YTTR ZIRC OXIDE PWDR.	.00
5	12PB40879	OFF-SIZE 203NS YTTR ZIRC OXIDE	290.00
5	12PB40880	OFF-SIZE 203NS YTTR ZIRC OXIDE	1,983.00
5	12PB42216	OFF-SIZE SINT TUNG CARB/COBL	2,000.00
5	12PB44319	OFF-SIZE NI CHR AL SIL (CHAMB)	.00
5	12PB44320	OFF-SIZE NI CHR AL SIL (CYCLO)	.00
5	12PB44321	OFFSZE AlSi CLAY NiCrAl(CHAMB)	.00
5	12PB44322	OFFSZE AlSi CLAY NiCrAl(CYCLO)	.00
5	12PB45713	OFF-SIZE TUNG CARB-17% COBL	347.00
5	12PB45839	OFF-SIZE YT STB ZIR OX(CYCHSP)	.00

QUERY:PBINV
DATE: 2/18/98
PAGE: 6

B/P Cd	Item No	Item Description	On Hand
5	12PB45840	OFF-SIZE MAG ZIRC (CYCL-HOSP)	3,360.00
5	12PB45998	OFF-SIZE YTR STAB ZIRC OX(CYC)	.00
5	12PB45999	OFF-SIZE YTR STAB ZIRC OX(CHM)	.00
5	12PB47424	OFF-SIZE FINE CHRM OXD (CHAMB)	490.00
5	12PB47425	OFF-SIZE FINE CHRM OXD (CYCLN)	13,804.00
5	12PB48603	OFF-SIZE YTR STAB ZIRC OX(CYC)	.00
5	12PB48604	OFF-SIZE YTR STAB ZIRC OX(CHM)	.00
5	12PB49545	OFF-SIZE YTTR STAB ZIR OXIDE	.00
5	12PB49546	OFF-SIZE YTTR STAB ZIR OX(CYC)	.00
5	12PB49795	OFF-SIZE 204NS-G(CYCHSP)	700.00
5	12PB90005	OFF-SIZE YTTR STAB ZIR OX(CHM)	.00
5	12PB90006	OFF-SIZE YTTR STAB ZIR OX(CYC)	.00
5	12PB90015	OFF-SIZE YTR STAB ZIRC OX(CYC)	.00
5	12PB90016	OFF-SIZE YTR STAB ZIRC OX(CHM)	.00
5	12PB90020	OFF-SIZE YT STB ZIR OX(CYCHSP)	.00
H	12PB04693	TUNGSTEN CARBIDE PWDR	.00
H	12PB19584	YTTRIUM OXIDE POWDER	6,514.00
H	12PB24909	SUPERFINE ALUMINUM OXIDE PWDR	2,000.00
H	12PB42373	TUNGSTEN CARBIDE POWDER	.00
H	12PB43265	TUNGSTEN CARBIDE COBALT POWDER	.00
H	12PB90148	YTTRIUM OXIDE POWDER	4,435.60
K	53Q09256	ALUMINUM ALLOY TUBE	5,426.00
K	53Q09608	ALUMINUM CUP INSERT	98,240.00
K	53Q10901	PLASTIC REEL	696.00

T# 5186 DART 116V

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D918230349 PFW01/10/2008 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD131318651	1	(800) 483-3718	001883763 FLE

5. Generator's Name and Mailing Address
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590
Generator's Phone: 516 338-2310

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name: Dr. + Trucking Company, Inc — U.S. EPA ID Number: OHD004165525

8. Designated Facility Name and Site Address
Clean Harbors Reidsville LLC
208 Wallington Industrial Drive
Reidsville, NC, 27320
Facility's Phone: (336) 342-6106
U.S. EPA ID Number: NCD000649451

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1755, WASTE CHROMIC ACID SOLUTION, 8, PG II	2	DF	957	P	D002 D008	D006	D007 T
	2.							
	3.							
	4.							

SULZER METCO (US) INC.
APR 21 2008
EHS DEPARTMENT

14. Special Handling Instructions and Additional Information
1. CH189142 ERG#154
2x55
DGPGt 05195 DOA 1#082663

15. GENERATOR'S/OFFEROR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in properly condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: x Jim Kour Koumelis — Signature: x [signature] — Month 3 Day 25 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: MANUEL GARCIA — Signature: Manuel Garcia — Month 3 Day 25 Year 08
Transporter 2 Printed/Typed Name: Angelo Lualdi — Signature: Angelo Lualdi — Month 3 Day 27 Year 08

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H121 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Doug Fox — Signature: [signature] — Month 4 Day 1 Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. DESIGNATED FACILITY TO GENERATOR

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping.

T# 5186

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) [illegible] Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
	NYD131318651	1	(800) 483-3710	001883763 FLE

5. Generator's Name and Mailing Address
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590
Generator's Phone: 516 338-2308

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039222250

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors Kinston LLC
203 Washington Industrial Drive
Raleigh, NC, 27320
Facility's Phone: (336) 342-6106
U.S. EPA ID Number: NCD000648461

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1755, WASTE CHROMIC ACID SOLUTION, 8, PG II	2	DF	957	P	D002 D008	D006	D007 T
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information
1. CH169142 ERG#154
2x55
D9P9H 05145 D9G1 H082663

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jim Kuckowski — Signature: [signature] — Month 3 Day 25 Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: MANUEL GARCIA — Signature: [signature] — Month 3 Day 25 Year 08
Transporter 2 Printed/Typed Name — Signature — Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete. **GENERATOR'S INITIAL COPY**

Clean Harbors has the quarantable permits for and will accept the waste the generator is shipping.

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Land Disposal Restriction Notification Form

Print Date: 03/24/2008

CleanHarbors ENVIRONMENTAL SERVICES, INC.

MANIFEST INFORMATION

Generator: Sulzer Metco US Inc
Address: 1101 Prospect Avenue
Westbury, NY 11590
EPA ID#: N Y D 1 3 1 3 1 8 6 5 1

Manifest No
001883763FLE
Sales Order No: D31838349

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category:
1	1	CH189142	NON- WASTEWATER	2 : This is subject to LDR.

EPA Waste Codes	EPA Waste Subcategory
D002	Corrosive Characteristic
D006	Toxicity characteristic for Cadmium
D007	Toxicity Characteristic for Chromium
D008	Toxicity Characteristic for Lead

LDR Chemical Data

Chemical	Underlying Hazardous Constituents	Constituents of Concern	Contaminants Subject to Treatment
CADMIUM	Y	N	N
Chromium	Y	N	N
LEAD	Y	N	N

Certification	Applies to Manifest Line Items
Pursuant to 40 CFR 268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268.	1

CleanHarbors ENVIRONMENTAL SERVICES, INC.

Land Disposal Restriction Notification Form

Print Date: 03/24/2008

MANIFEST INFORMATION

Generator: Sulzer Metco US Inc **Address:** 1101 Prospect Avenue Westbury, NY 11590 **EPA ID#:** N Y D 1 3 1 3 1 8 6 5 1	**Manifest No** 001883763FLE **Sales Order No:** D31838349

Waste analysis data, where available, is attached

Signature: [signature] **Print Name:** Jim Kouvkoumelis

Title: **Date:** 3/25/08

Revised November 1990

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name _____

Street _____

City _____ County _____ State _____ Zip _____

SIC Code [ ][ ][ ][ ] Dun & Brad Number [ ][ ]-[ ][ ][ ]-[ ][ ][ ][ ]

FOR OFFICIAL USE ONLY: ID # _____ Date Received _____

Owner/Operator Name

Name _____ Phone ( )

Mail Address _____

Emergency Contact

Name _____ Title _____

Phone ( ) 24 Hr. Phone ( )

Name _____ Title _____

Phone ( ) 24 Hr. Phone ( )

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19____

[ ] Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations: Container Type / Pressure / Temperature	Optional
CAS [ ][ ][ ][ ][ ][ ] [ ][ ] [ ] Trade Secret [ ] Chem. Name _____ Check all that apply: [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max. Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No. of Days On-site (days)	[ ][ ][ ] _____	[ ]
CAS [ ][ ][ ][ ][ ][ ] [ ][ ] [ ] Trade Secret [ ] Chem. Name _____ Check all that apply: [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max. Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No. of Days On-site (days)	[ ][ ][ ] _____	[ ]
CAS [ ][ ][ ][ ][ ][ ] [ ][ ] [ ] Trade Secret [ ] Chem. Name _____ Check all that apply: [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max. Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No. of Days On-site (days)	[ ][ ][ ] _____	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through _____, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner/operator OR owner/operator's authorized representative _____ Signature _____ Date signed _____

Optional Attachments

[ ] I have attached a site plan

[ ] I have attached a list of site coordinate abbreviations

[ ] I have attached a description of dikes and other safeguard measures

AREA CODE 708-572-7500

LIQUID CARBONIC

INDUSTRIES CORPORATION

810 JORIE BOULEVARD • OAK BROOK, ILLINOIS 60521-2216

To the Chief Safety and Health Officer
of Liquid Carbonic Industries Customers

As your supplier of industrial and/or medical gas products, it is our duty to notify you of your obligation to fulfill certain reporting responsibilities established under the Emergency Planning and Community Right-To-Know Act, also known as the Superfund Amendments and Reauthorization Act (SARA Title III) .

One or more of the products you purchase from Liquid Carbonic, as well as any of the substances you purchase from other companies and store in quantities above specific threshold amounts may need to be reported.

Which Facilities Must Report?

Every facility that stored - 1) a hazardous material in quantities exceeding 10,000 pounds or; 2) a substance listed on EPA's Extremely Hazardous Substance List in a quantity equal to or greater than 500 pounds (or 55 gals) or the threshold planning quantity (TPQ) (whichever is lower) - anytime during the calendar year 1994 must submit an "Emergency and Hazardous Chemical Inventory" form. The penalty for non-compliance can result in fines of up to $25,000 per day. The term "hazardous material" includes any material for which a Material Safety Data Sheet (MSDS) is required.

Section 311(e) of Title III does exclude the following substances: "Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual." These information letters have been sent to all Liquid Carbonic customers; each customer should determine whether this exclusion applies to them.

Many states accept the federal EPA's version of the form, called the "Tier II" form, but some states (CA, FL, GA, LA, ME, NJ, OH, OR, TX, VT, WI and possibly others) have developed their own version that must be used. Maryland requires both the federal and a state form. Some states also require an annual registration fee.

Where Must the Report Be Submitted?

The appropriate "Emergency and Hazardous Chemical Inventory" form must be submitted by **March 1** of each year to:

- Your State's Emergency Response Commission
- Your Local Emergency Planning Committee
- Your Local Fire Department

An overview of the reporting requirements and a copy of the Federal "Emergency and Hazardous Chemical Inventory" form (more commonly referred to as the federal Tier II form), is attached for your reference. Remember to check with your State Emergency Response Commission to be sure you are using the proper form and are submitting the form to the correct addresses.

It is also your responsibility to warn and protect your employees and others that may be exposed to potentially hazardous substances found in their workplace. If you are missing a Material Safety Data Sheet (MSDS) for any of the products you obtain from Liquid Carbonic, please call our MSDS Administrator at 1-708-572-7805.

For additional information and assistance regarding compliance, you can call the EPA Title III Hot Line at 1-800-535-0202 (1-703-920-9877 in Washington, DC and Alaska).

Sincerely,

Kate Carle

Kate Carle
Environmental Specialist

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) REPORTING REQUIREMENTS

EPCRA 302: Owners and operators are required to notify the State Emergency Response Commission (SERC) regarding the presence of extremely hazardous substances (EHSs) at their facilities. EHS are designated pursuant to EPCRA 302 and are listed in 40 Code of Federal Regulations (CFR) Part 355, Appendices A and B.

EPCRA 303: Owners and operators subject to EPCRA 302 are required to designate a facility emergency coordinator and provide any information necessary for emergency planning to the local emergency planning committee (LEPC) upon request.

EPCRA 304: Owners and operators of facilities are required to report releases of CERCLA hazardous substances and EPCRA EHSs to the SERC and LEPC immediately after the facility has knowledge that a reportable quantity has been released. The immediate notification must be followed by a written report as soon as practicable after the release.

EPCRA 311: Owners and operators that are required to prepare or have available Material Safety Data Sheets (MSDSs) under OSHA's Hazard Communication Standard must submit these MSDSs or a list to the SERC, LEPC, and local fire department with jurisdiction over the facility.

EPCRA 312: Owners and operators that are required to prepare or have available Material Safety Data Sheets (MSDSs) under OSHA's Hazard Communication Standard must submit hazardous chemical inventory forms to the SERC, LEPC, and local fire department annually on March 1st.

EPCRA 313: Owners and operators of certain facilities are required to submit annual reports of routine and accidental releases to EPA and designated State agencies. Facilities are subject to this requirement if they are in Standard Industrial Classification (SIC) Codes 20-39, employ 10 or more employees full time, and manufacture, import, process, or use any of 300 toxic chemicals at greater than the designated threshold amounts. Reports are due annually on July 1st.

Any questions owners or operators may have regarding the EPCRA reporting requirements may be directed to your local emergency planning committee, your State emergency response commission or to EPA's EPCRA Hotline at (800) 535-0202 or (703) 920-9877 in Washington, D.C. and Alaska.

TRANSMISSION REPORT

:METCO DOMESTIC SALES (APR [illegible] '92 12:26)

START TIME	REMOTE TERMINAL IDENTIFICATION	MODE	TIME	RESULTS	TOTAL PAGES	[illegible] CODE
[illegible]3 12:22	908 949 9127	G3EST	03'42"	OK	07	0569

FAX TRANSMITTAL FROM:

METCO PERKIN-ELMER

ENVIRONMENTAL

COMPLIANCE AND CONTROL

1101 PROSPECT AVENUE

WESTBURY, NY 11590-0201

(516) 334-1300 MAIN NUMBER

(516) 338-2337 ENVIRONMENTAL COMPLIANCE AND CONTROL

(516) 338-2218 FAX NUMBER

DATE: 4/23/92

TO: COMPANY:

ATTENTION: MARIANNE SANTARELL

DEPT. /M.S.:

FAX 908-949-9127

FROM: C. L. CONROY

6 PAGES TO FOLLOW

METCO

a division of

PERKIN ELMER

METCO, PERKIN-ELMER
1101 PROSPECT AVENUE
WESTBURY, NY 11590-0201
(516) 334-1300
EMERGENCY RESPONSE: CHEMTREC
INSIDE CONTINENTAL U.S. 800-424-9300
OUTSIDE CONTIENETAL U.S. 202-483-7616

MATERIAL SAFETY DATA SHEET

Product Name: METCOSEAL SA MSDS# 50-260

SECTION I

Trade Name: ACRYLIC SILICONE

Date of Issue: September 7, 1987

Revision Date: January 18, 1988

SECTION II — COMPOSITION AND TOXICITY DATA

Composition	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Isobutyl Acetate	110-19-0	150 ppm	150 ppm	
Diacetone Alcohol	123-42-2	50 ppm	50 ppm	
(Acetone free)				
Xylene	1330-20-7	100 ppm	100 ppm	STEL 150 ppm
Butyl Cellosolve	111-76-2	50 ppm	25 ppm	
Methyl Ethyl Ketone	78-93-3	200 ppm	200 ppm	STEL 300 ppm
Denatured Ethyl Alcohol	64-17-5	1000 ppm	1000 ppm	
Toluene	108-88-3	200 ppm	100 ppm	STEL 150 ppm
Skelly-Solv S		N/A	N/A	

SECTION III — PHYSICAL DATA

Boiling Point: (°F)	173-395	Specific Gravity (H_2O=1):	N/A
Vapor Pressure (mmHg):	N/A	Melting Point:	N/A
Solubility in Water:	Neg.	Evaporation Rate:	Slower than ether.
Appearance and Odor:	N/A	Vapor Density (AIR = 1):	Heavier than air.

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Flammable Limits	LEL	UEL
36°F CC	N/A	N/A	N/A

Extinguishing Media: Use National Fire Protection Association (NFPA) Clas B extinguishers (Carbon Dioxide, Dry Chemical or Foam) designed to extinguish NFPA Class 1B flammable liquid fires.

Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool closed containers to prevent pressure build up and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferrable.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces.

SECTION V — REACTIVITY DATA — 50-260

Stability	Unstable		
	Stable	X	

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition Products: May produce hazardous fumes when heated to decomposition as in welding. Fumes may contain carbon monoxide and oxides of nitrogen.

Hazardous Polymerization	May Occur		
	Will Not Occur	X	

SECTION VI — HEALTH HAZARD DATA

Summary of Risks:

ISOBUTYL ACETATE: A skin, eye irritant. Low oral, inhalation. See also esters. Upon absorption it can hydrolyze to acetic acid and isobutanol.

DIACETONE ALCOHOL: A human irritant. Moderate via oral and intraperitoneal exposure route. Irritant to eyes and mucous membrane. Narcotic in high concentration. Experiment has caused anemia and damage to kidneys and liver.

XYLENE: Dizziness, excitement, drowsiness, incoordination, staggering gait; irritation to eyes, nose, throat; corneal vacuolization; anorexia, nausea, vomit, abdominal pain; dermatitis.

NUTYL CELLOSOLVE: High human inhalation irritant. High intravenous, oral and skin. Moderate oral, intraperitoneal, inhalation, subcutaneous and skin. Mild skin, eye irritant.

METHYL ETHYL KETONE: Moderate irritation affects via oral route; low via dermal routes. A strong irritation. Affects peripheral nervous system, central nervous system is an experiment TER. Eye irritate at 350 ppm.

DENATURED ETHYL ALCOHOL: Moderate - Low via oral, intravenous and dermal routes. Probably also via inhalation route. Multiple data. The systemic effect of ethyl alcohol is rapidly oxidized in the body to carbon dioxide and water and in contrast to methyl alcohol, no cumulative effect occurs. Though ethyl alcohol possesses narcotic properties, concentration sufficient to produce this effect are not reached in industry. -continued on PAGE 5-

Medical Conditions Which May be Aggravated by Contact: N/A

Primary Entry Route(s): Respiratory system, central nervous system, eyes, gastrointestinal tract, blood, liver, kidneys and skin.

Signs and Symptoms of Overexposure:

Eye Contact: Primary irritation.

Skin Contact: Primary irritation.

Inhalation: Anesthetic. Irritation of the respitory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsiousness of coma.

Ingestion: N/A

First Aid:

Eye Contact: Flush immediately with copious amounts of running water for at least 15 minutes. Take to a physician for definitive medical treatment.

Skin Contact: Remove with soap and water. Remove contaminated clothing.

Inhalation: Expose to fresh air. Restore breathing. Keep warm and quiet.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Remove all sources of ignition (flames, hot surfaces and electrical, static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbant and non-sparkling tools.

Waste Management/Disposal: Dispose of an in accordance with local, state and federal regulations. Do not incinerate closed containers.

SECTION VIII — SPECIAL PROTECTION INFORMATION — 50-260

Personal Protective Equipment:

Goggles: Use safety eyewear designed to protect against splash of liquids.

Gloves: Required for prolonged or repeated contact.

Respirator: In outdoor or open areas use NIOSH approved mechanical filter respirator to remove solid air borne particles of overspray during spray application. In restricted ventilation areas use NIOSH approved chemical mechanical filters designed to remove a /combination of particulate and gas and vapor. In confined areas use NIOSH approved air line type respirators or hoods.

Other Protective Clothing or Equipment: Prevent prolonged skin contact with contaminated clothing.

Workplace Considerations:

Ventilation: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of most hazardous ingredient in Section II below acceptable limit.

Safety Stations: Eye wash stations are recommended.

Other: N/A

SECTION IX — HANDLING AND STORAGE PRECAUTIONS

Precautions to be Taken in Handling and Storage: Do not store above 120°F. Store large quantities in buildings designed for storage of NFPA Class II flammable liquids.

Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Keep container closed when not in use!

The information contained herein is based on available data and tests and is believed to be accurate. It is presented solely for your consideration and verification since conditions of use, storage and handling may vary.

Summary of Risks:

DENATURED ETHYL ALCOHOL: (continued)

Exposure to concentration of 5,000-10,000 ppm results in irritation of the eyes and mucous membrane of the upper respiratory tract. If continued for an hour, stupor and drowsiness may result. Concentration below 1,000 ppm usually produce no signs of intoxication. There is no concrete evidence that repeated exposure to ethyl alcohol vapor results in cirrhosis of the liver. Large does can cause alcohol poisoning. Repeated ingestions can lead to alcoholism. It is a central nervous system depressant, causes TER, ETA, GIT, GLN in humans. Exposure to concentration of over 1,000 ppm may cause headache, irritation to eyes, nose and throat, and if long continued, drowsinesss and lassitude, loss of appetite and inability to concentrate.

TOLUENE:

Moderate inhalation, intraperitoneal, subcutaneous; high intraperitoneal; low oral, skin. Toluene is dervied from coal tar and commercial grades usually contain small amounts of benzene as an impurity. Acute poisoning, resulting from exposures to high concentration of the vapors, are rate with toluene. Inhalation of 200 ppm of toluene for 8 hours may cause impairment of coordination and reaction time; with higher concentration (up to 800 ppm) these effects are increased and are observed in a shorter time. In the few cases of acute toluene poisoning reported, the effect has been that of a narcotic, the workman passing through a stage of intoxication into one of coma. Recovery following removal from exposure has been the rule. An occasional report of chronic poisoning describes an anemia and leucopenia, with biopsy showing a bone marrow hypoplasia. These effects, however, are less common in people working with toluene and they are not as severe. At 200-500 ppm, headache, nausea, eye irritation, loss of appetite, a bad taste, lassitude, impairment of coordination and reaction time are reported, but are not usually accompanied by any laboratory or physical findings of significance. With higher concentration, the above complaints are increased and in addition, anemia, leucopenia and enlarged liver may be found in rare cases.

SKELLY-SOLV S:

Not available.

The following is a list of ingredients and percentages for METCOSEAL SA, Material Safety Data Sheet number 50-260:

Ingredient	CAS Number	Percentage
Isobutyl Acetate	110-19-0	25
Diacetone Alcohol (Acetone free)	123-42-2	8
Xylene	1330-20-7	24
Methyl Ethyl Ketone	78-93-3	7
Denatured Ethyl Alcohol	Mixture	2
Toulene	108-88-3	2
Ethyl Benzene	100-41-4	5
2-Butoxyeymanol	111-76-2	5
Petroleum Solvent	8032-32-4	1
Isopropyl Alcohol	67-63-0	2
Aluminum (in non-volatiles)	7429-90-5	26
Benzene	71-43-2	0.00816

- All hazardous waste streams managed in units subject to RCRA permitting requirements;
- All hazardous waste streams managed in units exempt from RCRA permitting requirements;
- Radioactive wastes if they are mixed with RCRA hazardous waste streams;
- Hazardous waste streams generated as a result of RCRA Corrective Action or other remedial activity;
- RCRA hazardous waste streams generated at Superfund remediation sites;
- For on-site hazardous waste management units subject to RCRA permitting requirements, the RCRA and total capacity, influent, and effluent; and
- For on-site hazardous waste management units exempt from RCRA permitting requirements, the RCRA and total capacity, influent, and effluent.
- Hazardous waste streams which are required to be evaluated in the facility Hazardous Waste Reduction Plan or annual update (See Special Instructions beginning on page 47).

WHICH FORMS TO COMPLETE

This report contains five forms:

Form IC — All sites are required to submit Form IC. Note: There are two sides to this form.

Form GM — A site required to submit the 1992 Hazardous Waste Report must complete Form GM if it generated or shipped any quantity of RCRA or New York State hazardous waste streams during 1992.

A complete, separate, and independent Form GM must be submitted for each RCRA hazardous waste stream if:

- The hazardous waste stream generated on site from a production process or service activity.
- The hazardous waste stream was the result of a spill cleanup, equipment decommissioning, or other remedial cleanup activity.
- The hazardous waste stream was derived from the management of a non-hazardous waste stream.
- The hazardous waste stream was received from off site, was subsequently shipped off site and was not recycled or treated on site.
- The hazardous waste stream was a residual from the on-site treatment, disposal, or recycling of previously existing hazardous waste streams.

See the Special Instructions beginning on page 47 for reporting lab packs, asbestos, waste oils, contaminated groundwater, RCRA-radioactive mixed wastes, and waste streams which must also be reported in Hazardous Waste Reduction Plans.

SULZER

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
United States of America
www.sulzermetco.com
(516) 334-1300

TRI Facility ID: 11801PRKNL220MI

June 30, 2003

Ms. Susanne Wither
New York State Department of Environmental Conservation
Pollution Prevention Unit
625 Broadway, 12th Floor
Albany, NY 12233-8010

Subject: 2002 TRI Report

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskettes containing toxic chemical release reporting information for Sulzer Metco (US), Inc., 220 Miller Place, Hicksville, NY 11801.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 4 chemical reports for our facility. These 4 chemical reports are described below:

Chemical Name	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2002	7429-90-5	Form R
Chromium	2002	7440-47-3	Form R
Cobalt	2002	7440-48-4	Form R
Nickel	2002	7440-02-0	Form R

Our technical point of contact is:

Peter DiPietrantonio
(516) 338-2337
peter.dipietrantonio@sulzer.com

and is available should any questions or problems arise in the processing of this diskette.

I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report is accurate based on reasonable estimates using data available to the preparers of this report.

Sincerely,

Charles Haugh
Vice President, Sourcing
Sulzer Metco (US), Inc.
Enclosures: Diskette

ARCADIS GERAGHTY & MILLER

TELEFAX

To
Mr. Michael S. Lydon
Environment, Health & Safety
Sulzer Metco (US) Inc.

Copies

ENVIRONMENT

Fax
338-2336

Date
03 November 1998

From
Glenn Netuschil

Total pages
6

Extension
391-5207

Our ref
NY001110.0004

Subject
Remediation Work for the Duffy Avenue Facility

If you do not receive all pages, please call to let us know as soon as possible.

Attached please find the Summary and Recommendation Letter for the Duffy Avenue remediation work. Please call if you have any questions. Thank you.

THIS MESSAGE IS INTENDED ONLY FOR THE USE OF THE INDIVIDUAL OR ENTITY TO WHICH IT IS ADDRESSED AND MAY CONTAIN INFORMATION THAT IS PRIVILEGED, CONFIDENTIAL, AND EXEMPT FROM DISCLOSURE UNDER APPLICABLE LAW.
If the reader of this message is not the intended recipient, or the employee or agent responsible for delivering the message to the intended recipient, you are hereby notified that any dissemination, distribution, or copying of this communication is strictly prohibited. If you have received this communication in error, please notify us immediately by telephone and return the original message to us at the above address via the U.S. postal service.

ARCADIS GERAGHTY & MILLER

November 3, 1998

Mr. Michael S. Lydon
Sulzer Metco (US) Inc.
1101 Prospect Ave.
Westbury, NY 11590-0201

Subject: Sumps Remediation at the 325 Duffy Avenue Facility, Hicksville, NY

Dear Mr. Lydon:

ARCADIS Geraghty & Miller, Inc. and GM Consulting Engineers, P.C. were retained by Sulzer Metco (US) Inc. to remediate two indoor maintenance room sumps, Sumps 1 and 2, located at the 325 Duffy Avenue facility in Hicksville, New York. Sump 1 is located at the northern end of the maintenance department and was referred to as Sump A in a Phase II Site Investigation report by ERM-Northeast (dated November 19, 1997). Sump 2 is located at the southern end of the maintenance department and was referred to as Sump B in the ERM-Northeast report. The remediation of the sump areas consisted of the excavation and disposal of soil and concrete and the restoration of the sump areas. ARCADIS Geraghty & Miller retained Trade-Winds Environmental Restoration, Inc. to perform the excavation, soil and concrete disposal, and restoration activities. The following summarizes the work performed and includes a recommendation for the work to be completed.

Soil impacted by priority pollutant metals was excavated and removed from Sumps 1 and 2. The Sump 1 excavation was 8 feet by 8 feet with a depth of approximately 7.5 feet below floor slab. The original Sump 2 excavation was 7.5 feet by 7.5 feet with a depth of 7.5 feet below floor slab. Four sidewall and one endpoint soil samples were collected from each excavation and analyzed by Ecotest Laboratories using United States Environmental Protection Agency (USEPA) Method 6010 for priority pollutant metals. Analytical results were compared to New York State Department of Environmental Conservation (NYSDEC) Technical and Administrative Guidance Memorandum (TAGM) 4046 Criteria and Eastern USA Background.

The Sump 1 sidewall and endpoint soil sample data exhibited no exceedances of the TAGM 4046 Criteria and therefore, this area was backfilled with certified clean fill and restored. The analytical results for the Sump 1 sidewall and endpoint soil samples are summarized in Table 1. The excavation at Sump 2 was expanded 7 feet in each compass direction and 2 feet in depth (maximum depth attainable by the excavator) after the sidewall and endpoint soil samples from the original excavation exhibited concentrations of copper and nickel above the NYSDEC TAGM 4046 Criteria. A total of approximately 55 cubic yards of impacted soil was excavated

from the Sump 2 area. An additional four sidewall and one endpoint soil samples were collected and analyzed for priority pollutant metals. Endpoint soil sample, S2 E' (FLOOR), exhibited copper and nickel exceedances of the NYSDEC TAGM 4046 Criteria. The first round of Sump 2 sidewall and endpoint soil sample data is provided in Table 2 and the second round in Table 3.

ARCADIS Geraghty & Miller has reviewed the soil sample analytical results from the floor and sidewalls of the additional excavation performed at Sump 2 and recommends restoring the Sump 2 area and taking no further action based on the following reasons:

- The depth of the excavation is at the limit of reach of the largest excavator capable of entering the facility.
- There is potential to cause structural damage to a nearby bearing wall if the excavation were to extend deeper.
- Once the sump is restored and passes a leak test, the mobility of the metals in the soil will be minimal since the mechanism of transport (leaking fluid) will have been eliminated.
- There is no potential for direct exposure, since the soil is under the concrete floor within the building and all potential pathways will have been eliminated.

If you have any questions or comments please feel free to call Glenn Netuschil at (516) 391-5207.

Sincerely,

ARCADIS Geraghty & Miller, Inc.

Glenn Netuschil

Glenn Netuschil, P.E.
Project Engineer/Project Manager

GM Consulting Engineers, P.C.

Arnold S. Vernick, P.E.
President

Table 1: Sump 1, Priority Pollutant Metals Analytical Results of Sidewall and Endpoint Soil Samples, Maintenance Room Sulzer Metco, Duffy Avenue, Hicksville, New York.

Analytical Parameters	New York State Recommended Soil Cleanup Objectives[1] (mg/kg)	USGS Site Background for Eastern U.S. Estimated Arithmetic Mean (mg/kg)	Depth to Sump Bottom = 4' - 8"					
			Sample ID:	S1 A	S1 B	S1 C	S1 D	S1 E
			Sample Interval*:	4'	4'	4'	4'	FLOOR
			Date Sampled:	10/12/98	10/12/98	10/12/98	10/12/98	10/12/98
			Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Priority Pollutant Metals								
Antimony	SB	0.76		<1	<1	<1	<1	<1
Arsenic	7.5	7.4		0.74	0.66	1.4	0.83	0.63
Beryllium	0.16	0.85		0.11	0.1	0.05	0.05	<0.05
Cadmium	10	--		<0.26	<0.26	<0.26	<0.26	<0.26
Chromium	50	52		3.9	3.8	5.1	4.4	1.6
Copper	25	22		3.2	2.8	3.2	5.2	2.4
Lead	--	17		1.8	1.9	3.7	7	2.4
Mercury	SB	0.12		0.0078	<0.005	<0.005	0.0075	<0.005
Nickel	13	18		5.1	3.5	1.7	<0.5	2.3
Selenium	2	0.45		<0.4	<0.4	<0.4	<0.4	<0.4
Silver	SB	--		<0.26	<0.26	<0.26	<0.26	<0.26
Thallium	SB	--		<0.5	<0.5	<0.5	<0.5	<0.5
Zinc	20	52		4.5	4.5	2.4	10.1	4.3

NOTES:

* Sampling Intervals represent the depth below the top of concrete slab.

Analysis performed by Ecotest Laboratories, North Babylon, NY using USEPA Method 6010 (7000 series) for Priority Pollutant Metals.

Bold entries represent concentrations above either standard.

mg/kg	Milligrams per kilogram.
'	Feet
"	Inches
NYSDEC	New York State Department of Environmental Conservation.
USGS	United States Geological Survey
SB	Site Background
--	Criteria not available.
1	NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4046

Table 2: Sump 2 Original Excavation, Priority Pollutant Metals Analytical Results of the Sidewall and Endpoint Soil Samples, Maintenance Room Sulzer Metco, Duffy Avenue, Hicksville, New York.

Analytical Parameters	New York State Recommended Soil Cleanup Objectives[1] (mg/kg)	USGS Site Background for Eastern U.S Estimated Arithmetic Mean (mg/kg)	Depth to Sump Bottom = 2' - 2"				
			Sample ID:	S2 A	S2 B	S2 C	S2 D	S2 E
			Sample Interval*:	4'	4'	4'	4'	FLOOR
			Date Sampled:	10/8/98	10/8/98	10/8/98	10/8/98	10/8/98
			Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Priority Pollutant Metals								
Antimony	SB	0.76		<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic	7.5	7.4		<0.5	0.86	<0.5	<0.5	0.74
Beryllium	0.16	0.85		0.09	0.1	0.05	0.05	0.05
Cadmium	10	--		<0.25	<0.25	<0.25	<0.25	<0.27
Chromium	50	52		4	6.6	6.6	4.1	25
Copper	25	22		**28**	**24**	**36**	**66**	**47**
Lead	--	17		1.7	2	1.7	1.9	13
Mercury	SB	0.12		0.0077	0.013	<0.005	0.005	0.0066
Nickel	13	18		10	**26**	11	**26**	**19**
Selenium	2	0.45		<0.4	<0.4	<0.4	<0.4	<0.4
Silver	SB	--		<0.25	<0.25	<0.25	<0.25	<0.25
Thallium	SB	--		<0.5	<0.5	<0.5	<0.5	<0.5
Zinc	20	52		5.5	6.2	6.4	6.3	7.1

NOTES:

* Sampling Intervals represent the depth below the top of concrete slab.

Analysis performed by Ecotest Laboratories, North Babylon, NY using USEPA Method 6010 (7000 series) for Priority Pollutant Metals.

Bold entries represent concentrations above either standard.

mg/kg	Milligrams per kilogram.
'	Feet
"	Inches
NYSDEC	New York State Department of Environmental Conservation.
USGS	United States Geological Survey
SB	Site Background
--	Criteria not available.
1	NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4046

Table 3: Sump 2 Expanded Excavation, Priority Pollutant Metals Analytical Results of Sidewall and Endpoint Soil Samples, Maintenance Room Sulzer Metco, Duffy Avenue, Hicksville, New York.

Analytical Parameters	New York State Recommended Soil Cleanup Objectives (mg/kg)	USGS Site Background for Eastern U.S. Estimated Arithmetic Mean (mg/kg)	Depth to Sump Bottom = 2' - 2"				
			Sample ID:	S2 A'	S2 B'	S2 C'	S2 D'	S2 E'
			Sample Interval*:	4'	4'	4'	4'	FLOOR
			Date Sampled:	10/27/98	10/27/98	10/27/98	10/27/98	10/22/98
			Units:	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
Priority Pollutant Metals								
Antimony	SB	0.76		<0.5	<0.5	<0.5	<0.5	<0.5
Arsenic	7.5	7.4		<0.25	<0.25	<0.25	<0.25	0.52
Beryllium	0.16	0.85		0.05	0.051	0.051	0.05	0.081
Cadmium	10	--		<0.25	<0.25	<0.25	<0.25	0.14
Chromium	50	52		2.1	2.8	1.5	1.7	2.8
Copper	25	22		7.3	6.1	0.06	2.5	**120**
Lead	--	17		1.6	1.4	1.2	0.81	0.79
Mercury	SB	0.12		<0.04	<0.02	<0.02	<0.02	<0.005
Nickel	13	18		13	13	3.6	3.3	**30**
Selenium	2	0.45		<0.4	<0.4	<0.4	<0.4	<0.4
Silver	SB	--		<0.25	<0.25	<0.25	<0.25	<0.05
Thallium	SB	--		<0.5	<0.5	<0.5	<0.5	<0.1
Zinc	20	52		3.9	4	3.6	2.2	6.6

NOTES:

* Sampling Intervals represent the depth below the top of concrete slab.

Analysis performed by Ecotest Laboratories, North Babylon, NY using USEPA Method 6010 (7000 series) for Priority Pollutant Metals.

Bold entries represent concentrations above either standard.

mg/kg	Milligrams per kilogram.
'	Feet
"	Inches
NYSDEC	New York State Department of Environmental Conservation.
USGS	United States Geological Survey
SB	Site Background
--	Criteria not available.
1	NYSDEC's Technical and Administrative Guidance Memorandum (TAGM) #4046

Profile Summary Report

For Generator: SUL025 and All Profile Numbers

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH13495	CH13495	SUL025	SUPER AGITENE	FB2	G	E	11/04/2004	WASTE FLAMMABLE LIQUIDS, N.O.S. (PETROLEUM DISTILLATES)	D001
CH14936	CH14936	SUL025	ACTREL, 105 SOLVENT	FB1	G	E	08/20/2005	Waste Petroleum distillates, n.o.s. or Petroleum products, n.o.s., (ALIPHATIC HYDROCARBONS) , 3, UN1268, PG III	D001 D039
CH18605	CH18605	SUL025	CLEAR ENAMEL	A22K	I	A	05/09/2003	WASTE PAINT RELATED MATERIAL	D001
CH18606	CH18606	SUL025	AMINE HARDNER,ALKYL ESTER	CNOS	I	A	05/09/2003	NON DOT REGULATED MATERIAL	NONE
CH18666	CH18666	SUL025	BISPHENOL A EPOXY/RESIN BLEND	CNO	I	A	05/09/2003	NON DOT REGULATED MATERIAL	CR05 MA99 NONE
CH189101	CH189101	SUL025	GENESOLV D	A15	G	E	12/07/2001	WASTE TOXIC LIQUIDS, ORGANIC, N.O.S. (TRICHLOROTRIFLUOROETHANE)	F002
CH189102	CH189102	SUL025	OIL SPILL CLEANUP/FILTERS	CNO	I	A	03/09/2008	NON DOT REGULATED MATERIAL, (ABSORBENT PADS, OIL FILTERS) , N/A, NONE	CR05 MA01
CH189103	CH189103	SUL025	KEROSENE	FB1	G	E	09/16/2005	Waste Kerosene, 3, UN1223, PG III	D001
CH189104	CH189104	SUL025	ACETONE	FB1	G	E	12/07/2001	WASTE ACETONE	D001 U002
CH189105	CH189105	SUL025	GRINDING WASTE		G	E	10/02/1998	NON DOT REGULATED MATERIAL	NONE
CH189106	CH189106	SUL025	CAUSTIC COPPER DIP/SODIUM HYDROXIDE	B22CE	G	A	04/25/2007	Waste Corrosive liquid, basic, inorganic, n.o.s., (CHROMIUM, SODIUM HYDROXIDE) , 8, UN3266, PG II	D002 D006 D007 D008
CH189107	CH189107	SUL025	METAL OXIDES & CERAMIC POWDERS	CNO	I	A	02/09/2008	NON DOT REGULATED MATERIAL, (Magnesium oxide, Titanium oxide) , N/A, NONE	CR05 MA99 NONE
CH189107R	CH189107R	SUL025	METAL OXIDES & CERAMIC POWDERS	CNO	G	D		NON DOT REGULATED MATERIAL, (ZIRCRONIUM OXIDE, YTERRIUM OXIDE) , N/A, NONE	CR05 MA99 NONE
CH189108	CH189108	SUL025	RCRA METAL & CERAMIC POWDER	CCS	G	D		Hazardous waste, solid, n.o.s., (CERAMIC OXIDE, CHROMIUM) , 9, NA3077, PG III	D007
CH189109	CH189109	SUL025	Filters/PPE/Metal & Ceramic Powder	CNO	G	A	01/25/2008	NON DOT REGULATED MATERIAL, (FILTERS, PPE, CERAMIC POWDER) , NONE, NONE	CR05 MA99 NONE

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590 (Cont.)

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH189110	CH189110	SUL025	GRIT BLAST MATERIAL	CNO	G	A	09/11/2007	NON DOT REGULATED MATERIAL, (Aluminium Oxide) , NONE, NONE	CR05 MA99 NONE
CH189111	CH189111	SUL025	WASTE COMPRESSOR OIL	A31	G	A	09/11/2007	NON DOT REGULATED MATERIAL, (PETROLEUM OIL) , NONE, NONE	CR02 MA01 NONE
CH189112	CH189112	SUL025	MIXED SPENT ACIDS	B22HE	G	A	07/11/2007	Waste Corrosive liquid, acidic, inorganic, n.o.s., (HYDROCHLORIC ACID, NITRIC ACID) , 8, UN3264, PG II	D002 D006 D007 D008
CH189131	CH189131	SUL025	MIXED PLASTIC POWDER	CNO	G	E	12/07/2001	NON DOT REGULATED MATERIAL	CR05 MA99 NONE
CH189132	CH189132	SUL025	PAINT RELATED MATERIAL	FB2	G	E	11/05/2004	Waste Paint related material, 3, UN1263, PG II	D001 D035 F003 F005
CH189134	CH189134	SUL025	METAL/CERAMIC POWDER & WATER	CNOS	G	E	12/27/2006	NON DOT REGULATED MATERIAL, NONE, NONE	CR04 MA99
CH189134B	CH189134B	SUL025	METAL/CERAMIC POWDER & WATER	CNOS	W	E	12/30/2004	NON DOT REGULATED MATERIAL, NONE, NONE	CR04 MA99 NONE
CH189135	CH189135	SUL025	FILTERS WITH RCRA METALS	CCSM	G	A	09/15/2007	Hazardous waste, solid, n.o.s., (FILTERS, CHROMIUM) , 9, NA3077, PG III	D007
CH189136	CH189136	SUL025	LEAD ACID BATTERIES	LBLA	G	A	08/03/2007	Batteries, wet, filled with acid, electric storage, 8, UN2794, PG III	MA99
CH189137	CH189137	SUL025	SODIUM CARBOXYMETHYL CELLULOSE & WATER	CNOS	G	E	12/07/2001	NON DOT REGULATED MATERIAL (SODIUM CARBOXYMETHYL CELLULOSE)	CR04 MA99 NONE
CH189138	CH189138	SUL025	GRAPHITE AND WATER	CNO	G	E	08/20/2005	NON DOT REGULATED MATERIAL, (GRAPHITE,WATER) , NONE, NONE	CR05 MA99 NONE
CH189139	CH189139	SUL025	METCO MASKING COMPOUND	CNOS	G	E	12/07/2001	NON DOT REGULATED MATERIAL	CR02 MA01 NONE
CH189140	CH189140	SUL025	TURCOFORM MASK	CCRK	I	E	12/07/2001	WASTE TETRACHLOROETHYLENE, MIXTURE	F002
CH189141	CH189141	SUL025	WATER SOLUBLE OIL	FB2	G	A	06/02/2007	NON DOT REGULATED MATERIAL, (WATER SOLUBLE OIL) , N/A, NONE	CR04 MA01 NONE

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590 (Cont.)

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH189142	CH189142	SUL025	COPPER CLEANER/CHROMIC ACID	B22C	G	A	03/27/2008	Waste Chromic acid solution, 8, UN1755, PG II	D002 D006 D007 D008
CH189143	CH189143	SUL025	DEVELOPER/FIXER	B36	G	E	12/07/2001	HAZARDOUS WASTE LIQUID, N.O.S. (SILVER)	D011
CH189144	CH189144	SUL025	NYLON TURNINGS	CNOS	I	A	03/09/2008	NON DOT REGULATED MATERIAL, (NYLON SOLIDS) , N/A, NONE	MA01
CH189145	CH189145	SUL025	SPRAY ALUMINUM OXIDE	CNI	G	E	12/07/2001	NON DOT REGULATED MATERIAL (ALUMINUM OXIDE POWDER)	CR05 MA99 NONE
CH189146	CH189146	SUL025	TUMBLER WASTE SLUDGE	CNO	G	E	04/22/2005	NON DOT REGULATED MATERIAL, N/A, NONE	CR05 MA99 NONE
CH198420	CH198420	SUL025	Lucite- Poly Methyl Methacrylate	CBP	I	A	07/11/2007	NON D.O.T. REGULATED, NONE, N/A	
CH198422	CH198422	SUL025	Degreaser		I	A	07/11/2007	Non Hazardous, Non D.O.T. Regulated, N/A, NONE	MA99
CH198434	CH198434	SUL025	Diesel Fuel	A32	I	A	07/11/2007	NON D.O.T. REGULATED, NONE, N/A Diesel, Water	MA01
CH202690	CH202690	SUL025	Non PCB Ballasts and Capacitors	D80L	I	A	08/02/2007	NON DOT REGULATED MATERIAL, (Non PCB Ballasts/Capacitors) , NONE, N/A	
CH202693	CH202693	SUL025	Ethylene Glycol	B35	I	A	08/02/2007	NON DOT REGULATED MATERIAL, (Ethylene Glycol) , N/A, NONE Non DOT Regulated Organic Material, (Ethylene Glycol) , N/A, NONE	
CH202699	CH202699	SUL025	Nickel Cadmium Batteries	LBD2	I	A	08/02/2007	Environmentally hazardous substances, solid, n.o.s., (Nickel Cadmium Batteries) , 9, UN3077, PG III	
CH202711	CH202711	SUL025	LEAD-ACID BATTERIES	LBLA2		D		Waste Batteries, wet, filled with acid, electric storage, 8, UN2794, PG III	NONE
CH202742	CH202742	SUL025	Alkaline Batteries	CNO	I	A	08/03/2007	NON DOT REGULATED MATERIAL, (Alkaline Batteries) , N/A, NONE	
CH202743	CH202743	SUL025	Hgh Pressure Sodium Bulbs	CFL4	I	A	08/02/2007	NON DOT REGULATED MATERIAL, (SODIUM BULBS) , N/A, NONE Universal Waste	
CH202758	CH202758	SUL025	Metal Halide Bulbs	CFL4	I	A	08/02/2007	NON DOT REGULATED MATERIAL, (Metal Halide Bulbs) , N/A, NONE Universal Waste	

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590 (Cont.)

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH202786	CH202786	SUL025	Oil Based Paint in Cans	LPTP	I	A	08/02/2007	Waste Paint, 3, UN1263, PG II	D001
CH202792	CH202792	SUL025	PAINT/ADHESIVES/RESINS IN CANS	LPTN	I	A	08/02/2007	Waste Paint, 3, UN1263, PG III	D001
CH203839	CH203839	SUL025	LATEX PAINT	CNOS	I	A	08/04/2007	NON DOT REGULATED MATERIAL, (latex paint) , N/A, NONE	MA99
CH203842	CH203842	SUL025	PAINT RELATED MATERIAL/ oil based Paint	FB1	I	A	08/04/2007	Waste Paint related material, 3, UN1263, PG II	D001
CH209526	CH209526	SUL025	OIL SPRAY FILTERS	CNO	I	A	09/11/2007	NON DOT REGULATED MATERIAL, (OIL FILTERS) , NONE, NONE	
CH223685	CH223685	SUL025	Neutralized Acetic Acid	A22K	I	A	11/06/2007	NON DOT REGULATED MATERIAL, N/A, NONE	
CH225779	CH225779	SUL025	Flammable Liquid Spill Cleanup	CCRK	I	A	11/15/2007	Waste Solids containing flammable liquid, n.o.s., (Ethyl Alcohol, Isopropyl Alcohol) , 4.1, UN3175, PG II	D001
CH231707	CH231707	SUL025	Computer Equipment	EEE		D		NON DOT REGULATED MATERIAL, (Computer Equipment) , NONE, N/A	
CH245367	CH245367	SUL025	Metal and Ceramic Powder with RCRA Metal (Chromium)		I	I		Hazardous waste, solid, n.o.s., (Ceramic Oxide, Chromium) , 9, NA3077, PG III	D007
CH245369	CH245369	SUL025	Water with trace solvents	A24F	I	A	03/27/2008	Non DOT Regulated, NONE, NONE	
CH248157	CH248157	SUL025	Ammonia Solution	LCCRB	I	A	03/27/2008	Waste Ammonia solutions, 8, UN2672, PG III Waste Consumer commodity, ORM-D, NONE	D002
CH248243	CH248243	SUL025	OxOut-411	CBP	I	A	03/28/2008	Corrosive solids, n.o.s., (Sodium Hydroxide) , 8, UN1759, PG III	
CH25445	CH25445	SUL025	CHROMIC ACID DEBRIS	CCSM	I	E	02/28/2007	RQ, Hazardous waste, solid, n.o.s., (chromium) , 9, NA3077, PG III	D007
CH25451	CH25451	SUL025	COPPER TURNINGS			D		Non Hazardous, Non D.O.T. Regulated Non Hazardous, Non D.O.T. Regulated	
CH36421	CH36421	SUL025	SAND	CNO	I	E	05/06/2005	Non D.O.T. Regulated, (crstalline silica, iron oxide) , N/A, NONE	CR05 MA99
CH36423	CH36423	SUL025	Polyester Powder	CNO	I	E	05/02/2004	NON DOT REGULATED MATERIAL, N/A, NONE NON DOT REGULATED MATERIAL, N/A, NONE	CR05 MA99
CH36424	CH36424	SUL025	Characterized Liquid	CNOS	I	E	05/02/2004		CR02 MA01

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590 (Cont.)

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH36424	CH36424	SUL025	Characterized Liquid	CNOS	I	E	05/02/2004	NON DOT REGULATED MATERIAL, N/A, NONE NON DOT REGULATED MATERIAL, N/A, NONE	CR02 MA01
CH36427	CH36427	SUL025	Water/oil/soap	CNOS	I	A	09/11/2007	NON DOT REGULATED MATERIAL, (OILY SOAP) , N/A, NONE NON DOT REGULATED MATERIAL, NONE, NONE	CR02 MA01
CH40311	CH40311	SUL025	Albrite acid solution	B22A	I	E	09/18/2004	Waste Corrosive liquid, acidic, inorganic, n.o.s., (Phosphoric Acid) , 8, UN3264, PG II	D002
CH40314	CH40314	SUL025	Polyvinyl Alcohol	CNOS	I	E	09/18/2004	NON DOT REGULATED MATERIAL, (Polyvinyl Alcohol) , N/A, NONE	MA99
CH40316	CH40316	SUL025	Flammable amine resin	CCRC	I	E	09/18/2004	Waste Flammable liquids, corrosive, n.o.s., (Diethylamine) , 3, UN2924, PG II	D001 D002
CH40325	CH40325	SUL025	Silica solution	CNOS	I	E	09/18/2004	NON DOT REGULATED MATERIAL, (silica, water) , N/A, NONE	CR04 MA99
CH59278	CH59278	SUL025	METAL OXIDES & CERAMIC POWDERS	CBP	G	E	02/19/2005	NON DOT REGULATED MATERIAL, (CERAMIC OXIDE, ALUMINUM OXIDE) , N/A, NONE	CR05 MA99 NONE
CH66105	CH66105	SUL025	Kitchen Grease	CNOS	I	A	01/30/2008	NON DOT REGULATED MATERIAL, (Kitchen Grease) , N/A, NONE	CR04 MA99
CH66106	CH66106	SUL025	water/organic Binder	A22K	G	E	06/20/2006	NON DOT REGULATED MATERIAL, (ORGANIC BINDER SOLUTION) , N/A, NONE	CR04 MA99
CH66118	CH66118	SUL025	Oil and Speedi dry	CNOS	I	A	03/09/2008	NON DOT REGULATED MATERIAL, (oil, speedy Dry) , N/A, NONE	CR05 MA01
CH74857	CH74857	SUL025	Methanol	FB2	G	E	08/20/2005	Waste Methanol solution, 3, UN1230, PG II	U154
CH74860	CH74860	SUL025	Glycol/water	B35	G	E	08/20/2005	NON DOT REGULATED MATERIAL, (ethylene Glycol, propylene glycol) , N/A, NONE	CR04 MA99
CH74864	CH74864	SUL025	Laquer Thinner	FB1	G	E	08/24/2005	Waste Flammable liquids, n.o.s., (Paint Thinner) , 3, UN1993, PG III	D001
CH74868	CH74868	SUL025	Acetic Acid/water	CCRC	G	E	08/02/2005	RQ, Waste Acetic acid solution, with more than 80 percent acid, by mass, 8, UN2789, PG II (D002)	D002
CH74872	CH74872	SUL025	WATER/OIL	A31	G	A	07/26/2007	NON DOT REGULATED MATERIAL, (WATER,OIL) , N/A, NONE	CR02 MA01
CH74873	CH74873	SUL025	Empty Drums	D23	I	A	09/11/2007	NON DOT REGULATED MATERIAL, (empty drums) , N/A, NONE	
CH74875	CH74875	SUL025	Zirconium Oxide			D			

Generator: Sulzer Metco US Inc, 1101 Prospect Avenue, Westbury, NY 11590 (Cont.)

Clean Harbors Profile No	Generator Profile No.	Customer Code	Waste Description	Waste Class Code	Profile Type	Approv Status	Exp. Date	DOT Ship Information	EPA State Waste Code
CH74875	CH74875	SUL025	Zirconium Oxide			D		NON DOT REGULATED MATERIAL, (Zirconium Oxide) , N/A, NONE	
CH74876	CH74876	SUL025	Chrome Oxide	CBP	G	E	08/25/2005	NON DOT REGULATED MATERIAL, N/A, NONE Chrome Oxide	
CH75098	CH75098	SUL025	IGEPAL CO-710	FB2	G	A	09/11/2007	NON DOT REGULATED MATERIAL, (Igepal co-710) , N/A, NONE	CR04 MA99
CH75505	CH75505	SUL025	METALS & METAL OXIDE POWDERS	CBP	G	E	08/25/2005	NON DOT REGULATED MATERIAL, N/A, NONE	NONE
CH75837	CH75837	SUL025	METAL POWDERS W/ ALUMINUM	A99	I	E	09/28/2005	RQ, Environmentally hazardous substances, solid, n.o.s., (aluminum, nickel powder) , 9, UN3077, PG III (Nickel)	NONE
CH79100	CH79100	SUL025	COPPER CLEANER/CHROMIC ACID pH=10	B22CE	G	E	10/06/2005	Hazardous waste, liquid, n.o.s., (Lead, Chromium) , 9, NA3082, PG III	D006 D007 D008
CH82414	CH82414	SUL025	METAL/CERAMIC POWDER & 90% WATER	B26B	G	E	11/10/2005	NON DOT REGULATED MATERIAL, (Ceramic Oxide) , NONE, NONE	CR04 MA99 NONE
ch82414b	ch82414b	SUL025				T			
ch82414bb	ch82414bb	SUL025	METAL/CERAMIC POWDER & 90% WATER	CNOS	W	A	03/21/2008	NON DOT REGULATED MATERIAL, (Ceramic Oxide) , NONE, NONE	CR04
CH83772	CH83772	SUL025	METAL/CERAMIC WASTEWATER	CNO	I	E	02/03/2006	NON DOT REGULATED MATERIAL, (METAL OXIDES) , NONE, N/A	CR05 MA99
CH83772B	CH83772B	SUL025	METAL/CERAMIC WASTEWATER	CNOS	W	E	11/30/2005	NON DOT REGULATED MATERIAL, (Metal Oxides, Ceramics) , NONE, N/A	
CH92537	CH92537	SUL025	Methanol/Aquadag/water	A22K	I	A	06/01/2007	Waste Flammable liquids, n.o.s., (Methanol, graphite) , 3, UN1993, PG III	F003
CHCFL1-63	CHCFL1-63	SUL025	STRAIGHT FLUORESCENT TUBES FOR RECLAIM	CFL1	I	A	11/08/2007	NON DOT REGULATED MATERIAL, (UNIVERSAL WASTE LIGHT TUBES) , NONE, NONE	CR05 MA95 NONE
CHCFL2-48	CHCFL2-48	SUL025	U TUBES FLUORESCENT LAMPS FOR RECLAIM	CFL2	I	A	11/08/2007	universal waste, (mercury containing bulbs) , NONE, NONE	MA95 NONE
DS-CH82414BB	DS-CH82414BB	SUL025	METAL/CERAMIC POWDER & 90% WATER	CNOS		P		NON DOT REGULATED MATERIAL, (Ceramic Oxide) , NONE, NONE	CR04

Sulzer Metco US Inc Totals: 91 Profiles

End of Report

New York State Department of Environmental Conservation
Division of Solid and Hazardous Materials, 9th Floor
625 Broadway, Albany, New York 12233-7252
Phone: (518) 402-8610 • FAX: (518) 402-9024 (Attn: HW Manifest & Reporting Section)
Website: www.dec.ny.gov

Alexander B. Grannis
Commissioner

SULZER METCO (US) INC.
FEB 12 2008
DEPARTMENT

2007 HAZARDOUS WASTE REGULATORY FEE INFORMATION FORM INSTRUCTIONS

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM.
SUBMIT THE FORM WITH YOUR 2007 HAZARDOUS WASTE ANNUAL REPORT.

The attached form is NOT the Hazardous Waste Annual Report.

All Generators and TSD Facilities MUST complete this Hazardous Waste Regulatory Fee Information Form. The form must be filled out AFTER the Hazardous Waste Annual Report is completed.

You may be responsible for regulatory fees pursuant to Environmental Conservation Law (ECL) Sections 72-0401, 0402 and 0403, depending on the quantity and type of hazardous waste and hazardous wastewater generated and/or managed during calendar year 2007. The Hazardous Waste Regulatory Fee Information Form is used solely for assessing regulatory fees. All generators must submit both an Annual Report and a signed Regulatory Fee Information Form to the Department. Note that a signed paper copy of the Regulatory Fee Information Form still must be submitted to the Department along with the Declaration of Electronic Filing of the Annual Report Form, even if the Annual Report is submitted electronically.

These instructions explain which wastes should and should NOT be included in the Hazardous Waste Regulatory Fee Information Form waste totals. Errors or misrepresentation of quantities of hazardous waste may result in incorrect fees.

Surcharge fees on the generation of hazardous waste and hazardous wastewater were added to Section 72-0403 in 2003 by the Superfund and Brownfields legislation. These surcharge fees are in addition to the base fees that have been assessed on the generation of hazardous waste since 1983 pursuant to Section 72-0402.

The base and surcharge generator fees apply to the entire year's generation of hazardous waste. The existing administrative procedures and processes in 6NYCRR Parts 480, 481 and 483 will be used for the administration of the Section 72-0402 base fees and the Section 72-0403 surcharge fees.

The Hazardous Waste Regulatory Fee Information Form and Instructions are also posted on the Department's webpage at: http://www.dec.ny.gov/chemical/9099.html

Questions on the Hazardous Waste Regulatory Fee Information **Form** should be directed to the **Bureau of Hazardous Waste Regulation at 518-402-8610**. Questions on the Hazardous Waste **Annual Report** should be directed to the **Hazardous Waste Manifest and Reporting Section at 800-452-1925 (in New York State) or 518-402-8730**.

P2SUL002021

Section II, Lines 3.(a) and 3.(b) - Recycled Waste - For Lines 3.(a) and 3.(b), show the amounts claimed to be eligible for the 90% recycling exemption from surcharge fees for 2007 for hazardous waste and hazardous wastewater, respectively. Any amounts reported to be recycled must also be included in the totals in Lines 1.(a) and 2.(a), [and Lines 1.(c) and 2.(c)] for hazardous waste and hazardous wastewater, respectively. Before completing these lines, see the requirements below.

ECL Section 72-0403(2) contains an exemption from surcharge fees only (not the base fees) for those recycling more than 90% of hazardous waste or hazardous wastewater. Section 72-0403(2) states:
"In any case where a generator recycles more than ninety percent of the amount of hazardous waste or more than ninety percent of the amount of hazardous wastewater it produces in any calendar year, as certified to the commissioner, upon which a fee is imposed pursuant to this section, any such fee imposed or to be imposed in such case shall be determined based upon the net amount of hazardous waste or hazardous wastewater generated, as applicable, which is not so recycled in such calendar year, rather than upon the gross amount of hazardous waste or hazardous wastewater generated in such calendar year."

Claims for the recycling exemption must be made by means of written certification and backup documentation submitted to the Department. Hazardous waste must be addressed separately from hazardous wastewater, and vice versa. One must recycle at least 90% of the total amount of hazardous waste (other than wastewater) generated in 2007 to qualify for the exemption from the hazardous waste surcharge fee, and at least 90% of the total amount of hazardous wastewater generated in 2007 to qualify for the exemption from the hazardous wastewater surcharge fee.

If you believe the recycling exemption applies, submit written certification and documentation to substantiate such claim attached to the Regulatory Fee Information Form. The documentation must demonstrate that the recycling is legitimate and include details of the waste streams and the recycled material, including their physical characteristics and detailed chemical compositions, including, as a minimum, all hazardous constituents. Also include how, where and when the wastes are being recycled (including certificates of recycling, when applicable), what constituents and what quantity and percentage of the constituents are being recycled, and the end use of the recycled constituents. Explain how the recycled material is being managed as a commodity and to prevent releases to the environment. Show the amounts of any hazardous constituents in the recycled material as compared to a similar raw material. Document the economic and other benefits from the recycling.

As part of the above, for the case of burning for energy recovery, provide documentation showing that the waste 1) actually was burned for energy recovery (and was not burned in an incinerator or other disposal unit), 2) had significant fuel value (i.e., adequate BTUs/lb.), and 3) that the waste recycled contained no or minimal constituents that would be deleterious to and/or not treated by the burning process (e.g., mercury, and other materials that could harm the process and/or the environment).

The documentation must include the following written certification signed by the facility operator, owner, or his/her designated representative: "I hereby affirm under penalty of perjury that the information provided in this form and attached statements and exhibits is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law."

SECTION III. TREATMENT, STORAGE AND DISPOSAL FACILITY - This section must be completed ONLY if your facility is a Treatment, Storage, or Disposal (TSD) Facility. DO NOT complete this section if you are a Generator only.

A TSD Facility is a facility that has one or more hazardous waste units on site that require a permit for the treatment, storage, or disposal of hazardous waste pursuant to Title 9 of Article 27 of the ECL and the 6 NYCRR 370 Series. All TSD Facilities should have filed a Part A application for a hazardous waste permit and be permitted, seeking a permit, or in the process of closing any TSD units on site. Any TSD Facilities with TSD units not certified closed and approved by the Department are charged fees, regardless of the amount of waste presently managed. A TSD Facility fee is also applicable to a Post-closure facility.

Line 1: For the type of units listed on the form, check off the hazardous waste units requiring a permit located at the facility. Tank and container units do not need to be shown on Line 1 but must be included in the totals below.
Line 2: Show the total amount of hazardous waste received from off site.
Line 3: Show the total amount of hazardous waste managed in TSD Facility units required to obtain a permit. Exempt systems should NOT be included.
Line 4: Show the total amount of hazardous waste stored on site on December 31, 2007, in tons. This quantity is not found in your Hazardous Waste Annual Report and must be provided from facility records.
Line 5: Post-closure facilities are those facilities that have closed RCRA units for which Post-closure permits or orders are needed.

P2SUL002022

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

Dear Toxic Release Inventory (EPA Form R) Reporter:

Attached is a report, produced by EPA, which lists the chemical identities and corresponding release values for the Form R's EPA received from the facility listed above for Toxic Release Inventory (TRI) Reporting Year 1990 (RY90).

It is EPA's intention to represent all data reported by your facility as accurately as possible. In order to do this, EPA has implemented a variety of quality control procedures. We believe our data entry is of good quality. However, as a final quality control measure, we ask that you verify the critical release value information listed on this report against your Form R files. If you find any data entry errors, please let us know by following these simple instructions:

- On the attached report, use a red pen to mark through the erroneous value, and write the corrected value next to it.

- Return the corrected report to:

  The EPCRA Reporting Center
  P.O. Box 23779
  Washington, DC 20026-3779
  Attn: TRI 100%

We request that you do this within 21 calendar days of receipt, so that we may correct your data before we make it publicly available in the Spring, 1992. If you do not find any errors in this report, no response is necessary.

Please DO NOT use this report to make changes to release values or any other data which you reported incorrectly. Those changes should be submitted to EPA by making a photocopy of your Form R, writing 'REVISION' in red ink in the space labeled 'For Your Optional Use Only' on page one of the form, marking through the original data and writing in the revised data in red ink. The certification signature block on the revised form must contain an original signature. Mark through the photocopied signature and re-sign the revised form. Return the revised form to the address above. The attention line on the envelope should read: 'Attn: RY90 Revision'.

Please keep these facts in mind when reviewing the accuracy and completeness of this report:

1) The report lists only those Form R's which have passed our internal data quality checks. If one or more forms submitted by your facility is not listed here, you will be receiving additional correspondence from us soon.

2) The data represented here may not reflect any voluntary revisions submitted by your facility, if those revisions were not processed by the time we produced this report.

3) We have applied certain naming conventions to the way in which your facility's name is represented. For example, we always list the main company name first, followed by the division name. In addition, we use standard abbreviations for certain words such as Corporation (Corp.) and Highway (Hwy.). Please correct this information only if the actual data is incorrect.

If you have any questions about the information on this report, please call the EPCRA Reporting Center:

202-488-1501

Let the receptionist know that you are calling about the 'TRI 100% Industry Review'. The receptionist will connect you with a person who can answer your questions.

Thank you for your efforts in helping us to make Toxic Release Inventory data as accurate as possible.

Steven D. Newburg-Rinn

Steven D. Newburg-Rinn, Chief
Public Data Branch
Information Management Division
Office of Toxic Substances
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557597-6-NY	ALUMINUM (FUME OR DU	007429-90-5	FUG. AIR	NA
			STACK AIR	1,700
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557598-8-NY	CHROMIUM	007440-47-3	FUG. AIR	NA
			STACK AIR	1,400
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557599-0-NY	COBALT	007440-48-4	FUG. AIR	NA
			STACK AIR	1,180
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557600-4-NY	NICKEL	007440-02-0	FUG. AIR	NA
			STACK AIR	5,100
			WATER A	NA

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557600-4-NY	NICKEL	007440-02-0	WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA

METCO DIVISION PERKIN-ELMER
DUFFY AVENUE
ENVIRONMENTAL ISSUES

Water Pollution Control -

Waste water from a sink in the machine shop appears to discharge into a dry well through a grease trap and neutralization tank. Chronic acid etching solution and oils are handled in this area. Staining in the sink indicated these chemicals may be discharged to the dry well. All sinks in process area should be connected to the sanitary sewer. Waste oils and acids should be disposed of and managed as hazardous waste.

Our investigation of the waste lines revealed that the sink discharges to the storm water drain lines and then into the sump. Currently establishing an employee training program to include hazardous materials handling.

Air Pollution Control -

Emission points discharge VOCs from two spray paint booths and an oven. Paint samples were collected by an NCHD inspector to verify compliance with VOC emissions standards.

An inspector from Nassau County Department of Health, Office of Industrial Facility Regulation, collected paint samples on March 26, 1990. Paints currently in use at facility are water base. An inventory of the air emission points is maintained.

Hazardous Waste Management -

Hazardous waste containers are not labeled or sealed at the point of generation to prevent mixing of incompatible waste and improper disposal. Secondary containment, to prevent spills from reaching a nearby storm drain, is not present in the centralized drum storage area located at the loading dock. Hazardous wastes shipped offsite (October 1989 and April 1989) exceeded the 1000 kg limit for small quantity generators.

An inspector from Nassau County Department of Health office of Industrial and Hazardous Wastes Management toured the facility. Concerning secondary containment, obtaining absorbent material would surfice. The requirement of containers being labeled, dated and sealed is in the process of being addressed. We are in the process of setting up a waste monitoring system which will include weekly inspections of storage areas.

Hazardous Waste Management -

Waste degreasing solvent and waste rags are not properly classified. Rags contaminated with a hazardous waste must be disposed of as hazardous waste.

A waste container will be put into the waste accumulation area soley for the purpose of collecting contaminated rags.

Hazardous Waste Management -

Metco is not in compliance with the provisions of The Nassau County Health Department (NCHD) Hazardous Waste Ordinance:

Central storage areas do not have containment.

Containers in storage are not labeled with DOT designations.

Training is not provided to workers or supervisors involved in hazardous mateials handling practices.

Annual reports have not been submitted to NCHD.

Secondary containment, employee training, proper labeling and annual reports are currently being addressed.

Past Disposal Storage/Practices -

Facility industrial wastes were discharged to a septic system. This system was abandoned in 1986 without documentation on the impacts of discharging industrial wastes to the environment.

A storm water basin receives water from the facility cooling system. The source of this water is an onsite contaminated process well. The well was sampled by NYDEC and shown to be contaminated with volatile organics. The source of this contamination has not been documented.

Underground storage tanks were removed without documentation on the potential impact to soil and ground water.

The underground storage tanks were removed from all three facilities under the guidance of a Nassau County Department of Health representative (1987).

Upon receiving proper approval, we can proceed with our environmental consultants and conduct an investigation covering past disposal/storage practices at our facilities.

Community Right To Know -

A (Tier II) chemical inventory was not submitted to the local fire department.

Reviewing and revising the distribution of reports for SARA Title III Community-Right-To-Know.

CHEMICAL/SOLVENT WASTE REPORT

Bureau of Land Resources Management

Nassau County Department of Health

Name	Permit Number
Metco	NYD131318653
Address	Report Period
1101 Prospect Avenue, Westbury, NY 11590	1986

List all waste generating chemicals and/or solvents purchased during the reporting period. Indicate for each the purpose or use, trade name or supplier and the quantity purchased.

Name of Chemical or Solvent	Purpose or Use	Trade Name or Supplier	Quantity Purchased
Naptha	Cleaning of Parts	Safety-Kleen Corp.	55 gal.

EH 704 1/82

continued on reverse

CHEMICAL/SOLVENT WASTE REPORT

For each shipment of wastes, complete the following table with the indicated information. ATTACH COPIES OF MANIFESTS OR RECEIPTS FROM SCAVENGER FOR EACH SHIPMENT MADE.

Date of Shipment	Type of Waste (Chemical, oil or solvents)	Amount Shipped	Shipped By			Shipped To (Final Disposal Site For Waste)
			Scavenger Name	Scavenger Address	Scavenger Number	
6/16/86	Waste Naptha	45 gal.	Safety-Kleen Corp.	No. Amityville, NY 11701	NYD 00070 8198	Safety-Kleen Corp.

List any accidental spills that occurred during the reporting period: NONE

Date of Spill	Amount of Spill	Describe the nature of spill

Signature of Company Representative	Title	Date:
	Supervisor, Plant Engineering	March 31, 1987

EH 704A 1/80

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2000-0404. Expires 7-31-86

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.

Manifest Document No.

2. Page 1 of

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

A. State Manifest Document Number

B. State Generator's ID

5. Transporter 1 Company Name

6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Phone

7. Transporter 2 Company Name

8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Phone

9. Designated Facility Name and Site Address
SAFETY-KLEEN CORP.

10. US EPA ID Number

G. State Facility's ID

H. Facility's Phone

GENERATOR

11. US DOT Description *(Including Proper Shipping Name, Hazard Class and ID Number)*	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.						
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above

K. Handling Codes for Wastes Listed Above

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

Unless I am a small quantity generator who has been exempted by statute or regulation from the duty to make a waste minimization certification under Section 3002(b) of RCRA, I also certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and I have selected the method of treatment, storage or disposal currently available to me which minimizes the present and future threat to human health and the environment.

Printed/Typed Name | Signature | Date: Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Date: Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Date: Month Day Year

EPA FORM 8700-22 (3-84)

GENERATOR COPY
P2SUL008502

EPA

ACKNOWLEDGEMENT OF NOTIFICATION OF HAZARDOUS WASTE ACTIVITY

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act *(RCRA)*. Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D NUMBER → NYD131318651

METCO DIV. PERKIN-ELMER CORP.
1101 PROSPECT AVENUE
WESTBURY NY 11590

INSTALLATION ADDRESS → 1101 PROSPECT AVENUE
WESTBURY NY 11590

EPA Form 8700-12A (4-80)

NASSAU COUNTY DEPARTMENT OF HEALTH — NASSAU COUNTY PUBLIC HEALTH ORDINANCE - ARTICLE XI
APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
FORM 1 - GENERAL INFORMATION
SEE INSTRUCTION SHEET

For Office Use Only
Facility I.D.
☐ Municipal
☐ Non-Municipal

Check all that apply to your facility: ☒ Tank Storage ☒ Container Storage ☐ Bulk Storage ☐ Storage of Road De-icing Material

Reason for submitting application: ☒ New ☐ Renewal ☐ Change ☐ Construction

Facility Name	Street Address	Village	State	Zip	Phone
Metco	1101 Prospect Avenue	Westbury	NY	11590	334-1300

Facility Mailing Address (If different from above)	Facility Contact Person (Name & Title)	Phone
	Abraham Teicher Supervisor, Plant Engineering	334-1300

Facility Owner	Street Address	Village	State	Zip	Phone
Perkin-Elmer Corporation Metco Division	1101 Prospect Avenue	Westbury	NY	11590	334-1300

Property Owner (If not Facility Owner)	Street Address	Village	State	Zip	Phone
Same					

Tank Owner (If not Facility Owner)	Street Address	Village	State	Zip	Phone
Same					

Name that should appear on Permit (Permittee)
(If different from Facility Owner)

Permittee's Street Address	Village	State	Zip	Phone

Permittee's Relationship to Facility Owner: ☒ Same ☐ Operator of Facility ☐ Other (Specify):

Principal Property Tax Code:	School District No.	Section	Block	Lot
	1	11	329	369

Forms Attached (Check all that apply) ☒ Form 2 - Tank Registration ☒ Form 3 - Bulk & Container Storage Registration ☐ Form 4 - Storage of Road De-icing Materials

I hereby affirm under penalty of perjury that the information provided on this form and on any attached forms, statements and exhibits is true to the best of my knowledge and belief.

Print Name	Signature	Title	Date
Abraham Teicher		Supervisor, Plant Engineering	Feb. 24, 1987

EH 857 4/86

NASSAU COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
FORM 2 - TANK REGISTRATION
SEE INSTRUCTION SHEETS

For Office Use Only	
Date Application Received	Facility I
Reviewed By	Date Revie
Action: ☐ Not Req'd. ☐ Approved ☐ Disapproved	No.of Mont

Facility Name
Metco

Facility Address
1101 Prospect Avenue, Westbury, NY 11590

Action	Tank Number	Location	Design Capacity (Gallons)	Material of Construction	Internal Protection	External Protection	Piping	Type	Material Currently or Last Stored: NCDH Number	Material Currently or Last Stored: Name	Status	Tank Installation Date (Month/yr)	Leak Detection Sys.	Secondary Containment	Product Gauge	Dispenser Method	Fill	Additiona Informatio for Abandon Tanks: Date Last Used (Month/yr)	Condi-
1	1	4	20,000	1	2	2	1	1		#2 Fuel Oil	1	1970	5	5	1	2	2		
1	2	4	20,000	1	2	1	1	1		#2 Fuel Oil	1	1982	5	5	1	2	2		

EH 858 4/86

Date Submitted Feb. 24, 1987

Page 2 of 3

☐ D.P.

P2SUL008505

NASSAU COUNTY DEPARTMENT OF HEALTH
APPLICATION FOR A TOXIC OR HAZARDOUS MATERIALS STORAGE FACILITY PERMIT
FORM 3 - BULK AND CONTAINER STORAGE REGISTRATION
SEE INSTRUCTION SHEETS

For Office Use Only

Date Application Received	Facility
Reviewed By	Date Revie
Action: ☐ Not Req'd. ☐ Approved ☐ Disapproved	No.of Mont

Facility Name: Metco

Facility Address: 1101 Prospect Avenue, Westbury, NY 11590

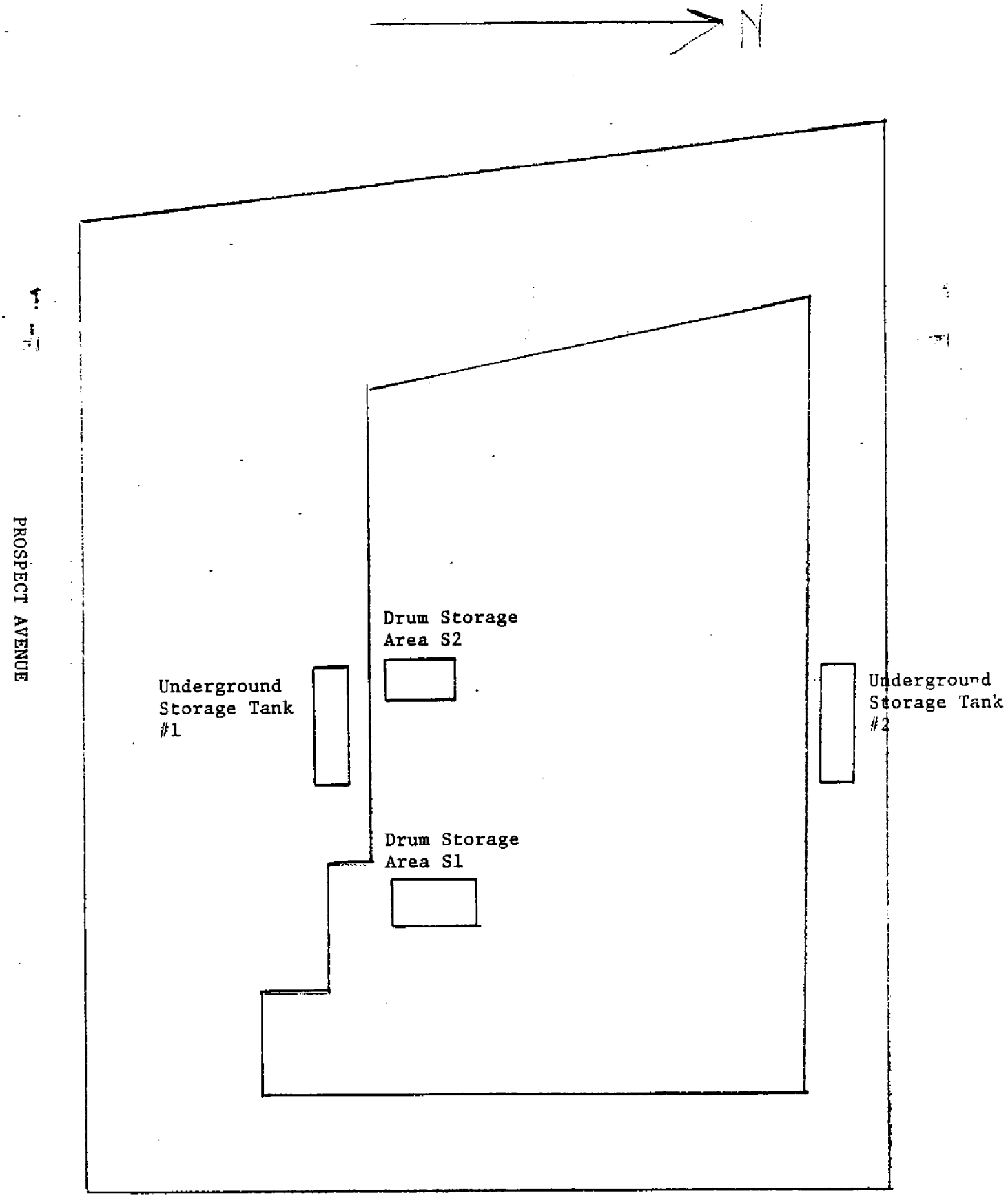
Action: ☒ Register Existing Area ☐ Add Area ☐ Remove Area ☐ Modify Area | Area No.

Location: ☒ Indoors ☐ Outdoors | Bulk Storage Max.Quantity Stored: | Container Storage Max.No. 15 Max.Vol. 750 gal.

Secondary Containment: ☐ Impervious Berm/Dike ☒ Impervious Floor/Pad ☐ Roof ☐ Walls ☐ Floor Drain & Storage Tank ☐ None ☐ Other (Specify):

Construction Material of Dike & Pad (Check all that Apply) ☒ Concrete ☐ Steel ☐ Other (Specify): | Security ☒ Yes ☐ No

Type	NCDH Number	Material Name	Physical State	Amount Stored		Storage Method	
				Average Quantity	Units	Average Number	Ty
1		1,1,1-Trichloroethane	1	100	1	2	1
2		1,1,1-Trichloroethane	1	55	1	1	1
2		Waste Solvent	1	100	1	2	1
2		Waste Sludge (from spray guns)	4	1,000	3	4	1
2		Waste over spray powder	2	500	3	4	1



BRIDGE STREET

Metco
1101 Prospect Avenue
Westbury, NY 11590

EPA
United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

WHERE TO SEND COMPLETED FORMS:

1. EPCRA Reporting Center
   P.O. Box 3348
   Merrifield, VA 22116-3348
   ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 3 trade secret?	[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)
2.2	If yes in 2.1, is this copy:	[ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: JMacri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name	Metco Division Perkin-Elmer Corporation
TRI Facility ID Number	11801PRKNL220MI
Street Address	220 Miller Place
City	Hicksville
County	Nassau
State	New York
Zip Code	11801
Mailing Address (if different from street address)	1101 Prospect Avenue
City	Westbury
State	New York
Zip Code	11590

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.

		Latitude			Longitude		
4.6	Latitude and Longitude	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	47	00

4.7	Dun & Bradstreet Number(s) (9 digits)	a.	05-773-1663
		b.	
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a.	NYD981558570
		b.	
4.9	Facility NPDES Permit Number(s) (9 characters)	a.	N/A
		b.	
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a.	N/A
		b.	

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Cobalt
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	**Manufacture the toxic chemical:**	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	**Process the toxic chemical:**	a. ☐ As a reactant b. ☐ As a formulation component	c. ☒ As an article component d. ☒ Repackaging
3.3	**Otherwise use the toxic chemical:**	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name N/A				
5.3.2	Stream or Water Body Name N/A				
5.3.3	Stream or Water Body Name N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 790	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pound

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Chemical, Category, or Generic Name
Cobalt Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	240	790	800	800
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)	YES	NO
			X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

2/7/2007

Sulzer Metco
Diane Goss
Ehs Specialist
1101 Prospect Avenue
Westbury, NY 11590

SUBJECT: EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY (SARA TIER 2) AND COMMUNITY RIGHT-TO-KNOW REPORTING REQUIREMENTS

IF YOU ARE NOT RESPONSIBLE FOR SUBJECT, PLEASE FORWARD TO APPROPRIATE INDIVIDUAL(S) WITHIN YOUR COMPANY

Section 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA) requires the owner or operator of a facility which must prepare or have available a Material Safety Data Sheet (MSDS) for a hazardous chemical under the Occupational Safety and Health Act (OSHA) of 1970, to prepare and submit an annual "Chemical Inventory Form" covering such chemical to each of the following agencies on or before March 1 of each year.

- the appropriate Local Emergency Planning Committee
- the state Emergency Response Commission
- the Fire Department with jurisdiction over the facility

Federally, when hazardous chemicals (compressed and cryogenic gases covered by this letter) are present at any time at a facility in amounts equal to or greater than 10,000 pounds, they must be reported on a Chemical Inventory Form (e.g. Tier 2) for the reporting year 2006. Please note that state reporting thresholds and requirements may be different and more comprehensive than Federal requirements.

Compressed and cryogenic (refrigerated) gases are hazardous under OSHA because they can cause injury if they are released inadvertently or in an uncontrolled manner.

A review of our records indicates that an Inventory Form covering product(s) Praxair sold you in 2006 is required to be filed by March 1, 2007.

Attached is a copy of the federal Tier II form which is also available electronically (an electronic reporting package or Word version) at http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/tier2.htm You should complete the state, c federal Tier II form, as appropriate for your facility, by following the enclosed instructions and carefully reviewing the form to make sure all the information is accurate and complete. Please note that some states have specific requirements and have also instituted electronic filing procedures. Contact your State Emergency Response Commission (SERC) /State Right to Know agency (which can be found at the USEPA website provided above) to

obtain any state specific reporting requirements and forms that may apply. Then have the form signed, dated and submitted to each of the agencies identified above.

Following is some information concerning our products. This information may help you in preparing your Tier II form. All products are greater than ambient pressure.

Chemical Name	CAS #	Reporting Threshold			Hazard *
	(Lbs.)	(Gals.)	(Std.ft^3)	Category*	
Argon Gas, or Liquid	7440-37-1	10,000	860	96,700	S
Carbon Dioxide	124-38-9	10,000	1,180	87,400	I, S
Helium Gas, or Liquid	7440-59-7	10,000	9,590	960,000	S
Hydrogen Gas, or Liquid	1333-74-0	10,000	16,930	1,920,000	F, I, S
Nitrogen Gas, or Liquid	7727-37-9	10,000	1,480	138,000	S
Oxygen Gas, or Liquid	7782-44-7	10,000	1,050	120,000	F, S

***I:** Immediate Health Hazard **F:** Fire Hazard **S:** Sudden Release of Pressure **D:** Delayed Health Hazard

Should you have any questions or if we can be of any assistance in connection with the applicability, completion, or filing of the Inventory Form, please call 1-800-PRAXAIR (1-800-772-9247). For additional information on EPCRA reporting, call the EPA EPCRA Hotline 1-800-424-9346.
On-line information is available through the EPA website at
http://yosemite.epa.gov/oswer/ceppoweb.nsf/content/tier2.htm.

If you are not the person responsible for addressing these issues, it is important that you promptly forward this to the appropriate party. We hope that the information being provided is helpful. We have always valued your business and look forward to continuing to work with you in the future.

Sincerely,

Jim Merriam

Jim Merriam
Safety & Environmental Services
Praxair, Inc.

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW ACT (EPCRA) REPORTING REQUIREMENTS

EPCRA 302: Owners and operators are required to notify the State Emergency Response Commission (SERC) regarding the presence of extremely hazardous substance (EHSs) at their facilities. EHS are designated pursuant to EPCRA 302 and are listed in 40 Code of Federal Regulations (CFR) Part 355, Appendices A and B.

EPCRA 303: Owners and operators subject to EPCRA 302 are required to designate a facility emergency coordinator and provide any information necessary for emergency planning to the local emergency planning committee (LEPC) upon request.

EPCRA 304: Owners and operators of facilities are required to report releases of CERCLA hazardous substances and EPCRA EHSs to the SERC and LEPC immediately after the facility has knowledge that a reportable quantity has been released. The immediate notification must be followed by a written report as soon as practicable after the release.

EPCRA 311: Owners and operators that are required to prepare or have available Material Safety Data Sheets (MSDSs) under OSHA's Hazard Communication Standard must submit theses MSDSs or a list to the SERC, LEPC, and local fire department with jurisdiction over the facility.

EPCRA 312: Owners and operators that are required to prepare or have available Material Safety Data Sheets (MSDSs) under OSHA's Hazard Communication Standard must submit hazardous chemical inventory forms to the SERC, LEPC, and local fire department annually on March 1st.

EPCRA 313: Owners and operators of certain facilities are required to submit annual reports of routine and accidental releases to EPA and designated State agencies. Facilities are subject to this requirement if they are in Standard Industrial Classification (SIC) Codes 20-39, employ 10 or more employees full time, and manufacture, import, process, or use any of 300 toxic chemicals at greater than the designated threshold amounts. Reports are due annually on July 1st.

Any questions owners or operators may have regarding the EPCRA reporting requirements may be directed to your local emergency planning committee, your State emergency response commissions or to the EPA'S EPCRA Hotline in Washington, D.C. and Alaska.

CHEMICAL DESCRIPTION:

1. Enter the Chemical Abstract Service registry number (CAS). For mixtures, enter the CAS number of the mixture as a whole if it has been assigned a number distinct from its constituents. For a mixture that has no CAS number, leave the item blank or (report the CAS numbers of as many constituent chemicals as possible). Arizona prefers 1a below be done rather than the above option in parentheses.

1a. Submit current material safety data sheets (MSDS) for mixtures containing two or more hazardous chemicals. For single hazardous chemical mixtures enter the CAS and percentage (or percentage range) of the hazardous chemical, e.g. 93% Sulfuric Acid. See first example on page 5 for inventory Section reporting range determination. This is an Arizona specific request to facilitate emergency planning response requirements.

2. If you are withholding the name of a chemical in accordance with criteria specified in Title III, Section 322, enter the generic class or category that is structurally descriptive of the chemical (e.g., list toluene diisocyanate as organic isocyanate) and check the box marked Trade Secret. Trade secret information should be submitted to EPA and must include a substantiation. Please refer to EPA's final regulation on trade secrecy (53 FR 28772, July 29, 1988) for detailed information how to submit trade secrecy claims.

3. Enter the chemical name or common name of each hazardous chemical.

4. Check box for All applicable descriptors: pure, mixture: solid, liquid, and /or gas; and whether the chemical is or contains an EHS. A minimum of two boxes must be checked. Specify EHS solids in powder form (particle size less than 100 microns).

5. If the chemical is a mixture containing an EHS enter the chemical name of EHS in the mixture.

EXAMPLE

You have pure chlorine gas on hand, as well as two mixtures that contain liquid chlorine. You write "chlorine" and enter the CAS number. Then you check "pure", "mix", "liquid", gas and "EHS".

PHYSICAL AND HEALTH HAZARDS:

For each chemical you have listed, check all the physical and health hazard boxes that apply. These hazard categories are defined in 40 CFR 370.2. The two health hazard categories and three physical hazard categories are a consolidation of the 23 hazard categories defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200. A minimum of one box must be checked.

Hazard Category Comparison For Reporting Under Sections 311 and 312

EPA's Hazard Categories	OSHA's Hazard Categories
Fire Hazards	Flammable Combustible Liquid Pyrophoric Oxidizer
Sudden Release of Pressure	Explosive Compressed Gas
Reactive	Unstable Reactive Organic Peroxide Water Reactive
Immediate (Acute) Health Hazards	Highly Toxic Toxic Irritant Sensitizer Corrosive
Delay (Chronic) Health Hazard	Carcinogens
Other	Hazardous chemicals with an adverse effect with long term exposure

INVENTORY:

MAXIMUM AMOUNT

1. For each hazardous chemical, estimate the greatest amount present at your facility on any single day during the reporting period. See example on page 5.

2. Find the appropriate range value code in Table I.

3. Enter the range value as the Maximum Amount.

Table I: REPORTING RANGES

Range Value	Weight Range in Pounds From...	To...
01	0	99
02	100	999
03	1,000	9,999
04	10,000	99,999
05	100,000	999,999
06	1,000,000	9,999,999
07	10,000,000	49,999,999
08	50,000,000	99,999,999
09	100,000,000	499,999,999
10	500, 000, 000	999,999,999
11	1 Billion	Higher then 1 billion

Enter the actual weight in pound in the shaded space below the response blocks. Do this for both Maximum Amount and Average Daily Amount.

EXAMPLE

You received one large shipment of a solvent mixture last year. The shipment filled five 5,00 - gallon storage tanks. You know that the solvent contains 10% benzene, which is a hazardous chemical.

You figure that 10% of 25,000 gallons is 2,500 gallons. You also know that the density of benzene is 7.29 pounds per gallon to get a weight of 18,225 pounds.

Then you look at Table I on page 4 and find that the range value 04 corresponds to 18,225. You enter 04 as the Maximum Amount

You should write 18,255 in the shaded area.

AVERAGE DAILY AMOUNT:

1. For each hazardous chemical, estimate the average weight in pounds that was present at your facility during the year.

To do this, total all daily weights and divide by the number of days the chemical was present on the site.

2. Find the appropriate range value in Table I.

3. Enter this range value as the Average Daily Amount.

EXAMPLE

The 25,000-gallon shipment of solvent you received last year was gradually used up and completely gone in 351 days. The sum of the daily volume levels in the tank is 4,536,000 gallons. By dividing 4,536,000 gallons by 315 days on-site, you calculate an average daily amount of 14,400 gallons.

You already know that the solvent contains 10% benzene, which is a hazardous chemical. Since 10% of 14,400 is 1,440, you figure that you had an average of 1,440 gallons of benzene. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 1,440 by 7.29 to get a weight of 10,500 pounds.

Then you look at Table I and find that the range value 04 corresponds to 10,500. You enter 04 as the Average Daily Amount.

You should write 10,500 in the shaded area.

NUMBER OF DAYS ON-SITE:

Enter the number of days that the hazardous chemical was found on-site.

EXAMPLE

The solvent composed of 10% benzene was present for 315 days at your facility. Enter 315 in the space provided.

STORAGE CODES AND STORAGE LOCATIONS:

List all non-confidential chemical locations in this column, along with storage types/conditions associated with each location. Please note that a particular chemical may be located in several places around the facility. Each row of boxes followed by a line represents a unique location for the same chemical.

Storage Codes: Indicate the types and conditions of storage present.

a. Look at Table II. For each location, find the appropriate storage type and enter the corresponding code in the first box.

b. Look at Table III. For each location, find the appropriate storage types for pressure and temperature conditions. Enter the applicable pressure code in the second box. Enter the applicable temperature code in the third box.

Table II: STORAGE TYPES

Code	Types of Storage
A	Above ground tank
B	Below ground tank
C	Tank inside building
D	Steel Drum
E	Plastic or non-metallic drum
F	Can
G	Carboy
H	Silo
I	Fiber drum
J	Bag
K	Box
L	Cylinder
M	Glass bottles or jugs
N	Plastic bottles or jugs
0	Tote bin
P	Tank wagon
Q	Rail car
R	Other

Table III: PRESSURE & TEMPERATURE CONDITIONS

Code	Storage Conditions
	PRESSURE
1	Ambient pressure
2	Greater than ambient pressure
3	Less than ambient pressure
	TEMPERATURE
4	Ambient temperature
5	Greater than ambient temperature
6	Less than ambient temperature but not cryogenic
7	Cryogenic conditions

EXAMPLE

The benzene in the main building is kept in a tank inside the building, at ambient pressure and less than ambient temperature.

Table II shows you that the code for a tank inside a building is C. Table III shows you that the code for ambient pressure is 1, and the code for less than ambient temperature is 6 you enter C 1 6.

STORAGE LOCATIONS:

Provide a brief description of the precise location of the chemical, so that emergency responders can locate the optional site plan or site coordinates as explained below.

For each chemical, indicate at a minimum the building or lot. Additionally, where practical, the room or area may be indicated. You may respond in narrative form with appropriate site coordinates or abbreviations.

If the chemical is present in more than one building, lot, or area location, continue your responses down the page as needed.

If the chemical exists everywhere at the plant site simultaneously, you may report that the chemical is ubiquitous at the site

OPTIONAL ATTACHMENTS:

If you choose to attach one of the following, check the appropriate attachments box at the bottom of the Tier Two from.

a. A site plan with site coordinates indicated for buildings, lots, areas, etc. throughout your facility.

b. A list of site coordinate abbreviations that correspond to buildings, lots, areas, etc. throughout your facility.

c. A description of dikos and other safeguard measures for storage locations throughout your facility.

EXAMPLE

You have benzene in the main room of the main building, and in tank 2 in tank field 10. You attach a site plan with coordinates as follows: main building = G-2, tank field 10 = B-6. Fill in the Storage Location as follows:

B-6 (Tank 2) G-2 (Main Room)

CONFIDENTIAL INFORMATION:

Under Title III, Section 324, you may elect to withhold location information on a specific chemical from disclosure to the public. If you choose to do so:

• Enter the word "confidential" in the Non-Confidential Location section of the Tier Two form on the first line of the storage locations.

• On a separate Tier Two Confidential Location Information Sheet, enter the name and CAS number of each chemical for which you are keeping the location confidential.

• Enter the appropriate location and storage information, as described above for non-confidential locations.

• Attach the Tier Two Confidential Location information Sheet to the Tier Two form. This separates confidential locations from other information that will be disclosed to the public.

CERTIFICATION:

Instructions for this section are included on page four of these instructions.

FORM R/313 REPORTING REQUIREMENTS: Reporting "trigger" is based on annual chemical consumption not releases. (Report due July 1 of each year)

RESUBMITTAL PROCEDURES:

Recertify corrected reports using red ink. Using the "Resubmittal / Information Package Response Letter," send corrected copies to the:

(1) State Emergency Response Commission

(2) Applicable Local Emergency Planning Committee

(3) Fire department/district with facility jurisdiction.

An original signature is required as described in these instructions under CERTIFICATION.

TIER TWO EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Facility Identification (Praxair Account 95033750):	Safety / Environmental Coordinator:
Company Name: Sulzer Westbury Inc	**Company Name:** Sulzer Metco **Contact:** Diane Goss
Address: 1101 Prospect Avenue **City, State:** Westbury, NY **Zip:** 11590-2564	**Phone #:** 516-338-2563 **E-Mail:** @
SIC Code:	**D&B Number:**

Tank Owner / Operator:

Owner: **Praxair** **Operator:** **Praxair**

Chemical Description

Praxair #	Chemical Name	Chemical Description	CAS#	Trade Secret?
8527187	NITROGEN	CRYOGENIC LIQUID	007727379	No

Chemical Properties

Praxair #	Chemical Attributes
8527187	Gas, Liquid, Pure

Chemical Hazards

Praxair #	Chemical Physical and Health Hazard Information
8527187	Sudden Release of Pressure, Immediate Health Hazards (Acute)

General Tank Information

Praxair #	Maximum Daily Amount	Average Daily Amount	Number of Days On Site	Container Type	Pressure	Temperature
8527187	04	04	365	A	02	07

RECORD UPDATE

Please complete and return by March 1st

Thank you for helping Praxair simplify SARA Tier II reporting requirements in accordance with EPA regulations. Please correct any information that is missing or incorrect regarding your facility, or the name, e-mail and mailing address of the person in your company to whom future SARA Tier II notifications should be sent. It is essential that you provide an e-mail address for the appropriate contact person.

If you are not the correct person to receive this information, please direct this form to the appropriate contact person in your company.

Please e-mail this information, along with your Praxair Account Number to SARA@Praxair.com or completed forms may be faxed to the Praxair Customer Care Center 1-800-772-9980.

Questions? Call 1-800-PRAXAIR (1-800-772-9247) or e-mail SARA@Praxair.com

Praxair Account Number:	95033750
Safety / Environmental Coordinator:	Sulzer Metco Diane Goss Ehs Specialist 1101 Prospect Avenue Westbury, NY 11590
E-Mail Address:	@
Phone #:	516-338-2563
D&B Number:	
Facility Information:	Sulzer Westbury Inc 1101 Prospect Avenue Westbury, NY 11590-2564
SIC Code:	
Tank Owner:	Praxair
Tank Operator:	Praxair

USEPA EPCRA Section 313 Form R
2000 Calendar Year Back up Data

Reporting Year 1999

Prepared on 08-10-01

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590

TRI facility # 11590-PRKNL-1101P
EPA ID # NYD131318651
D&B # 011272254
Parent Company D&B # 001826957

Exemptions to TRI 2000 Reporting requirements

The Prospect Avenue facility consists of a machine shop, QA/ QC laboratories, and a thermal spray laboratory. The remainder of the facility consists of offices, warehouse, shipping and receiving, maintenance, and equipment rooms. The QA / QC laboratory performs testing with small quantities of section 313 acids. > 100lbs year. This QA / QC laboratory is considered exempt under the laboratories activities exemption.

The thermal spray laboratory conducts research and development of thermal spray materials and equipment. Pilot scale operations of section 313 chemicals are **not** conducted in this laboratory. Therefore the lab is considered exempt under the laboratories activities exemption.

Consideration of Reportable Section 313 Chemicals

The prospect facility operates a full machine shop and machines (processes) Brass, Bronze, Aluminum, Stainless steel, and Copper bar and plate stock. The operation utilizes mineral oil as machine lubricant. Various parts washers and vapor degreaser tanks are located throughout the facility. The tanks use either Safety Kleen 105 or Actrel 3349L. These materials are both petroleum hydrocarbons.

Of the various materials used or processed in the machine shop the following materials are Section 313 Chemicals subject to consideration.

- **Actrel 3349:** 100% CAS 64742-48-9. Exempt from consideration.

- **Safety Kleen 105:** 99-100% CAS 64742-48-9, 0-0.2% CAS 127-18-4 (Tetrachloroethene). Tetrachloroetene is a Section 313 chemical above the De Minimis concentration of 0.1% and must be considered.

  10,270 lb. of Safety Kleen 105 (otherwise used) yields 20.5 lb. of CAS 127-18-4 (Tetrachloroethene) was other wise used in CY 2000. 20.5 lb. < 10,000 threshold for reporting.

- **Brass:** 60% CAS 7440-50-8 Copper, 39.2% CAS 7440-66-6 Zinc. Both Copper and Zinc are Section 313 chemicals and must be considered.

  19,297.35 lb. processed, 60% CAS 7440-50-8 Copper, 39.2% CAS 7440-66-6 Zinc yields 11,578.41 lb. of Copper, and 7,564.56 lb. of Zinc. These totals will be added to the reporting thresholds of Copper and Zinc.

- **Aluminum:** 100% CAS 7429-90-5. Aluminum is a Section 313 chemical and must be considered.

  13,562.57 lb. of Aluminum was processed in CY 2000. 13, 562.57 lb. < 25,000 lb. threshold for reporting.

- **Stainless Steel:** 17-25% CAS 7440-47-3 Chromium, 8-25% CAS 7440-02-0 Nickel. Both Chromium and Nickel are Section 313 chemicals and must be considered.

  5,393.95 lb. of stainless steel was processed in CY 2000 yielding 1,348.48 lb. of Chromium, and 1,348.48 lb. of Zinc. These totals will be added to the reporting thresholds of Chromium and Zinc.

- **Copper:** 100% CAS 7440-50-8 Copper. Copper is a Section 313 chemical and must be considered.

  44,205 lb. of Copper was processed in CY 2000. Quantities of Copper from Brass and Brass processed in CY 2000 when added to the quantity of Copper yield a total of 58,126.11 lb. of Copper processed in CY 2000. 58,126.11 lb. > 25,000 lb. reporting threshold.

- **Bronze:** 90% CAS 7440-50-8 Copper, 10% CAS 7440-66-6 Zinc. Both Copper and Zinc are Section 313 Chemicals and must be considered.

  2,603 lb. of Bronze was processed in CY 2000 yielding 2,342.7 lb. of Copper and 260.3 lb. of Zinc. These totals will be added to the reporting thresholds of Copper and Zinc.

- **Chromic Acid Cleaning Solution:** 65% CAS N090 Chromium Compounds Chromium Compounds are Section 313 chemicals and must be considered.

  300 lb. of Chromic acid solution were otherwise used in CY 2000 yielding 20.5 lb. of Chromium compounds. 20.5 lb. < 10,000 lb. reporting threshold.

- **Zinc:** CAS 7440-66-6. Zinc is contained in Brass, and Bronze. 7,824.86 lb. of Zinc were processed in CY 2000. 7,824.86< 25,000 lb. reporting threshold for reporting.

- Nickel: CAS 7440-02-0. Nickel is contained in Stainless Steel. 1,348.48 lb. of Nickel was processed in CY 2000. 1,348.48 lb. < 25,000 lb. reporting threshold for reporting.

Reportable Section 313 Chemicals

- **Copper:** CAS 7440-50-8. 44,205 lb. of Copper was processed in CY 2000. Quantities of Copper from Brass and Brass processed in CY 2000 when added to the quantity of Copper yield a total of 58,126.11 lb. of Copper processed in CY 2000. 58,126.11 lb. > 25,000 lb. reporting threshold.

Transfers Off Site

Recyling: 23,750 lb. of Copper and 6,075 lb. of Brass were recycled in CY 2000.

Of the 6,075 lb. of Brass recycled 3,645 lb. were Copper (6,075 lb. x 0.60 = 3,645 lb.)

23,750 lb. + 3,645 lb. = 27,395 lb. total copper recycled in CY 2000.

The recycling center used for all scrap metal recycling was Gershow Recycling Corp. 71 Peconic Avenue, Medford NY 11763.

Production Ratio

The production ratio as reported by the Sulzer Metco accounting department for machinery and equipment sales for the period of 1999-2000 is 1.15%.

TRI 2000 Worksheet Prospect Avenue facility
Chemical and % Constituents
Prepared 08-10-01

	CAS N090 Chromium Compounds	CAS 7440-50-8 Copper	CAS 7440-66-6 Zinc	CAS 7440-47-3 Chromium	CAS 7440-02-0 Nickel	CAS 127-18-4 Tetrachloroethene	CAS 7429-90-5 Aluminum
Safety Kleen 105 10,270 lb. otherwise used 0-0.2% CAS 127-18-4 (Tetrachloroethene)						20.5 lb.	
Brass 19,297.35 lb. processed 60% CAS 7440-50-8 Copper, 39.2% CAS 7440-66-6 Zinc		11,578.41 lb.	7,564.56 lb.				
Aluminum 13,562.57 lb. processed 100% CAS 7429-90-5.							13,562.57 lb.
Stainless Steel 5,393.95 lb. processed 17-25% CAS 7440-47-3 Chromium, 8-25% CAS 7440-02-0 Nickel				1,348.48 lb.	1,348.48 lb.		
Copper 44,205 lb. processed 100% CAS 7440-50-8 Copper		44,205 lb.					
Bronze 2,603 lb. processed 90% CAS 7440-50-8 Copper, 10% CAS 7440-66-6 Zinc		2,342.7 lb.	260.3 lb.				
Chromic Acid Cleaning Solution 300 lb. otherwise used 65% CAS N090 Chromium Compounds	19.5 lb.						
Totals	19.5 lb.	58126.11 lb.	7,824.86 lb.	1,348.48 lb.	1,348.48 lb.	20.5 lb.	13,562.57 lb.

Prospect Avenue Facility Hazardous Waste Generation 2000

Date	Manifest #	Waste Description	Quantity	SG	Lb.	Tons	USEPA ID # Transporter	USEPA ID # TSDRF Facility	Codes
1/17/00	NYC6346710	Waste combustible Liquid (Petroleum Naptha)	59	6.7 lb/gal	395.3	0.20	SCR000075150	NYD000708198	D001, D018, D039, D040
1/17/00	NYC6346710	Waste combustible Liquid (Petroleum Naptha)	30	6.7 lb/gal	201	0.10	SCR000075150	NYD000708198	D001, D018, D039, D040
1/20/00	NYC6050002	Waste combustible Liquid (Petroleum Naptha)	48	6.7 lb/gal	321.6	0.16	ILD984908202	NYD000708198	D001, D018, D039, D040
1/20/00	NYC6050002	Waste combustible Liquid (Petroleum Naptha)	32	6.7 lb/gal	214.4	0.11	ILD984908202	NYD000708198	D001, D018, D039, D040
1/20/00	NYC6049991	Waste combustible Liquid (Petroleum Naptha)	40	6.7 lb/gal	268	0.13	ILD984908202	NYD000708198	D001, D018, D039, D040
1/20/00	NYC6049991	Waste combustible Liquid (Petroleum Naptha)	15	6.7 lb/gal	100.5	0.05	ILD984908202	NYD000708198	D001, D018, D039, D040
1/31/00	NYC6006406	Waste combustible Liquid (Petroleum Naptha)	5	6.7 lb/gal	33.5	0.02	ILD984908202	NYD000708198	D001, D018, D039, D040
3/2/00	NYC6019547	Waste combustible Liquid (Petroleum Naptha)	75	6.7 lb/gal	502.5	0.25	ILD984908202	NYD000708198	D001, D018, D039, D040
3/2/00	NYC6019547	Waste combustible Liquid (Petroleum Naptha)	34	6.7 lb/gal	227.8	0.11	ILD984908202	NYD000708198	D001, D018, D039, D040
3/16/00	NYC5791093	Waste combustible Liquid (Petroleum Naptha)	47	6.7 lb/gal	314.9	0.16	ILD984908202	NYD000708198	D001, D018, D039, D040
3/16/00	NYC5791093	Waste combustible Liquid (Petroleum Naptha)	16	6.7 lb/gal	107.2	0.05	ILD984908202	NYD000708198	D001, D018, D039, D040
3/16/00	NYC6108276	Waste combustible Liquid (Petroleum Naptha)	53	6.7 lb/gal	355.1	0.18	ILD984908202	NYD000708198	D001, D018, D039, D040
3/16/00	NYC6108276	Waste combustible Liquid (Petroleum Naptha)	31	6.7 lb/gal	207.7	0.10	ILD984908202	NYD000708198	D001, D018, D039, D040
3/27/00	NYC6055424	Waste combustible Liquid (Petroleum Naptha)	5	6.7 lb/gal	33.5	0.02	ILD984908202	NYD000708198	D001, D018, D039, D040
3/27/00	NYC6055424	Waste combustible Liquid (Petroleum Naptha)	16	6.7 lb/gal	107.2	0.05	ILD984908202	NYD000708198	D001, D018, D039, D040
4/12/00	NYC6029499	Waste combustible Liquid (Petroleum Naptha)	46	6.7 lb/gal	308.2	0.15	ILD984908202	NYD000708198	D001, D018, D039, D040
4/12/00	NYC6029499	Waste combustible Liquid (Petroleum Naptha)	32	6.7 lb/gal	214.4	0.11	ILD984908202	NYD000708198	D001, D018, D039, D040
4/12/00	NYC5791702	Waste combustible Liquid (Petroleum Naptha)	24	6.7 lb/gal	160.8	0.08	ILD984908202	NYD000708198	D001, D018, D039, D040
5/8/00	NYC6124353	Waste combustible Liquid (Petroleum Naptha)	69	6.7 lb/gal	462.3	0.23	ILD984908202	NYD000708198	D001, D018, D039, D040
5/8/00	NYC6124353	Waste combustible Liquid (Petroleum Naptha)	47	6.7 lb/gal	314.9	0.16	ILD984908202	NYD000708198	D001, D018, D039, D040
5/24/00	NYC6150230	Waste combustible Liquid (Petroleum Naptha)	5	6.7 lb/gal	33.5	0.02	ILD984908202	NYD000708198	D001, D018, D039, D040
6/8/00	NYC6163547	Waste combustible Liquid (Petroleum Naptha)	17	6.7 lb/gal	113.9	0.06	SCR000075150	NYD000708198	D001, D018, D039, D040
6/8/00	NYC6163547	Waste combustible Liquid (Petroleum Naptha)	90	6.7 lb/gal	603	0.30	SCR000075150	NYD000708198	D001, D018, D039, D040
6/8/00	NYC6163536	Waste combustible Liquid (Petroleum Naptha)	17	6.7 lb/gal	113.9	0.06	SCR000075150	NYD000708198	D001, D018, D039, D040
9/7/00	NYC6237347	Waste combustible Liquid (Petroleum Naptha)	70	6.7 lb/gal	469	0.23	SCR000075150	NYD000708198	D001, D018, D039, D040
9/7/00	NYC6237347	Waste combustible Liquid (Petroleum Naptha)	42	6.7 lb/gal	281.4	0.14	SCR000075150	NYD000708198	D001, D018, D039, D040
9/20/00	NYC6232353	Waste combustible Liquid (Petroleum Naptha)	4	6.7 lb/gal	26.8	0.01	SCR000075150	NYD000708198	D001, D018, D039, D040
10/10/00	NYC6258014	Waste combustible Liquid (Petroleum Naptha)	17	6.7 lb/gal	113.9	0.06	SCR000075150	NYD000708198	D001, D018, D039, D040
11/21/00	NYC6292776	Waste combustible Liquid (Petroleum Naptha)	70	6.7 lb/gal	469	0.23	SCR000075150	NYD000708198	D001, D018, D039, D040
11/21/00	NYC6292776	Waste combustible Liquid (Petroleum Naptha)	49	6.7 lb/gal	328.3	0.16	SCR000075150	NYD000708198	D001, D018, D039, D040
12/1/00	NYC6233433	Waste combustible Liquid (Petroleum Naptha)	58	6.7 lb/gal	388.6	0.19	SCR000075150	NYD000708198	D001, D018, D039, D040
12/1/00	NYC6233433	Waste combustible Liquid (Petroleum Naptha)	32	6.7 lb/gal	214.4	0.11	SCR000075150	NYD000708198	D001, D018, D039, D040
12/22/00	NYC583061	Waste combustible Liquid (Petroleum Naptha)	63	6.7 lb/gal	422.1	0.21	SCR000075150	NYD000708198	D001, D018, D039, D040
12/22/00	NYC583061	Waste combustible Liquid (Petroleum Naptha)	45	6.7 lb/gal	301.5	0.15	SCR000075150	NYD000708198	D001, D018, D039, D040
					8730.1	**4.37**			
1/17/00	MDC0855488	Chromic Acid Solution	1000		1000	0.50	SCR000074591	MDD980554653	D002, D007
3/23/00	MDC0857610	Waste Chromic Acid Solution	1710		1710	0.86	SCR000074591 NYD980769947	MDD980554653	D002, D007
4/26/00	MDC0857689	Waste Chromic Acid Solution	1224		1224	0.61	SCR000074591	MDD980554653	D002, D007
					3934	**1.97**			
6/18/00	NJA3067689	Waste petroleum Distillates, Aliphatic and Aromatic Hydrocarbons	1392		**1392**	**0.70**	ILD984908202 SCD987574647	NJD002182697	D001
1/17/00	MDC0855400	Waste Mixed Acids, Hydrofluoric, Nitric	5		**5**	**0.00**	SCR000074591	MDD980554653	UN 2922
1/17/00	MDC0855488	Waste Tetrachloroethylene	600		**600**	**0.30**	SCR000074591	MDD980554653	

Total Tons	7.33

Prospect Avenue

BRASS	ALUMINUM	STAINLESS STEEL	COPPER	BRONZE/COPPER
25.00	11.00	2.00	699.00	147.00
117.00	13.00	22.50	5,526.00	28.00
41.00	245.00	10.00	671.00	113.00
34.00	70.00	2.00	1,199.00	81.00
159.00	46.00	23.00	2,886.00	288.00
920.00	86.00	4.00	14.00	997.00
44.00	35.00	19.00	1,414.00	289.00
41.00	39.00	34.00	1,375.00	660.00
98.00	4.00	122.00	146.00	
313.00	16.00	184.00	46.00	
170.00	86.00	82.00	25,507.00	
23.00	1,870.00	48.00	1,519.00	
266.00	2,223.00	113.00	329.00	
314.00	27.00	106.00	2,874.00	
352.00	88.00	226.00		
196.00	55.00	10.00		
1,619.00	5.00	242.00		
591.00	3.00	389.00		
170.00	21.00	45.00		
92.00	4.00	83.00		
425.00	175.00	82.00		
366.00	11.00	163.00		
555.00	234.00	1.30		
157.00	85.00	30.00		
1,483.00	27.00	30.00		
625.00	1.60	64.00		
673.00	6.00	34.00		
434.00	33.00	128.00		
1.35	112.00	13.00		
5.00	0.90	3.40		
51.00	87.00	54.00		
134.00	1.00	221.00		
157.00	2.00	152.00		
135.00	2.80	101.00		
43.00	11.00	250.00		
126.00	9.00	106.00		
321.00	64.00	342.00		
1,148.00	61.00	28.00		
43.00	194.00	96.00		
913.00	43.00	633.00		
643.00	143.00	15.00		
72.00	98.00	237.00		
345.00	22.00	242.00		
101.00	24.00	288.00		
234.00	26.00	6.25		
135.00	105.00	88.00		
11.00	80.00	20.00		
25.00	91.00	12.50		
442.00	71.00	24.00		
99.00	60.00	4.50		
117.00	103.00	61.00		

Prospect Avenue

354.00	335.00	7.00
553.00	482.00	2.00
25.00	390.00	6.00
44.00	321.00	5.50
28.00	411.00	6.00
54.00	1.77	11.00
598.00	8.00	5.00
530.00	24.00	30.00
530.00	43.00	25.00
199.00	32.00	
778.00	3.00	
	5.00	
	3.00	
	80.00	
	85.00	
	7.00	
	11.00	
	170.00	
	35.00	
	42.00	
	27.00	
	42.00	
	5.00	
	85.00	
	22.00	
	100.00	
	168.00	
	6.00	
	20.00	
	20.00	
	50.00	
	1.50	
	30.00	
	5.00	
	19.00	
	3.00	
	144.00	
	222.00	
	1,995.00	
	62.00	
	15.00	
	1,102.00	
Brass	Aluminum	Stainless Steel	Copper	Bronze/Copper
19,297.35	**13,562.57**	**5,393.95**	**44,205.00**	**2,603.00**
CU 60%		Chrome - 12-25%		CU 90%
ZN 34.2%		Nickel 8-25%		ZN - 10%
		MO - 7%		

M. Feldhusen 8-8-01

(IMPORTANT: Type or print; read instructions before completing form)

EPA
United States Environmental Protection Agency

FORM R

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2000

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
JOSEPH REARDON MANAGER OF GLOBAL QUALITY		08/17/2001

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address(if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	
City/County/State/Zip Code	WESTBURY NASSAU NY 11590-	City/State/Zip Code	-
		Country (Non-US)	

4.2	This report contains information for: (Important : check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	MICHAEL LYDON	Telephone Number (include area code)	(516) 338-2337	
4.4	Public Contact Name	JOSEPH REARDON	Telephone Number (include area code)	(516) 338-2316	

4.5	SIC Code (s) (4 digits)	Primary a. 3542	b.	c.	d.	e.	f.

4.6	Latitude	Degrees	Minutes	Seconds	Longitude	Degrees	Minutes	Seconds
		40	45	50		073	33	10

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA Identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 011272254	a. NYD131318651	a. NA	a. NA
b.	b.	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
COPPER

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440508
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) COPPER
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
X																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [ ] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	03	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA X	NA		
5.2	Stack or point air emissions	NA X	NA		
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1 - 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R PART II. CHEMICAL-SPECIFIC INFORMATION	TRI Facility ID Number 11590PRKNL1101P Toxic Chemical, Category or Generic Name COPPER
If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box and indicate the Part II, Section 5.3 page number in this box. 1 (example: 1,2,3, etc.)	1

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1 - 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
COPPER

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X	NA	
5.4.2	Underground Injection onsite to Class II-V Wells	X	NA	
5.5	Disposal to land onsite			
5.5.1A	RCRA Subtitle C landfills	X	NA	
5.5.1B	Other landfills	X	NA	
5.5.2	Land treatment/application farming	X	NA	
5.5.3	Surface Impoundment	X	NA	
5.5.4	Other disposal	X	NA	

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B.1	POTW Name	NA					
POTW Address							
City		State		County		Zip	-
6.1.B.2	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box 1 **and indicate the Part II, Section 6.1 page number in this box** 1 **(example: 1,2,3, etc.)**

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.1	Off-Site EPA Identification Number (RCRA ID No.)	NA					
Off-Site Location Name	NA						
Off-Site Address							
City		State		County		Zip		Country (Non-U.S.)	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	TRI Facility ID Number 11590PRKNL1101P Toxic Chemical, Category or Generic Name COPPER

Is location under control of reporting facility or parent company?	☐ Yes	☐ No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
COPPER

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 27395	1. M	1. M93
2.	2.	2.
3.	3.	3.
4.	4.	4.

6.2.2 Off-Site EPA Identification Number (RCRA ID No.)

Off-Site location Name

Off-Site Address

City		State		County		Zip	-	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data ?
7A.1a	7A.1b	1		2			7A.1c	7A.1d	7A.1e
NA	3		4		5			%	Yes [ ] No [ ]
	6		7		8				
7A.2a	7A.2b	1		2			7A.2c	7A.2d	7A.2e
	3		4		5			%	Yes [ ] No [ ]
	6		7		8				
7A.3a	7A.3b	1		2			7A.3c	7A.3d	7A.3e
	3		4		5			%	Yes [ ] No [ ]
	6		7		8				
7A.4a	7A.4b	1		2			7A.4c	7A.4d	7A.4e
	3		4		5			%	Yes [ ] No [ ]
	6		7		8				
7A.5a	7A.5b	1		2			7A.5c	7A.5d	7A.5e
	3		4		5			%	Yes [ ] No [ ]
	6		7		8				

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [1]
and indicate the Part II. Section 6.2/7A page number in this box : [1] **(example: 1.2.3. etc)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 01/2001) - Previous editions are obsolete.

** Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
COPPER

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
COPPER

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 NA 2 3 4

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1. NA 2. 3. 4. 5.
6. 7. 8. 9. 10.

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1	Quantity released ***	24000	27395	27395	27395
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	24000	27395	24000	24000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)			0	
8.9	Production ratio or activity index			0000001.15	

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11 Is additional information on source reduction, recycling, or pollution control activities included with this report ? (Check one box) YES [ ] NO [X]

EPA Form 9350-1 (Rev. 01/2001) - Previous editions are obsolete.

* For Dioxin or Dioxin-like compounds, report in grams/year

*** Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated onsite.

E COMPANY
1905 Aston Avenue, #100
Carlsbad, CA 92008
Ph: 760-602-8700
Fax: 760-602-8888

Material Safety Data Sheet Transmittal Form

25-Jul-01

Request #: **474851**
Processed By: **Maria Mena**

Recipient:

ATTN: MARIAN FELDHUSEN

516-338-2123

Requester:

SAFETY-KLEEN CUSTOMER

Safety-Kleen Corporation CORP
Safety-Kleen Corporation

Thank you for using 3E's MSDS Paperless Compliance™ service. This service may eliminate the requirement to maintain MSDS on site. Below is a list of the MSDS you requested. Please verify that the MSDS sheet(s) enclosed/attached match what you have ordered.

3E COMPANY does not develop, prepare, or review the contents of any MSDS; the MSDS is prepared by the manufacturer. The statements, technical information and recommendations contained herein are transmitted without warranty or guarantee of any kind, expressed or implied, by 3E COMPANY. Furthermore, 3E COMPANY assumes no responsibility for any loss, damage, or expense, direct or consequential, arising out of their use.

If you have any questions regarding the MSDS, or you would like further information on the paperless compliance program, please call 3E Company at (800) 360-3220 or visit us at www.3ecompany.com.

Index3E	Manufacturer ORDERED/Actual	Product Name ORDERED/Actual	UPC	Item SKU
R	**The MSDS is attached for the following product(s).**			
SAKC00017404		SAFETY-KLEEN 105		
Verified Current: 7/17/01	Safety-Kleen Corp.	Safety-Kleen 105 Solvent Recycled		

END OF ORDER DETAIL - Request # 474851

3E Company is North America's leader in hazardous materials information management. 3E simplifies compliance for over 75,000 business locations worldwide. Services include: MSDS on Demand, 3E On-line, Government Disclosures, Hazmat Transportation Services, Emergency Response and Chemical Spill/Exposure Hotlines. For more information call
(800) 360-3220 or visit us at www.3ecompany.com

SAFETY-KLEEN 105 SOLVENT RECYCLED

MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

safety-kleen.

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: **SAFETY-KLEEN 105 SOLVENT RECYCLED**

SYNONYMS: Parts Washer Solvent; Petroleum Distillates; Petroleum Naptha; Naptha, Solvent; Stoddard Solvent; Mineral Spirits.

PRODUCT PART NUMBERS: 6614, 6617, 1011662, 1014662.

PRODUCT USE: Cleaning and degreasing metal parts.
If this product is used in combination with other products, refer to the Material Safety Data Sheets for those products.

	24-HOUR EMERGENCY PHONE NUMBERS	
These numbers are for emergency use only. If you desire non-emergency product information, please call a phone number listed below.	**MEDICAL:** **1-800-752-7869 Extension 2 or 1-312-906-6194**	**TRANSPORTATION (SPILL):** **1-800-468-1760 (USA)** **1-613-996-6666 (CANADA) (call collect)**

SUPPLIER: Safety-Kleen Corp.
1301 Gervais Street, Suite 300
Columbia, SC 29201
USA
1-803-933-4200

TECHNICAL INFORMATION: 1-800-669-5740, Extension 7500

MSDS FORM NUMBER: 82310 **ISSUE:** March 24, 2000

ORIGINAL ISSUE: April 8, 1976 **SUPERSEDES:** April 4, 1997

PREPARED BY: Product MSDS Coordinator **APPROVED BY:** MSDS Task Force

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

				OSHA PEL		ACGIH TLV®			
WT%	NAME	SYNONYM	CAS NO.	TWA	STEL	TWA	STEL	LD	LC
99 to 100	Distillates (petroleum), hydrotreated light[e]	N.Av.	64742-47-8	500[d] ppm	N.Av.	100[d] ppm	N.Av.	>5000[g,c]	>5500[d,h] mg/m^3/4 hours
0 to 0.2*	Tetrachloroethene	Perchloroethylene; Tetrachloroethylene	127-18-4	100 ppm	200 ppm (ceiling)	25 ppm	100 ppm	2629[a,f]	34200[b] mg/m^3/8 hours

N.Av. = Not Available
*Even though the concentration range does not fall under the ranges prescribed by WHMIS, this is the actual range which varies with each batch of the product.
[a]Oral-Rat LD_{50} (mg/kg)
[b]Inhalation-Rat LC_{50}
[c]Based on Stoddard solvent: Skin-Rabbit LD_{50} >3000 mg/kg
[d]Based on Stoddard Solvent.
[e]Based on Stoddard Solvent, NIOSH IDLH (Immediately Dangerous to Life or Health): 20000 mg/m^3 (5000 ppm)
[f]Skin-Rabbit LD_{50} >10000 mg/kg
[g]Oral-Rat LD (mg/kg)
[h]Inhalation-Rat LC

SECTION 3: HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

APPEARANCE
Liquid, clear and green, mild hydrocarbon odor.

WARNING!

PHYSICAL HAZARD
Combustible liquid and vapor.

HEALTH HAZARDS
May be harmful if inhaled.
May irritate eyes and skin.
May be harmful if swallowed.
Suspect cancer hazard. Contains material (less than 0.3 WT%) which may cause cancer.
Risk of cancer depends on duration and level of exposure.
Contains material which may cause birth defects.
Contains material which may cause central nervous system damage.

ENVIRONMENTAL HAZARDS
Toxic to aquatic life.

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

POTENTIAL HEALTH EFFECTS

INHALATION (BREATHING): High concentrations of vapor or mist may be harmful if inhaled. High concentrations of vapor or mist may irritate the respiratory tract (nose, throat, and lungs). High concentrations of vapor or mist may cause nausea, vomiting, headaches, dizziness, loss of coordination, numbness, and other central nervous system effects. Massive acute overexposure may cause rapid central nervous system depression, sudden collapse, coma, and/or death.

EYES: May cause irritation with watering, stinging, and/or redness.

SKIN: May cause irritation. Not likely to be absorbed through the skin in harmful amounts.

INGESTION (SWALLOWING): May be harmful if swallowed. May cause throat irritation, nausea, vomiting, and central nervous system effects as noted under **INHALATION (BREATHING)**. Breathing product into the lungs during ingestion or vomiting may cause lung injury and possible death.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Individuals with pre-existing respiratory tract (nose, throat, and lungs), central nervous system, eye, and/or skin disorders may have increased susceptibility to the effects of exposure.

CHRONIC: Prolonged or repeated inhalation may cause toxic effects as noted under **INHALATION (BREATHING)**. Prolonged or repeated inhalation and/or ingestion has been suggested to produce kidney toxicity in dogs but in no other species, including humans. According to one unsubstantiated human case report, prolonged or repeated inhalation, skin contact, and/or ingestion may cause mild, acute chemical hepatitis and acute, yellow atrophy (size reduction) of the liver. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball (conjunctivitis). Prolonged or repeated skin contact may cause drying, cracking, redness, itching, and/or swelling (dermatitis); and/or burns.

CANCER INFORMATION: This product contains perchloroethylene which may cause cancer. Risk of cancer depends on duration and level of exposure. For more information, see **SECTION 11: CARCINOGENICITY**.

Also see **SECTION 15: CALIFORNIA**.

POTENTIAL ENVIRONMENTAL EFFECTS

Product is toxic to aquatic life. Also see **SECTION 12: ECOLOGICAL INFORMATION**.

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 4: FIRST AID MEASURES

INHALATION: (BREATHING) Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Oxygen should only be administered by qualified personnel. Someone should stay with victim. Get medical attention if breathing difficulty persists.

EYES: If irritation or redness from exposure to vapor develops, move away from exposure into fresh air. Upon contact, immediately flush eyes with plenty of lukewarm water, holding eyelids apart, for 15 minutes. Get medical attention.

SKIN: Remove affected clothing and shoes. Wash skin thoroughly with soap and water. Get medical attention if irritation or pain develops or persists.

INGESTION: (SWALLOWING) Do NOT induce vomiting. Immediately get medical attention. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information. If spontaneous vomiting occurs, keep head below hips to avoid breathing the product into the lungs. Never give anything to an unconscious person by mouth.

NOTE TO PHYSICIANS: Treat symptomatically and supportively. Administration of gastric lavage, if warranted, should be performed by qualified medical personnel. Treatment may vary with condition of victim and specifics of incident. Call 1-800-752-7869, extension 2 or 1-312-906-6194 for additional information.

SECTION 5: FIRE FIGHTING MEASURES

FLASH POINT: 105°F (40°C) (minimum) Tag Closed Cup

FLAMMABLE LIMITS IN AIR: **LOWER:** 0.7 VOL% (minimum)
UPPER: 5 VOL% (maximum)

AUTOIGNITION TEMPERATURE: 410°F (210°C) (minimum)

HAZARDOUS COMBUSTION PRODUCTS: Decomposition and combustion materials may be toxic. Burning may produce carbon monoxide and unidentified organic compounds.

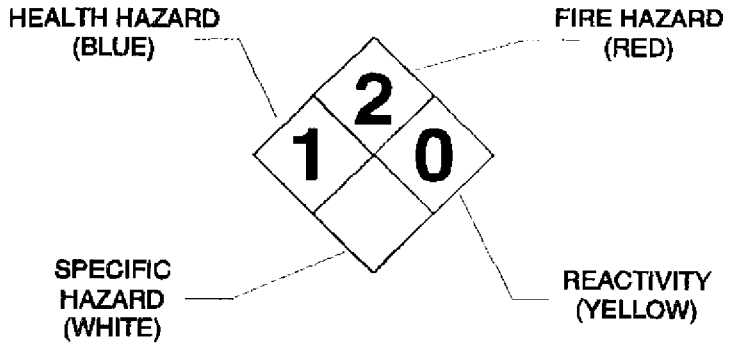
CONDITIONS OF FLAMMABILITY: Heat, sparks, or flame.

EXTINGUISHING MEDIA: Carbon dioxide, regular foam, dry chemical, water spray, or water fog.

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

NFPA 704 HAZARD IDENTIFICATION:

This information is intended solely for the use by individuals trained in this system.



FIRE FIGHTING INSTRUCTIONS:

Keep storage containers cool with water spray.
A positive-pressure, self-contained breathing apparatus (SCBA) and full-body protective equipment are required for fire emergencies.

FIRE AND EXPLOSION HAZARDS:

Vapor explosion hazard indoors, outdoors, or in sewers. Vapors may travel to ignition source and flashback. Vapors will spread along the ground and collect in low or confined areas. Run-off to sewer may create a fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous. Not sensitive to mechanical impact. Product may be sensitive to static discharge, which could result in fire or explosion.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Remove all ignition sources. Do not touch or walk through spilled product. Stop leak if you can do it without risk. Wear protective equipment and provide engineering controls as specified in **SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Ventilate area and avoid breathing vapor or mist. A vapor suppressing foam may be used to reduce vapors. Contain spill away from surface waters and sewers. Contain spill as a liquid for possible recovery or sorb with compatible sorbent material and shovel with a clean, sparkproof tool into a sealable container for disposal.

Additionally, for large spills: Water spray may reduce vapor, but may not prevent ignition in closed spaces. Dike far ahead of liquid spill for collection and later disposal.

There may be specific federal regulatory reporting requirements associated with spills, leaks, or releases of this product. Also see **SECTION 15: REGULATORY INFORMATION.**

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 7: HANDLING AND STORAGE

HANDLING: Keep away from heat, sparks, or flame. Where flammable mixtures may be present, equipment safe for such locations should be used. Use clean, sparkproof tools and explosion-proof equipment. When transferring product, metal containers, including trucks and tank cars, should be grounded and bonded. Do not breathe vapor or mist. Use in a well ventilated area. Avoid contact with eyes, skin, clothing, and shoes. Do not smoke while using this product.

SHIPPING AND STORING: Keep container tightly closed when not in use and during transport. Do not pressurize, cut, weld, braze, solder, drill, or grind containers. Keep containers away from heat, flame, sparks, static electricity, or other sources of ignition. Empty product containers may retain product residue and can be dangerous. See **SECTION 14: TRANSPORT INFORMATION** for Packing Group information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Provide general ventilation needed to maintain concentration of vapor or mist below applicable exposure limits. Where adequate general ventilation is unavailable, use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Where explosive mixtures may be present, equipment safe for such locations should be used.

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY PROTECTION: Use NIOSH-certified, air-purifying respirators with organic vapor cartridges respiratory protective equipment when concentration of vapor or mist exceeds applicable exposure limits. Protection provided by air-purifying respirators is limited. Selection and use of respiratory protective equipment should be in accordance in the USA with OSHA General Industry Standard 29 CFR 1910.134; or in Canada with CSA Standard Z94.4.

EYE PROTECTION: Where eye contact is likely, wear chemical goggles; contact lens use is not recommended.

SKIN PROTECTION: Where skin contact is likely, wear nitrile, supported neoprene, Viton®, polyvinyl alcohol (PVA), laminate (such as North Silver Shield®, Safety 4 4h®, Ansell Edmont Barrier®), or equivalent protective gloves; use of polyvinyl chloride (PVC), natural rubber (latex), or equivalent gloves is not recommended.

To avoid prolonged or repeated contact where spills and splashes are likely, wear appropriate chemical-resistant faceshield, boots, apron, whole body suits, or other protective clothing.

PERSONAL HYGIENE: Use good personal hygiene. Wash thoroughly with soap and water after handling product and before eating, drinking, or using tobacco products. Clean affected clothing, shoes, and protective equipment before reuse. Discard affected clothing, shoes, or protective equipment if they cannot be thoroughly cleaned. Discard leather articles, such as shoes, saturated with the product.

OTHER PROTECTIVE EQUIPMENT: Where spills and splashes are likely, facilities storing or using this product should be equipped with an emergency eyewash and shower, both equipped with clean water, in the immediate work area.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE, APPEARANCE, AND ODOR: Liquid, clear and green, mild hydrocarbon odor.

ODOR THRESHOLD: 30 ppm (based on Stoddard Solvent)

MOLECULAR WEIGHT: Not available.

SPECIFIC GRAVITY: 0.77 to 0.80 at 60°F/60°F (15.6°C/15.6°C) (water = 1)

DENSITY: 6.4 to 6.7 LB/US gal (770 to 800 g/l)

VAPOR DENSITY: 5 (air = 1) (approximately)

VAPOR PRESSURE: 0.4 mm Hg at 68°F (20°C) (approximately)
1.0 mm Hg at 100°F (38°C) (approximately)

BOILING POINT: 310°F (155°C) (initial)

FREEZING/MELTING POINT: -45°F (-43°C) (maximum)

pH: Not applicable.

EVAPORATION RATE: 0.1 (butyl acetate = 1) (based on Stoddard Solvent)

SOLUBILITY IN WATER: Insoluble.

FLASH POINT: 105°F (40°C) (minimum) Tag Closed Cup

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

FLAMMABLE LIMITS IN AIR: **LOWER:** 0.7 VOL% (minimum)
UPPER: 5 VOL% (maximum)

AUTOIGNITION TEMPERATURE: 410°F (210°C) (minimum)

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under normal temperatures and pressures. Avoid heat, sparks, or flame.

INCOMPATIBILITY: Avoid acids, alkalies, oxidizing agents, reducing agents, reactive halogens, or reactive metals.

REACTIVITY: Polymerization is not known to occur under normal temperatures and pressures. Not reactive with water.

HAZARDOUS DECOMPOSITION PRODUCTS: None under normal temperatures and pressures. See also **SECTION 5: HAZARDOUS COMBUSTION PRODUCTS**.

SECTION 11: TOXICOLOGICAL INFORMATION

SENSITIZATION: Based on best current information, there is no known human sensitization associated with this product.

MUTAGENICITY: Perchloroethylene has demonstrated animal effects of mutagenicity.

Based on best current information, the other component listed in **SECTION 2** is not a mutagen.

CARCINOGENICITY: Perchloroethylene is categorized by IARC as probably carcinogenic to humans (Group 2A). Perchloroethylene is listed by NTP as having limited evidence of carcinogenicity in humans or sufficient evidence of carcinogenicity in experimental animals.

Perchloroethylene is categorized by ACGIH as a confirmed animal carcinogen with unknown relevance to humans (A3). This agent is carcinogenic in experimental animals at a relatively high dose, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) that may not be relevant to worker exposure. Available epidemiologic studies do not confirm an increased risk of cancer in exposed humans. Available evidence does not suggest that the agent is likely to cause cancer in humans except under uncommon or unlikely routes or levels of exposure.

Based on best current information, the other component listed in **SECTION 2** is not a carcinogen.

Also see **SECTION 3: CANCER INFORMATION** and **SECTION 15: CALIFORNIA.**

REPRODUCTIVE TOXICITY: Based on best current information, there is no known reproductive toxicity associated with this product.

Also see **SECTION 15: CALIFORNIA.**

TERATOGENICITY: Perchloroethylene has demonstrated animal effects of teratogenicity.

Based on best current information, the other component listed in **SECTION 2** is not a teratogen.

TOXICOLOGICALLY SYNERGISTIC PRODUCT(S): Based on best current information, there are no known toxicologically synergistic products associated with this product.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY: 2900 ug/L 96 hour LC_{50} Rainbow trout, donaldson trout (Oncorhynchus mykiss) (based on Distillates (petroleum) hydrotreated light).

OCTANOL/WATER PARTITION COEFFICIENT: Not available.

VOLATILE ORGANIC COMPOUNDS: 100 WT%; 6.4 to 6.7 LB/US gal; 770 to 800 g/l
As per 40 CFR Part 51.100(s).

SECTION 13: DISPOSAL CONSIDERATIONS

DISPOSAL: Dispose in accordance with federal, state, provincial, and local regulations. Regulations may also apply to empty containers. The responsibility for proper waste disposal lies with the owner of the waste. Contact Safety-Kleen regarding recycling or proper disposal.

USEPA WASTE CODE(S): D001, D018, D039, and D040
Based on available data, this information applies to the product as supplied to the user. Processing, use, or contamination by the user may change the waste code(s) applicable to the disposal of this product.

SAFETY-KLEEN 105 SOLVENT RECYCLED
MATERIAL SAFETY DATA SHEET FOR USA AND CANADA

SECTION 14: TRANSPORT INFORMATION

DOT: COMBUSTIBLE LIQUID, N.O.S. (PETROLEUM NAPHTHA), NA1993, PG III

TDG: Petroleum Distillates, N.O.S., Class 3, UN1268, PG III

EMERGENCY RESPONSE GUIDE NUMBER: 128
Reference *North American Emergency Response Guidebook*

SECTION 15: REGULATORY INFORMATION

USA REGULATIONS

SARA SECTIONS 302 AND 304: Based on the ingredients listed in **SECTION 2**, this product does not contain any "extremely hazardous substances" listed pursuant to Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) Section 302 or Section 304 as identified in 40 CFR Part 355, Appendix A and B.

SARA SECTIONS 311 AND 312: This product poses the following physical and health hazards as defined in 40 CFR Part 370 and is subject to the requirements of sections 311 and 312 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA):

Immediate (Acute) Health Hazard
Delayed (Chronic) Health Hazard
Fire Hazard

SARA SECTION 313: The following component is subject to the requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Material	CAS
Perchloroethylene	127-18-4

CERCLA: Based on the ingredients listed in **SECTION 2**, this product contains the following "hazardous substance" listed under the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA) in 40 CFR Part 302, Table 302.4 with the following reportable quantity (RQ):

Material	CAS	RQ
Perchloroethylene	127-18-4	100 LB (15.4 kg)

TSCA: All the components of this product are listed on the TSCA Inventory.

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

August 2, 1999

Mr. Sitansu Ghosh
New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Prevention and Response
50 Wolf Road / Room 340
Albany, NY 12233-3510

Subject: 1998 Toxic Chemical Release Inventory Reporting

Dear Mr. Ghosh:

Enclosed please find one (1) microcomputer diskette containing the toxic chemical release reporting information for:

Sulzer Metco (US), Inc.
220 Miller Place
Hicksville, NY 11801
TRI Fac. I.D. # 11801PRKNL220MI

Sulzer Metco (US), Inc.
1101 Prospect Avenue
Westbury, NY 11590
TRI Fac. I.D. # 11590PRKNL1101P

This information is submitted as required under section 313, Title III of the Superfund Amendments and Reauthorization Act of 1986, and the Pollution Prevention Act of 1990.

Sulzer Metco is submitting a total of twenty four (24) reports from our facilities. The breakdown of each facility is as follows:

Sulzer Metco (US), Inc.
220 Miller Place
Hicksville, NY 11801
TRI Fac. I.D. # 11801PRKNL220MI

Chemical Name	Report Year	CAS#	Report Status
Nickel Compounds	1998	N495	2 Page Form A
Chromium Compounds	1998	N090	2 Page Form A
Aluminum (Fume or Dust)	1998	007429905	2 Page Form A
Copper Compounds	1998	N100	2 Page Form A
Cobalt Compounds	1998	N096	5 Page Form R
Nitric Acid	1998	007697372	2 Page Form A
Phosphoric Acid	1998	007664382	2 Page Form A

Sulzer Metco, (US) Inc.
1101 Prospect Ave.
Westbury, NY 11590-0020
TRI Fac. I.D. # 11590PRKNL1101P

Chemical Name	Report Year	CAS#	Report Status
Nickel Compounds	1998	N495	2 Page Form A
Chromium Compounds	1998	N090	2 Page Form A
Aluminum (Fume or Dust)	1998	007429905	2 Page Form A
Copper Compounds	1998	N100	2 Page Form A
Cobalt Compounds	1998	N096	2 Page Form A
Zinc Compounds	1998	N982	2 Page Form A
Hydrogen Flouride	1998	007664393	2 Page Form A
Nitric Acid	1998	007697372	2 Page Form A
Ammonia	1998	007664417	2 Page Form A
Barium Compounds	1998	N040	2 Page Form A
Phosphoric Acid	1998	007664382	2 Page Form A
Xylene (Mixed Isomers)	1998	001330207	2 Page Form A
1,1,1-Trichloroethane	1998	000071556	2 Page Form A
Tetrachloroethylene	1998	000127184	2 Page Form A
Lead	1998	007439921	2 Page Form A

Our technical point of contact is Michael S. Lydon, phone number (516) 338-2337, and is available should any questions or problems arise in your processing of these diskettes.

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using date available to the preparers of this report.

Thank you.

Russell Siedlewicz
Manager Facilities
Phone #: (516) 338-2139
FAX #: (516) 338-2336

FILE:0802991.DOC

(IMPORTANT: Type or print; read instructions before completing form)

EPA
United States Environmental Protection Agency

FORM R

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 1998

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 3 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
RUSSELL SIEDLEWICZ MANAGER, FACILITIES		07/30/1999

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11801-PRKNL-220MI
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address(if different from street address)	SULZER METCO (US), INC.
Street	220 MILLER PLACE	Mailing Address	1101 PROSPECT AVENUE
City/County/State/Zip Code	HICKSVILLE NASSAU NY 11801-	City/County/State/Zip Code	WESTBURY NY 11590-0201

4.2	This report contains information for: (Important : check a or b; check c if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility			
4.3	Technical Contact Name	MICHAEL S. LYDON			Telephone Number (include area code)	(515) 338 - 2337	
4.4	Public Contact Name	MICHAEL S. LYDON			Telephone Number (include area code)	(515) 338 - 2337	
4.5	SIC Code (s) (4 digits)	a. 3399	b. NA	c.	d.	e.	f.

4.6	Latitude	Degrees	Minutes	Seconds	Longitude	Degrees	Minutes	Seconds
		040	47	10		073	31	00

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 152084398	a. NYD981558570	a. NA	a. NA
b. NA	b. NA	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
COBALT COMPOUNDS

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N096
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COBALT COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive)
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:		
c. [ ] For on-site use/processing	a. [ ] As a reactant	a. [ ] As a chemical processing aid
d. [ ] For sale/distribution	b. [X] As a formulation component	b. [ ] As a manufacturing aid
e. [ ] As a byproduct	c. [ ] As an article component	c. [ ] Ancillary or other use
f. [ ] As an impurity	d. [X] Repackaging	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year) (Enter range code or estimate*)	B. Basis of estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [X]	NA		
5.2	Stack or point air emissions	NA [ ]	B	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					
5.4.1	Underground Injection onsite to Class I Wells	NA [X]	NA		
5.4.2	Underground injection onsite to Class II-V Wells	NA [X]	NA		

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [1]
and indicate the Part II, Section 5.3 page number in this box. [1] (example: 1,2,3, etc)

* Range Codes: A= 1 - 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category, or Generic Name
COBALT COMPOUNDS

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)
5.5	Disposal to land onsite			
5.5.1A	RCRA Subtitle C landfills	X	NA	
5.5.1B	Other landfills	X	NA	
5.5.2	Land treatment/application farming	X	NA	
5.5.3	Surface Impoundment	X	NA	
5.5.4	Other disposal	X	NA	

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year) (enter range code* or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	-
6.1.B. 2	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box 1 and indicate the Part II, Section 6.1 page number in this box 1 (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1	Off-Site EPA Identification Number (RCRA ID No.)	NYD082785429					
Off-Site Location Name	CHEMICAL POLLUTION CONTROL, IN						
Off-Site Address	120 SOUTH FOURTH STREET						
City	BAY SHORE	State	NY	County	USA	Zip	11706-

Is location under control of reporting facility or parent company? [ ] Yes [X] No

* Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
COBALT COMPOUNDS

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1300	1. M	1. M24
2.	2.	2.
3.	3.	3.
4.	4.	4.

6.2 2 Off-Site EPA Identification Number (RCRA ID No.)

Off-Site location Name

Off-Site Address

City | State | County | Zip -

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

A. Total Transfers (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data ?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d	7A.1e
NA			0 %	Yes ☐ No ☐
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d	7A.2e
			%	Yes ☐ No ☐
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d	7A.3e
			%	Yes ☐ No ☐
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d	7A.4e
			%	Yes ☐ No ☐
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d	7A.5e
			%	Yes ☐ No ☐

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [1]
and indicate the Part II, Section 6.2/7A page number in this box : [1] (example: 1,2,3, etc)

* Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
COBALT COMPOUNDS

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 NA 2 3 4

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1. NA 2. 3. 4. 5.

6. 7. 8. 9. 10.

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year)	Column B Current Reporting Year (pounds/year)	Column C Following Year (pounds/year)	Column D Second Following Year (pounds/year)
8.1	Quantity released **	1400	1300	1500	1500
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	1400	1300	1500	1500
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)				
8.9	Production ratio or activity index			0000.98	

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year ? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11 Is additional information on source reduction, recycling, or pollution control activities included with this report ? (Check one box) YES [ ] NO [X]

** Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated onsite or offsite.

(IMPORTANT: Type or print; read instructions before completing form)

EPA
United States Environmental Protection Agency

FORM R

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 1998

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 3 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
RUSSELL SIEDLEWICZ MANAGER, FACILITIES		07/30/1999

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11801-PRKNL-220MI
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address(if different from street address)	SULZER METCO (US), INC.
Street	220 MILLER PLACE	Mailing Address	1101 PROSPECT AVENUE
City/County/State/Zip Code	HICKSVILLE NASSAU NY 11801-	City/County/State/Zip Code	WESTBURY NY 11590-0201

4.2	This report contains information for: (Important : check a or b; check c if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility			
4.3	Technical Contact Name	MICHAEL S. LYDON			Telephone Number (include area code)	(516) 338 - 2337	
4.4	Public Contact Name	RUSSEL SIEDLEWICZ			Telephone Number (include area code)	(516) 338 - 2139	
4.5	SIC Code (s) (4 digits)	a. 3399	b. NA	c.	d.	e.	f.

4.6	Latitude	Degrees	Minutes	Seconds	Longitude	Degrees	Minutes	Seconds
		040	47	10		073	31	00

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 152084398	a. NYD981558570	a. NA	a. NA
b. NA	b. NA	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
CHROMIUM COMPOUNDS

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N090
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	CHROMIUM COMPOUNDS
1.3	Generic Chemical Name (Important: Complete **only** if Part 1, Section 2.1 is checked "yes". Generic Name must be structurally descriptive)
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:		
c. [ ] For on-site use/processing	a. [ ] As a reactant	a. [ ] As a chemical processing aid
d. [ ] For sale/distribution	b. [X] As a formulation component	b. [ ] As a manufacturing aid
e. [ ] As a byproduct	c. [ ] As an article component	c. [ ] Ancillary or other use
f. [ ] As an impurity	d. [X] Repackaging	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04 (Enter two-digit code from instruction package.)	

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year) (Enter range code or estimate*)	B. Basis of estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [X]	NA		
5.2	Stack or point air emissions	NA [ ]	B	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					
5.4.1	Underground Injection onsite to Class I Wells	NA [X]	NA		
5.4.2	Underground injection onsite to Class II-V Wells	NA [X]	NA		

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [1]
and indicate the Part II, Section 5.3 page number in this box. [1] (example: 1,2,3, etc)

* Range Codes: A= 1 - 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category, or Generic Name
CHROMIUM COMPOUNDS

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)
5.5	Disposal to land onsite			
5.5.1A	RCRA Subtitle C landfills	X	NA	
5.5.1B	Other landfills	X	NA	
5.5.2	Land treatment/application farming	X	NA	
5.5.3	Surface Impoundment	X	NA	
5.5.4	Other disposal	X	NA	

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year) (enter range code* or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	-
6.1.B. 2	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box 1 and indicate the Part II, Section 6.1 page number in this box 1 (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)		NYD082785429					
Off-Site Location Name	CHEMICAL POLLUTION CONTROL, IN						
Off-Site Address	120 SOUTH FOURTH STREET						
City	BAY SHORE	State	NY	County	USA	Zip	11706-

Is location under control of reporting facility or parent company? [ ] Yes [X] No

* Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
CHROMIUM COMPOUNDS

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1800	1. M	1. M40
2.	2.	2.
3.	3.	3.
4.	4.	4.

6.2 2 Off-Site EPA Identification Number (RCRA ID No.)

Off-Site location Name

Off-Site Address

City | State | County | Zip -

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

A. Total Transfers (pounds/year) (enter range code* or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data ?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d	7A.1e
NA			%	Yes ☐ No ☐
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d	7A.2e
			%	Yes ☐ No ☐
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d	7A.3e
			%	Yes ☐ No ☐
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d	7A.4e
			%	Yes ☐ No ☐
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d	7A.5e
			%	Yes ☐ No ☐

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box 1
and indicate the Part II, Section 6.2/7A page number in this box : 1 (example: 1,2,3, etc)

* Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801-PRKNL-220MI
Toxic Chemical, Category or Generic Name
CHROMIUM COMPOUNDS

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 NA 2 3 4

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1. NA 2. 3. 4. 5.
6. 7. 8. 9. 10.

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year)	Column B Current Reporting Year (pounds/year)	Column C Following Year (pounds/year)	Column D Second Following Year (pounds/year)
8.1	Quantity released **	400	1800	16000	0
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)			NA	
8.9	Production ratio or activity index			0000.98	

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year ? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional information on source reduction, recycling, or pollution control activities included with this report ? (Check one box)	[ ]	[X]

** Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated onsite or offsite.

United States Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY
FORM A

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY	2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)	Enter "X" here if this is a revision	
		For EPA use only	

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 1998

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 3 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the statement, the annual reportable amount as defined in 40 CFR 372.27 (a), did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during this reporting year

Name and official title of owner/operator or senior management official:		Signature:	Date Signed:
RUSSELL SIEDLEWICZ	MANAGER, FACILITIES		07/30/1999

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11801-PRKNL-220MI
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address(if different from street address)	SULZER METCO (US), INC.
Street	220 MILLER PLACE	Mailing Address	1101 PROSPECT AVENUE
City/County/State/Zip Code	HICKSVILLE NASSAU NY 11801-	City/County/State/Zip Code	WESTBURY NY 11590-0201

4.2	This report contains information for: (Important : check c if applicable)	c. [ ]	A Federal facility
4.3	Technical Contact Name: MICHAEL S. LYDON	Telephone Number (include area code): (515) 338 - 2337	
4.4	Intentionally left blank		

4.5	SIC Code (s) (4 digits)	a. 3399	b. NA	c.	d.	e.	f.

4.6	Latitude	Degrees	Minutes	Seconds	Longitude	Degrees	Minutes	Seconds
		040	47	10		073	31	00

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 152084398	a. NYD981558570	a. NA	a. NA
b. NA	b. NA	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

FID: 11801-PRKNL-220MI

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 1 of 5

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N495
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	NICKEL COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 2 of 5

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N100
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COPPER COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 3 of 5

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007429905
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	ALUMINUM (FUME OR DUST)
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 4 of 5

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007697372
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	NITRIC ACID
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

EPA FORM A

PART II. CHEMICAL IDENTIFICATION

FID: 11801-PRKNL-220MI

SECTION 1. TOXIC CHEMICAL IDENTITY

Report 5 of 5

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007664382
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	PHOSPHORIC ACID
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

United States Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY
FORM A

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 1998

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 3 trade secret? ☐ Yes (Answer question 2.2; Attach substantiation forms) ☒ No (Do not answer 2.2; Go to Section 3)	2.2	Is this copy ☐ Sanitized ☐ Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the statement, the annual reportable amount as defined in 40 CFR 372.27 (a), did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during this reporting year

Name and official title of owner/operator or senior management official:	Signature:	Date Signed
RUSSELL SIEDLEWICZ MANAGER, FACILITIES		07/30/1999

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590-PRKNL-1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address(if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	
City/County/State/Zip Code	WESTBURY NASSAU NY 11590-	City/County/State/Zip Code	

4.2	This report contains information for: (Important : check c if applicable)	c. ☐	A Federal facility
4.3	Technical Contact Name: MICHAEL S. LYDON	Telephone Number (include area code): (516) 338 - 2337	
4.4	Intentionally left blank		

4.5	SIC Code (s) (4 digits)	a. 3542	b. NA	c.	d.	e.	f.

4.6	Latitude	Degrees	Minutes	Seconds	Longitude	Degrees	Minutes	Seconds
		040	45	50		073	33	10

4.7	Dun & Bradstreet Number(s) (9 digits)	4.8	EPA identification Number (RCRA I.D. No.) (12 characters)	4.9	Facility NPDES Permit Number(s) (9 characters)	4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a.	011272254	a.	NYD131318651	a.	NA	a.	NA
b.	NA	b.	NA	b.		b.	

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA ☐	SULZER INC.
5.2	Parent Company's Dun & Bradstreet Number	NA ☐	001826957

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

FID: 11590-PRKNL-1101P

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 1 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007429905
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	ALUMINUM (FUME OR DUST)
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 2 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N096
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COBALT COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 3 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N100
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COPPER COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 4 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N982
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	ZINC COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

FID: 11590-PRKNL-1101P

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 5 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N090
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	CHROMIUM COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 6 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N495
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	NICKEL COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 7 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	000108883
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	TOLUENE
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 8 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007664393
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	HYDROGEN FLUORIDE
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

FID: 11590-PRKNL-1101P

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 9 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007697372
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	NITRIC ACID
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 10 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007664417
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	AMMONIA
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 11 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N040
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	BARIUM COMPOUNDS
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 12 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007439921
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	LEAD
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

FID: 11590-PRKNL-1101P

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 13 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007664382
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	PHOSPHORIC ACID
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 14 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	001330207
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	XYLENE (MIXED ISOMERS)
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 15 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	000071556
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	1,1,1-TRICHLOROETHANE
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 1. TOXIC CHEMICAL IDENTITY — Report 16 of 16

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	000127184
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	TETRACHLOROETHYLENE
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive).
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

EXECUTIVE LEGAL SUMMARY

Compliance
7/30 DFJ

BUSINESS LAWS, INC.
11630 CHILLICOTHE ROAD
CHESTERLAND, OHIO 44026
Phone: 216-729-7996

EDITOR: W.A. HANCOCK

Executive Legal Summary No. 110

EMERGENCY PLANNING AND COMMUNITY RIGHT-TO-KNOW: TOXIC CHEMICAL RELEASE REPORTING

CONTENTS

Introduction 1

Who Must Report? 1
Facilities with 10 or More Employees 1
Facilities in SIC Codes 20-39 1
Manufacturers, Processors, and Users of Chemicals 2
Threshold Reporting Quantities 3

How Do You Report? 3

Trade Secrets 4

Supplier Notification 4

Record-keeping Requirements 4

Introduction

The Emergency Planning and Community Right-to-Know Act was passed in 1986 as Title III of the Superfund Amendments and Reauthorization Act of 1986 ("SARA"). Its purpose is to inform the public about chemicals present in the community and to assist communities in developing chemical emergency response plans. To achieve this goal, the law requires certain facilities to provide information on the chemicals they manufacture, process, or use. Section 313 of Title III, entitled "Toxic Chemical Release Reporting," requires companies to submit annual reports on the amount of chemicals their facilities release into the environment, either routinely or by accident. Based on these reports, the EPA has created a computerized data base that will be accessible to the public as needed or desired.

Who Must Report?

Any owner or operator of a facility that meets all of the following criteria must submit the Section 313 reports:

(1) the facility has ***10 or more full-time employees***;
(2) the facility is included in ***SIC codes 20-39***; and
(3) the facility ***manufactures, imports, processes, or otherwise uses any of the toxic chemicals listed in the law in amounts greater than specified "threshold" quantities***.

Covered facilities that fail to comply with the Section 313 reporting requirements are subject to civil penalties of up to $25,000 a day. The law also allows citizens to file suit against any covered facility that fails to submit a Section 313 report. Therefore, it is very important to determine whether you are subject to this section.

Facilities with 10 or More Employees

A facility is defined as "all buildings, equipment, structures, and other stationary items located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person." A full-time employee is defined as someone who works at least 2,000 hours per year. To determine whether you have at least 10 full-time employees at your facility, add the hours worked by all employees during the calendar year, including contract employees and sales and support staff working at the facility, and divide that by 2,000. If the total hours worked by all employees is at least 20,000, your facility will meet the 10-employee threshold.

Facilities in SIC Codes 20-39

The Standard Industrial Classification (SIC) system is a numerical classification of businesses according to the primary activities they perform. SIC codes apply to "establishments," which are economic units, usually at a single location, where business is conducted or services or industrial operations are performed. SIC codes 20-39 represent the manufacturing industries. Facilities may include more than one establishment. Your facility is subject to Section 313 reporting if it consists of

(1) a single establishment in SIC codes 20-39;

(2) two or more establishments, all of which are in SIC codes 20-39; or
(3) two or more establishments in different SIC codes where *either*

(a) more than 50 percent of the total value of products shipped from or produced at the facility comes from establishments with primary SIC codes in groups 20-39; *or*
(b) the products shipped from or produced at a single establishment with a primary SIC code in groups 20-39 have a greater value than the products shipped from or produced at any other establishment in the facility.

If your facility is covered under any of these criteria, you must account for all releases of listed toxic chemicals, even from those establishments outside of SIC codes 20-39. A facility with multiple establishments is responsible for determining coverage for each establishment. However, the individual establishments or groups of establishments may file separate reports. The key is to make sure that the required information is reported for the whole facility.

Where establishments within a facility are operated by different persons with no common corporate relationship, each establishment must determine its own coverage. For example, a facility owner who operates an establishment in the facility but leases part of the facility to another establishment has no business relationship with the other establishment other than landlord and tenant. Another example would be an owner who has only a real estate interest in the facility and leases the facility to others. Since no one person is in a position to know all of the information necessary to determine the facility's coverage, each operator should treat its own establishment as a facility. The person who merely owns the real estate would not be required to report.

Special rules apply to "auxiliary facilities," which primarily support other establishments and are assigned a SIC code according to the establishment they service. Examples include research and development laboratories, warehouses, and waste treatment facilities. Auxiliary facilities that are not part of a larger facility must determine their own coverage. Auxiliary establishments within the boundaries of a multiestablishment facility must be factored into the calculations for determining the facility's coverage. Laboratories that manufacture, process, or use chemicals under the supervision of a technically qualified individual need not report.

Manufacturers, Processors, or Users of Chemicals

The toxic chemical release reporting requirements apply only to facilities that manufacture, process, or otherwise use one of the chemicals appearing on a list of toxic chemicals in the EPA regulations. The list includes more than 300 chemicals and chemical categories. The EPA may revise the list on its own or in response to a petition.

The term "manufacturing" includes importing, which means "to cause a chemical to be imported into the customs territory of the U.S." If you order a toxic chemical from a foreign supplier, you have "caused it to be imported," even if you use an import brokerage firm to buy the chemical. Only one facility is deemed to have imported the shipment of a toxic chemical — the one that intends the chemical to be imported and controls the identity and amount to be imported, not those merely involved in the transaction.

The EPA interprets "manufacture" to include ***coincidental production of a listed toxic chemical as a byproduct or impurity*** during the manufacture, processing, use or disposal of another chemical substance or mixture. For example, suppose a nitric acid manufacturer uses ammonia in a waste treatment system to neutralize a wastewater stream containing nitric acid. The reaction of the ammonia with the nitric acid produces an ammonium nitrate solution, a listed toxic substance. The company will be considered a manufacturer of ammonium nitrate solution as a byproduct.

Where one company contracts with another to produce a chemical exclusively for it, the facility that actually produces the chemical is considered to be the manufacturer of that chemical for purposes of Section 313 reporting.

A company ***processes*** a chemical if, after its manufacture, the chemical is ultimately made part of some material or product distributed in commerce. For example, your company receives a nickel compound (a listed toxic chemical) as a bulk solid and performs various grinding operations before packaging the compound into 50-pound bags. You would be considered a processor of nickel compound.

A company ***otherwise uses*** a chemical if it uses it in any manner that is not manufacturing or processing and the chemical is not intentionally incorporated into a commercial product. For example, if you clean equipment with toluene, you are a toluene user. If you incorporate toluene into a mixture for distribution in commerce, you are a toluene processor. The distinction is

Copyright 1989, Business Laws, Inc. ***EXECUTIVE LEGAL SUMMARY*** (ISBN 0-929576-44-6) is published by Business Laws, Inc., 11630 Chillicothe Road, Chesterland, Ohio 44026 (216) 729-7996. Subscriptions are available for $128.00 per year. Individual copies are $10.00 each. *This publication is sold with the understanding that the publisher is not engaged in rendering legal, accounting, or other professional services or advice. If legal advice or other expert assistance is required, the services of a competent professional should be sought.* All Rights Reserved. The information contained herein is based upon sources believed to be accurate and reliable. We have exercised reasonable care to assure the accuracy of the information. However, no representation or warranty is made as to such accuracy. Readers should check primary sources where appropriate and use the traditional legal research techniques to make sure that the information has not been affected or changed by recent developments.

significant because the reporting thresholds (discussed below) are different depending on whether the chemical is "manufactured or processed" or "otherwise used."

The EPA has specifically exempted the following uses of listed chemicals from the reporting requirements:

(1) as a structural component of the facility;
(2) in routine janitorial or facility grounds maintenance;
(3) in items for personal use by employees or others;
(4) in products for motor vehicle maintenance; and
(5) in intake water or intake air.

Threshold Reporting Quantities

A listed chemical is subject to reporting if the facility manufactured, processed, or used it during the preceding year in quantities exceeding the established thresholds. For reports covering the facility's 1988 activities, the threshold was 50,000 pounds per year. Thus, if you manufactured 50,000 pounds of a chemical in 1988, you should have filed a 1989 report for that chemical. For reports covering 1989 and every year thereafter, the threshold quantity is 25,000 pounds. For chemicals "otherwise used," the threshold is 10,000 pounds for all reporting years.

To determine if you have met the threshold, you count only the total amount of the chemical ***actually manufactured, processed, or used at the facility,*** not the total amount brought to the facility during the year.

Each activity (*i.e.*, manufacturing, processing, or otherwise using) requires its own threshold determination; you do not add all the quantities together. For example, if you processed 20,000 pounds of a chemical in 1988 and used 6,000 pounds of that same chemical, your facility has not exceeded the threshold for either processing or using, and you need not report for that chemical. On the other hand, you must report if you exceed any of the thresholds for a chemical. For example, if you process 22,000 pounds of a chemical and use 16,000 pounds of that chemical, you must report for the chemical even though you did not exceed the processing threshold. ***In your report, you must include all releases of the chemical from all activities, not just those for which you exceeded the threshold.*** Thus, in our example, you would have to report for 38,000 pounds of the chemical, not just the 16,000 pounds that exceeded the "use" threshold.

Toxic chemicals in mixtures and trade name products must be factored into the threshold determination. However, a listed chemical does not have to be considered if it makes up less than 1 percent of a mixture or trade name product received or distributed by the facility (or less than 0.1 percent if the substance is a carcinogen under OSHA standards). This is called the *de minimis* concentration rule. It does not apply to toxic chemicals that are byproducts (*i.e.*, a chemical that is separated from a process stream and further processed or disposed of).

Facilities that import, process, or use toxic chemicals as part of mixtures or trade name products must use the best information available to determine whether the components of a mixture exceed the *de minimis level*. If you know that a mixture or trade name product contains a specific toxic chemical, you must combine the amount of the chemical in the mixture or product with the amounts of the chemical manufactured, processed, or used at your facility to make the threshold determination. If you know only the maximum concentration of the chemical in the mixture or product, you must assume the chemical is present at that concentration.

Toxic chemicals that exist in "articles" are also exempt from the threshold determination. An article is an item that is formed to a specific shape or design, has end-use functions dependent on that shape or design, and does not release toxic chemicals during normal use or processing. For example, a transformer that contains PCBs (a toxic chemical) but does not release the PCBs during normal use would be an article. However, if the facility services the transformer by replacing the PCBs, the PCBs would have to be factored into the reporting threshold determination.

How Do You Report?

Every facility owner or operator who met the reporting criteria for the preceding calendar year must file annual reports on or before July 1. The first annual report was due on July 1, 1988 for 1987 activities. Covered facilities must file a separate report ***for each listed chemical manufactured, processed, or used in excess of the threshold quantities.*** Reports must be filed with the EPA's Office of Toxic Substances and the designated state official in the state where the facility is located. Your EPA regional office can direct you to the proper state agency.

The EPA has a special form that must be used for Section 313 reporting (Form R). You can obtain the form from the Section 313 Document Distribution Center, P.O. Box 12505, Cincinnati, Ohio 45212. The form includes instructions and technical guidance on how to calculate chemical releases from your facility. There is also a comprehensive Section 313 "Reporting Package" that you can order from the Document Distribution Center. Additional assistance is available from the EPA's Emergency Planning and Community Right-to-Know Information Hotline — (800) 535-0202.

The EPA allows facilities to submit their Form R reports on magnetic media that meet certain technical specifications. However, you may not use magnetic media to report chemicals for which you are asserting a trade secrecy claim.

The five-page form consists of four parts:

(1) ***Facility identification*** — This includes the name, location, and

other information about your facility, as well as a certification statement to be signed by the owner or operator or a senior management official responsible for the person completing the form. The certification statement indicates that the official has reviewed the documents and that, to the best of his or her knowledge and belief, the information is true and complete and the amounts and values are accurate based on reasonable estimates using available data.

(2) ***Off-site locations to which toxic chemicals are transferred in wastes*** — This page lists all publicly owned treatment works and other off-site locations to which the facility sent its wastes.

(3) ***Chemical-specific information*** — This includes the chemical identity (unless the chemical is claimed as a trade secret); the activities and uses of the chemical at the facility; the maximum amount of the chemical on site at any time during the year; the amount of the chemical released during the year, including accidental spills and routine emissions into the air, water, land, and underground injection wells; quantities of the chemical transferred in wastes to off-site locations; and on-site treatment methods used for wastes containing the chemical, including estimates of their efficiency. There is also an optional section in which the facility may report actions taken to reduce the amount of the chemical being released from the facility.

(4) ***Supplemental information*** — This part provides additional space to answer the questions in part 3.

The form is designed so that most of the information required on the first two parts can be filled out and then photocopied and attached to each chemical-specific report. Each facility identification page must contain an original signature on the certification statement.

You do not need to measure or monitor your releases for purposes of Section 313 reporting. You may use readily available data or, if none is available, reasonable estimates.

Trade Secrets

Title III permits facilities to withhold the specific chemical identity from a report if the chemical meets the EPA's criteria for a valid trade secret. The EPA's rules governing trade secret claims are discussed in a separate EXECUTIVE LEGAL SUMMARY. Briefly, if you are seeking trade secret protection for a Section 313 chemical, you must submit two copies of the reporting form. One copy, the unsanitized version, will identify the chemical. The other copy, the sanitized version, will delete the chemical identity and substitute a generic class or category that structurally describes the chemical. You must also submit both a sanitized and unsanitized copy of the EPA's trade secret substantiation form. All four documents must be submitted together when you file your Form R report.

Supplier Notification

In order to give processors and users of mixtures and trade name products information about the presence of toxic chemicals in those products, suppliers in SIC codes 20-39 must develop and distribute a notice to facilities in SIC codes 20-39 or to others who distribute to such facilities. The supplier notification requirement took effect with the first shipment of a mixture or trade name product in 1989 and applies to the first shipment of a product each year thereafter. If the product requires a material safety data sheet under OSHA's hazard communication rule, the notice must be incorporated into or attached to that sheet.

The notice must identify any listed toxic chemicals present in the product in quantities above the *de minimis* concentration level, along with their percent composition. If the supplier is claiming the chemical identity as a trade secret under OSHA's hazard communication rule, the notice must provide a generic identity that structurally describes the chemical. If the supplier claims that the composition information is a trade secret, it must provide a maximum concentration level of the chemical in the mixture or product.

Facilities that receive mixtures or trade name products from suppliers outside of SIC codes 20-39 or from foreign suppliers not covered by the notice requirements must follow the EPA rules for calculating the amounts of toxic chemicals present in those products.

Record-keeping Requirements

You must keep a copy of each Form R report, as well as all materials supporting the information in the report, including all receipts or manifests associated with the transfer of each toxic chemical in waste to off-site locations. These records must be retained at the facility for at least three years from the date that you submit the report and they must be readily available for inspection by the EPA. The three-year period also applies to suppliers covered by the supplier notification requirements. Suppliers must keep records of the fact that they provided the notice, all supporting materials used to determine whether the notice is required and to develop the notice, and a copy of the notice. Where applicable, suppliers must keep records explaining why they determined a specific chemical to be a trade secret as well as the appropriateness of the generic chemical name provided. Where the supplier claims the specific concentration of the chemical as a trade secret and provides a maximum concentration limit instead, the supplier must keep records supporting the claim and the basis for the maximum concentration limit.

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 12C

MSDS No.: METCO / 50-100
Revision No.: 3
Revision Date: February 18, 1993
Original Date of Issue: September 7, 1987

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 12C

Description: Metal Powder

Other Designation: SELF-FLUXING ALLOY POWDER

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Cobalt *	0.5	7440-48-4	0.05 mg/m³ TWA metal dust and fume, as Co	0.05 mg/m³ TWA metal dust and fume, as Co	
Silicon	2.5	7440-21-3	10 mg/m³ TWA total dust 5 mg/m³ TWA respirable	10 mg/m³ TWA **	
Boron	2	7440-42-8	10 mg/m³ TWA as B_2O_3	10 mg/m³ TWA as B_2O_3	
Chromium *	10	7440-47-3	1 mg/m³ TWA	0.5 mg/m³ TWA	
Nickel *	83	7440-02-0	1 mg/m³ TWA	1 mg/m³ TWA	
Iron	2	7439-89-6	10 mg/m³ TWA total particulate Fe_2O_3 fume, as Fe	5 mg/m³ TWA Fe_2O_3 fume, as Fe	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	3.2
Vapor Pressure (mmHg):	N/A	**Melting Point:**	1800 - 1950° F
Vapor Density (Air=1):	N/A	**Percentage Volatiles:**	N/A
Solubility in water (%):	Insoluble	**Evaporation Rate:**	N/A
Appearance and Odor:	Powder, no odor	**pH of Solution:**	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	NONE	**Flammable Limits:**	
		LEL %: N/A	**UEL%:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Fine metal dusts are flammable and may explode when exposed to heat, flame or oxidizers. Cobalt may ignite if airborne in the presence of an ignition source or spontaneously. Silicon may ignite if exposed to flame or oxidizers, do not heat or expose to water. Chromium and iron may ignite if airborne in the presence of an ignition source.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Oxidizers, Acids, Sulfur, $Ni(NO_3)_2$, Combustibles.

Hazardous Decomposition Products: Ozone and nitric oxide are formed by the plasma flame (similar to welding fumes). This action is independent of metal powder.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
COBALT:	Hazard by inhalation and skin contact. Inhalation may cause progressive, diffuse pneumonia, respiratory sensitization characterized by cough, wheezing and shortness of breath. Skin contact may cause allergic dermatitis or eczema. Cobalt is found to be a confirmed carcinogen by other reference guide sources such as Carcinogenically Active Chemicals published by Van Nostrand. Target Organ(s): Lungs, skin.
SILICON:	No known toxicity associated with inhalation of this form. Under normal use/conditions silicon dioxide is formed. Inhalation of silicon dioxide may cause pneumoconiosis: silicosis. Silicosis is a pulmonary fibrosis characterized by generalized fibrotic changes on X-ray examination, shortness of breath, cough, decreased chest expansion, lessened capacity for work and increased susceptibility to tuberculosis. Target Organ(s): Lungs.

BORON: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritation due to abrasive action.

Target Organ(s): Lungs, skin, eyes.

CHROMIUM: Hazard by inhalation and skin contact. Inhalation may cause pneumoconiosis and mucous membrane irritation or ulceration. Skin contact may cause dermatitis, sensitization or chrome lesions. A portion of metallic chromium may be converted during the thermal spray process to hexavalent chromium. Exposure to hexavalent chromium may cause bronchogenic, lung and stomach cancers.

Target Organ(s): Lungs, skin.

NICKEL: Hazard by inhalation and skin contact. Inhalation may cause cancers of the lung and nasal sinuses. Skin contact may cause dermatitis. Nickel is found to be a potential carcinogen in IARC Monographs. Nickel is listed in the NTP Annual Report on Carcinogens.

Target Organ(s): Respiratory tract, skin.

IRON: Hazard by inhalation. Inhalation may cause Siderosis (benign pneumoconiosis).

Target Organ(s): Lungs.

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, skin contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Irritation.

Skin Contact: Possible dermatitis.

Inhalation: Irritation, pneumoconiosis.

Ingestion: Possible irritation.

FIRST AID

Eye Contact: Flush eye with sufficient amounts of water. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII — SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with metallic dusts should be utilized. Wipe the area clean. Do not use water for clean up operations. Do not sweep. Avoid generating airborne dust.

Waste Management and Disposal: Empty product containers, product waste, and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION VIII — SPECIAL PROTECTION INFORMATION — CONTINUED

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10, and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

Gloves: Aluminized gloves are to be worn during the plasma spray process. Rubber or other appropriate gloves may be worn as necessary during other phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) An aluminized apron is to be worn during the plasma spray process. Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended. Wash facilities are recommended.

Other: Wash facilities are recommended.

SECTION IX — HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: Avoid ingestion, inhalation and excessive skin contact. Avoid contact of powder with water and oxidizers.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

Form Approved OMB No 2070-0093
Approval Expires 01/91
Page 1 of 5

(Important: Type or print; read instructions before completing form.)

U.S. Environmental Protection Agency

EPA

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

EPA FORM **R**

Section 313, Title III of The Superfund Amendments and Reauthorization Act of 1986

(This space for EPA use only)

PART I. FACILITY IDENTIFICATION INFORMATION

1. 1.1 Does this report contain trade secret information? ☐ Yes (Answer 1.2) ☒ No (Do not answer 1.2)
1.2 Is this a sanitized copy? ☐ Yes ☒ No
1.3 Reporting Year: 1988

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Patrick A. Tighe — Superintendent, Facilities

Signature: Patrick A. Tighe

Date signed: June 29, 1989

3. FACILITY IDENTIFICATION

3.1 Facility or Establishment Name: METCO DIVISION PERKIN-ELMER CORPORATION
Street Address: 220 Miller Place
City: Hicksville
County: Nassau
State: New York
Zip Code: 11801-

3.2 This report contains information for: (check one)
a. ☐ An entire covered facility.
b. ☒ Part of a covered facility.

3.3 Technical Contact: Patrick A. Tighe
Telephone Number (include area code): (516) 334-1300 Ext. 495

3.4 Public Contact: Same as 3.3
Telephone Number (include area code): ( ) -

3.5 a. SIC Code: 3999
b.
c.

3.6 Latitude: Deg. 08 Min. 61 Sec. 30
Longitude: Deg. 003 Min. 47 Sec. 00

3.7 Dun & Bradstreet Number(s)
a. 05-773-1663
b.

3.8 EPA Identification Number (RCRA I.D. No.)
a. NYD981558570
b.

3.9 NPDES Permit Number(s)
a.
b.

Where to send completed forms:

U.S. Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266
Attn: Toxic Chemical Release Inventory

3.10 Name of Receiving Stream(s) or Water Body(s)
a. N/A
b.
c.

3.11 Underground Injection Well Code (UIC) Identification No.: N/A

4. PARENT COMPANY INFORMATION

4.1 Name of Parent Company: Perkin-Elmer Corporation

4.2 Parent Company's Dun & Bradstreet No.: 00-118-4480

(Important Type or print, read instructions before completing form)

(This space for EPA use only)

EPA FORM R
PART III. CHEMICAL SPECIFIC INFORMATION

1. CHEMICAL IDENTITY

1.1	☐ Trade Secret (Provide a generic name in 1.4 below. Attach substantiation form to this submission.)
1.2	CAS # 007440 - 48 - 4 (Use leading zeros if CAS number does not fill space provided.)
1.3	Chemical or Chemical Category Name COBALT POWDER
1.4	Generic Chemical Name (Complete only if 1.1 is checked.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you have completed Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation))

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture:	a. ☐ Produce	b. ☐ Import	c. ☐ For on-site use/processing
		d. ☒ For sale/distribution	e. ☐ As a byproduct	f. ☐ As an impurity
3.2	Process:	a. ☐ As a reactant	b. ☐ As a formulation component	c. ☐ As an article component
		d. ☐ Repackaging only		
3.3	Otherwise Used:	a. ☐ As a chemical processing aid	b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR

Ø3 (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT

You may report releases of less than 1,000 lbs. by checking ranges under A.1.		A. Total Release (lbs/yr) A.1 Reporting Ranges 0	1–499	500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a	0.0				5.1b ☐	
5.2 Stack or point air emissions	5.2a	0.0				5.2b ☐	
5.3 Discharges to water (Enter letter code from Part I Section 3.10 for stream(s).) 5.3.1 ☐	5.3.1a	N/A				5.3.1b ☐	5.3.1c
5.3.2 ☐	5.3.2a	N/A				5.3.2b ☐	5.3.2c
5.3.3 ☐	5.3.3a	N/A				5.3.3b ☐	5.3.3c
5.4 Underground injection	5.4a	N/A				5.4b ☐	
5.5 Releases to land 5.5.1 ☐☐☐ (enter code)	5.5.1a	N/A				5.5.1b ☐	
5.5.2 ☐☐☐ (enter code)	5.5.2a	N/A				5.5.2b ☐	
5.5.3 ☐☐☐ (enter code)	5.5.3a	N/A				5.5.3b ☐	

☐ (Check if additional information is provided on Part IV–Supplemental Information)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 lbs. by checking ranges under A.1.	A. Total Transfers (lbs/yr)				B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
	A.1 Reporting Ranges			A.2 Enter Estimate		
	0	1-499	500-999			
6.1 Discharge to POTW	N/A				6.1b	
6.2 Other off-site location (Enter block number from Part II, Section 2.)	N/A				6.2b	6.2c
6.3 Other off-site location (Enter block number from Part II, Section 2.)	N/A				6.3b	6.3c
6.4 Other off-site location (Enter block number from Part II, Section 2.)	N/A				6.4b	6.4c

☐ (Check if additional information is provided on Part IV-Supplemental Information)

7. WASTE TREATMENT METHODS AND EFFICIENCY

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
N/A 7.1a	7.1b	7.1c	7.1d	7.1e %	7.1f	
7.2a	7.2b	7.2c	7.2d	7.2e %	7.2f	
7.3a	7.3b	7.3c	7.3d	7.3e %	7.3f	
7.4a	7.4b	7.4c	7.4d	7.4e %	7.4f	
7.5a	7.5b	7.5c	7.5d	7.5e %	7.5f	
7.6a	7.6b	7.6c	7.6d	7.6e %	7.6f	
7.7a	7.7b	7.7c	7.7d	7.7e %	7.7f	
7.8a	7.8b	7.8c	7.8d	7.8e %	7.8f	
7.9a	7.9b	7.9c	7.9d	7.9e %	7.9f	
7.10a	7.10b	7.10c	7.10d	7.10e %	7.10f	
7.11a	7.11b	7.11c	7.11d	7.11e %	7.11f	
7.12a	7.12b	7.12c	7.12d	7.12e %	7.12f	
7.13a	7.13b	7.13c	7.13d	7.13e %	7.13f	
7.14a	7.14b	7.14c	7.14d	7.14e %	7.14f	

☐ (Check if additional information is provided on Part IV-Supplemental Information.)

8. OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of modification (enter code)	B. Quantity of the chemical in the wastestream prior to treatment/disposal			C. Index	D. Reason for action (enter code)
	Current reporting year (lbs/yr)	Prior year (lbs/yr)	Or percent change		
			%		

(Important. Type or print; read instructions before completing form.)

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Parts I and III. Number or letter this information sequentially from prior sections (e.g., D.E. F. or 5.54, 5.55).

(This space for EPA use only.)

ADDITIONAL INFORMATION ON FACILITY IDENTIFICATION (Part I - Section 3)

3.5	SIC Code		
3.7	Dun & Bradstreet Number(s)		
3.8	EPA Identification Number(s) RCRA I.D. No.)		
3.9	NPDES Permit Number(s)		
3.10	Name of Receiving Stream(s) or Water Body(s)		

ADDITIONAL INFORMATION ON RELEASES TO LAND (Part III - Section 5.5)

Releases to Land	A. Total Release (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)
5.5___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b

ADDITIONAL INFORMATION ON OFF-SITE TRANSFER (Part III - Section 6)

	A. Total Transfers (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.___ Discharge to POTW	6.___a					6.___b	
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.

ADDITIONAL INFORMATION ON WASTE TREATMENT (Part III - Section 7)

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	

Confidential Business Information

You may not withhold information from the Commissioner of the Department because it is confidential. However, when the Commissioner is requested to consider information confidential, it must be treated according to NYSDEC regulations contained in Section 87 of the Public Officers Law and 6 NYCRR Part 616. These regulations provide that a business may, if it desires, assert a claim of business confidentiality (CBI) covering all or part of the information furnished to NYSDEC.

The Department will treat information covered by such a claim in accordance with the procedures set forth in Part 616. If someone requests release of information covered by a claim of confidentiality, or if the Department otherwise decides to make a determination as to whether such information is entitled to confidential treatment, the Department will notify the business. NYSDEC will not disclose information as to when a claim of confidentiality has been made except to the extent of and in accordance with 6 NYCRR Part 616. However, if the business does not claim confidentiality when it furnishes the information, NYSDEC may make the information available to the public without notice to the business.

WHEN AND WHERE TO FILE

New York State requires submission of the 1992 Hazardous Waste Report by April 1, 1993. No extensions to this date will be granted. Reports not received by this data may be subject to enforcement actions.

Return this report to:

New York State Department of Environmental Conservation
P.O. Box 12820
Albany, New York 12212

To deliver completed reports via UPS or overnight mail:

New York State Department of Environmental Conservation
Data Assessment and Reporting Section
50 Wolf Road
Albany, New York 12233-7250

MATERIAL SAFETY DATA SHEET

ATTN CONNIE CONROY

PRODUCT NAME: HARTITE W/R PRIMER
PRODUCT CODE: 77-63003

HMIS CODES: H F R P
2 3 0 J

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: HARTIN PAINT & FILLER COMPANY
ADDRESS: 225 BROAD STREET, CARLSTADT NEW JERSEY 07072
EMERGENCY PHONE: 201-438-3300 **INFORMATION PHONE:** SAME
DATE REVISED : 01-04-90 **NAME OF PREPARER** :

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS OSHA PEL	ACGIH TWA	TLV STEL	VAPOR PRESSURE mm Hg	@ TEMP	WEIGHT PERCENT
ETHANOL, 2-(DIMETHYLAMINO)	108-01-0	N/A	N/A	N/A	4.0	68F	< 5.0%
*BUTYL CELLOSOLVE	111-76-2	50	25	(75)	1.0	68F	2
ISOPROPANOL ALCOHOL	67-63-0	400	400	500	33.0	68F	< 5.0%

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
MAY ALSO CONTAIN THE FOLLOWING PRODUCTS: TITANIUM DIOXIDE [CAS # 13463-67-7] CARBON BLACK [CAS # 1333-86-4]
MAGNESIUM SILICATE [CAS #14807-96-6]

RECEIVED MAR 27 1990

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: 181 to 340 Deg F **SPECIFIC GRAVITY (H2O=1):** 1.1
VAPOR DENSITY: LIGHTER THAN AIR **EVAPORATION RATE:** SLOWER THAN ETHER
COATING V.O.C. : 2.92 LB/GL (350 G/L)
SOLUBILITY IN WATER:
APPEARANCE AND ODOR:

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 108 Deg F **METHOD USED:** TCC
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 1.1% **UPPER:** 13.4%

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES
MATERIALS BURNS RAPIDLY WITH INTENSE HEAT. USE SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPLOSION HAZARDS
AVOID UNNECESSARY EXPOSURE TO HEAT. VAPORS MAY TRAVEL TO SOURCE OF IGNITION AND FLASH BACK.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID

HIGH HEAT, SPARKS, OPEN FLAME

INCOMPATIBILITY (MATERIALS TO AVOID)

ALKALINE METALS, STRONG ACIDS, OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

OXIDES OF NITROGEN-CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

VAPORS MAY BE IRRITATING AND CAUSE DIZZINESS, HEADACHE, NAUSEA, VOMITTING AND NARCOSIS

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

BREIF CONTACT WITH SKIN SHOULD NOT PRODUCE ANY HARMFUL EFFECTS, BUT PROLONGED CONTACT, AS FROM CLOTHING WET WITH CHEMICAL, MAY CAUSE IRRITATION. EYE CONTACT CAUSES SEVERE IRRITATION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

NONE CURRENTLY KNOWN.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

MAY CAUSE TOXICOLOGICAL AND NEUROLOGICAL EFFECTS.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE INGESTION CAN CAUSE HEADACHE, DROWSINESS AND UNCONSCIOUSNESS. ACUTE INHALATION OF VAPORS ARE IRRITATING TO NASAL PASSAGES AND THROAT. ACUTE REPEATED OR PROLONGED SKIN CONTACT CAN CAUSE DRYING OF THE SKIN, AND ACUTE VAPOR OR LIQUID EYE CONTACT MAY BE HARMFUL TO THE EYES.

CARCINOGENICITY: NTP? NO IARC MONOGRAPHS? NO OSHA REGULATED? NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

EMPHYSEMA, ASTHMA, DERMATITIS.

EMERGENCY AND FIRST AID PROCEDURES

IF SWALLOWED CALL A PHYSICIAN/SKIN - FLUSH WITH WATER. IF INHALED REMOVE TO FRESH AIR AND CALL A PHYSICIAN. GIVE ARTIFICIAL RESPIRATION IF BREATHING IS DIFFICULT. EYES - FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. TREATMENT SHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION. THERE IS NO SPECIFIC ANTIDOTE

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
WEAR SUITABLE PROTECTIVE EQUIPMENT. SPILLS SHOULD BE COLLECTED FOR DISPOSAL BY APPROPRIATE METHODS.

WASTE DISPOSAL METHOD
DISPOSE OF WASTE BY APPROPRIATE METHODS OR INCENERATE IN A FURNACE WHERE PERMITTED UNDER APPROPRIATE FEDERAL, STATE, AND LOCAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
STORE LARGE QUANITIES ONLY IN BUILDINGS DESIGNED TO COMMPLY WITH OSHA 1910.106. STORE IN COOL AREA.

OTHER PRECAUTIONS
KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE . DO NOT STORE OR USE HEAT, SPARKS OR OPEN FLAME. STORE DRUM OUT OF SUN AND AWAY FROM HEAT. STORE AND USE ONLY IN WELL-VENTILATED AREAS. DRUMS OF THIS MATERIAL SHOULD BE GROUNDED WHEN POURING. NEVER USE PRESSURE TO EMPTY. DRUM IS NOT A PRESSURE VESSEL . DO NOT PUNCTURE CONTAINER OR LEAVE OPENED OR UNCOVERED. DRUMS SHOULD NOT BE WASHED OUT OR USED FOR OTHER PURPOSES. DO NOT GET IN EYES. AVOID SKIN CONTACT. HARMFUL IF INHALED. PREVENT PROLONGED OR REPEATED BREATHING OF VAPOR OR MIST. READ INSTRUCTIONS BEFORE USING

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION
IN OPEN AREAS: USE APPROVED MECHANICAL FILTER RESPIRATORS TO REMOVE SOLID AIR-BORNE PARTICLES. IN RESTRICTED VENTILATION AREAS: USE OSHA APPROVED CHEMICAL/MECHANICAL FILTER RESPIRATORS DESIGNED TO REMOVE A COMBINATION OF PARTICLES AND VAPOR, IF LOCAL EXHAUST IS NOT SUFFICIENT TO KEEP LEL BELOW STATED IN SECTION III.

VENTILATION
ALL APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION 29CFR.1910 TO KEEP AIR CONTAMINANT CONCENTRATION LEVELS BELOW APPLICATION OSHA PERMISSABLE EXPOSURE LIMIT OR ACGIH'S TLV LIMIT.

PROTECTIVE GLOVES
REQUIRED FOR PROLONGED OR REPEATED CONTACT

EYE PROTECTION
USE SAFETY EYEWEAR WITH SPLASH GUARDS OR SIDE SHEILDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT
EYE BATH, SAFETY SHOWER, APRONS

WORK/HYGIENIC PRACTICES
WEAR PROTECTIVE CLOTHING WHEN NECESSARY. WASH THOROUGHLY BEFORE HANDLING FOOD PRODUCTS.

SECTION IX - DISCLAIMER

DISCLAIMER
WHILE HARTIN PAINT AND FILLER CORP. BELEIVES THAT THE DATA CONTAINED HEREIN ARE FACTUAL AND THE OPINIONS EXPRESSED ARE THOSE OF QUALIFIED EXPERTS REGARDING THE RESULTS OF THE TESTS CONDUCTED. THE DATA ARE NOT TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH THE HARTIN ASSUMES LEGAL RESPONSIBILITY. IT IS THE USERS RESPONSIBILITY FOR SAFE USE.

Form Approved
OMB Number: 2040-0148
Expiration Date: 01/31/92

U.S. ENVIRONMENTAL PROTECTION AGENCY

1989 MACHINERY MANUFACTURING AND REBUILDING

DATA COLLECTION PORTFOLIO

Public reporting burden for this collection of information is estimated to average 80 hours per response. The reporting burden includes time for reviewing instructions, gathering data, and completing and reviewing the questionnaire.

Send comments regarding the burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to:

Chief
Information Policy Branch (PM-223)
U.S. EPA
401 M Street, S.W.
Washington, D.C. 20460

Office of Management
and Budget
Paperwork Reduction
Project
Washington, D.C. 20503

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

INTRODUCTION 5

AUTHORITY 5

WHO MUST COMPLETE THE DATA COLLECTION PORTFOLIO 5

WHEN TO RETURN THE DATA COLLECTION PORTFOLIO 5

HOW TO RETURN THE DATA COLLECTION PORTFOLIO 5

QUESTIONS REGARDING PARTS I THROUGH V (TECHNICAL PORTION) . . 6

QUESTIONS REGARDING PART VI (ECONOMIC PORTION) 6

PROVISIONS REGARDING DATA CONFIDENTIALITY 6

INSTRUCTIONS TO THE DATA COLLECTION PORTFOLIO 7

- Introduction 9
- General Instructions 15
  - -- Units of Measure 16
- Item-by-Item Instructions 17
  - -- Part I General Information 17
  - -- Part II Process Information 19
  - -- Part III Water Supply 23
  - -- Part IV Wastewater Treatment and Discharge 23
  - -- Part V Process and Hazardous Wastes . 30
  - -- Part VI Financial and Economic Data . . 31

DEFINITIONS OF TERMS 31

DATA COLLECTION PORTFOLIO 49

- -- PART I General Information 49
- -- PART II Process Information 53
- -- PART III Water Supply 71
- -- PART IV Wastewater Treatment and Discharge 72
- -- Part V Process and Hazardous Wastes . 79
- -- Part VI. Financial and Economic Data . . 80

LIST OF FIGURES

Figure		Page
1	EXAMPLE MANUFACTURING PROCESS OPERATIONS BLOCK DIAGRAM	20
2	EXAMPLE REBUILDING PROCESS OPERATIONS BLOCK DIAGRAM	21
3	EXAMPLE MAINTENANCE PROCESS OPERATIONS BLOCK DIAGRAM	22
4	EXAMPLE WASTEWATER TREATMENT BLOCK DIAGRAM.	24

U.S. ENVIRONMENTAL PROTECTION AGENCY
1989 MACHINERY MANUFACTURING AND REBUILDING
DATA COLLECTION PORTFOLIO

GENERAL INSTRUCTIONS

INTRODUCTION

The U.S. Environmental Protection Agency (EPA) is developing new effluent limitations guidelines and standards for sites engaged in machinery manufacturing, rebuilding, and maintenance. This data collection portfolio (dcp) is part of that regulatory effort. Data collection portfolio responses will become part of a database that EPA will use to develop effluent limitations guidelines and standards. This data gathering effort covers the manufacturing, rebuilding, and maintenance of machinery and metal machinery components (see the definition of machine on page 9 for further details).

AUTHORITY

The authority for this data gathering effort is Section 308 of the Clean Water Act, as amended, 33 U.S.C. Section 1318.

WHO MUST COMPLETE THE DATA COLLECTION PORTFOLIO

All recipients must complete this data collection portfolio.

WHEN TO RETURN THE DATA COLLECTION PORTFOLIO

Your response must be postmarked no later than 45 days after receipt of this dcp.

HOW TO RETURN THE DATA COLLECTION PORTFOLIO

After completing the dcp and certifying the information it contains, mail it to:

Mr. Ernst P. Hall
Metals Branch (WH-552)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460

Send only the response form and any additional response sheets that were needed. The instructions and accompanying letter may be retained for your records or destroyed.

QUESTIONS REGARDING PARTS I THROUGH V (TECHNICAL PORTION)

For questions regarding, or assistance in completing, any item in Parts I through V of the questionnaire, EPA has established a toll-free help line:

EPA Manufacturing and Rebuilding Help Line
(800) 654-9932.

The help line is available Monday through Friday, 9 am to 6 pm Eastern time. Any other questions may be directed to:

Ms. Sabita Rajvanshi or Mr. Ernst P. Hall
Metals Branch (WH-552)
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460
(202) 382-7126

QUESTIONS REGARDING PART VI (ECONOMIC PORTION)

Questions about Part VI Financial and Economic Information may be directed as follows:

For questions regarding, or assistance in completing, any item in Part VI of the questionnaire, EPA has established a toll-free help line:

EPA Machinery Manufacturing & Rebuilding
Abt Associates Inc.
(800) 343-3019
Ask for Jeremy Wilson (Ext. 5436) or Caty McGuckin (Ext. 5155)

For questions regarding schedule:

Dr. Lynne G. Tudor
Analysis and Evaluation Division WH-586
U.S. Environmental Protection Agency
401 M Street, S.W.
Washington, D.C. 20460
(202) 382-5834

PROVISIONS REGARDING DATA CONFIDENTIALITY

Information and provisions regarding confidential business information are included in the cover letter accompanying this data collection portfolio.

INSTRUCTIONS TO

MACHINERY MANUFACTURING, REBUILDING AND MAINTENANCE

DATA COLLECTION PORTFOLIO

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

INTRODUCTION

The objective of this data collection portfolio (dcp) is to obtain information on current manufacturing, rebuilding, and maintenance operations performed at sites engaged in the manufacturing, rebuilding, and maintenance of machinery and metal parts. A further objective of this dcp is to obtain information regarding wastewater control and treatment and solid waste handling practices at these sites. Machinery manufacturing, rebuilding, and maintenance sites are sites that conduct operations that fall within the definitions provided below:

> Machine: As used for this project, machine is defined as any metal part, or an assembly of parts operating together to do work. Machine is applied technically to any device or parts used in or which may be used in a device to increase or change one form of motion or energy into another. Thus the lever, pulley, inclined plane, screw, wheel and axle, and any parts thereof are simple machines included under this study. Complex machines are complicated combinations of the simple machines. Certain machines used to transform some other form of energy into mechanical energy are known as motors or engines.
>
> Machinery Maintenance: Machinery maintenance includes the various mechanical operations on original or replacement components (primarily metals) required to keep machines in operating condition. Machinery maintenance is generally conducted in a non-production environment.
>
> Machinery Manufacturing: Machinery manufacturing is the series of operations necessary to produce metal parts, machine components, or machines primarily from metal components. Machinery manufacturing is generally conducted in a production environment.
>
> Machinery Rebuilding: Machinery rebuilding is the series of operations necessary to disassemble used machines into components (primarily metal), replace the components or subassemblies or restore them to original function, and then reassemble the restored machine. Machinery rebuilding is generally conducted in a production environment.

A list of the specific operations and groups of operations of interest is provided below. Definitions of these operations are provided on pages 34 through 47 of these instructions.

MACHINERY MANUFACTURING AND REBUILDING UNIT OPERATIONS

1. Abrasive Blasting
   a. Bead ✓
   b. Grit ✓
   c. Sand
   d. Shot
   e. Other

2. Abrasive Jet Machining (Vapor Blasting)

3. Acid Treatment
   a. Acid Cleaning
   b. Chemical Etching
      i. Bright Dipping ✓
      ii. Other
   c. Pickling
   d. Other

4. Adhesive Bonding

5. Alkaline Treatment
   a. Alkaline Cleaning
   b. Chemical Etching
   c. Other

6. Anodizing
   a. Chemical
   b. Chromic Acid
   c. Phosphoric Acid
   d. Sulfuric Acid
   e. Other

7. Assembly ✓

8. Barrel Finishing (Tumbling) ✓

9. Brazing ✓

10. Burnishing

11. Calibration ✓

MACHINERY MANUFACTURING, REBUILDING AND MAINTENANCE UNIT OPERATIONS (Continued)

12. Chemical Conversion Coating
    a. Chromate Conversion Coating
    b. Coloring
    c. Complex Oxide Conversion Coating
    d. Passivating
    e. Phosphate Conversion Coating
    f. Other

13. Chemical Machining (Chemical Milling)

14. Corrosion Preventive Coating

15. Disassembly

16. Electrical Discharge Machining

17. Electrochemical Machining

18. Electrolytic Cleaning

19. Electron Beam Machining

20. Electroplating

21. Electropolishing

22. Floor Cleaning ✓

23. Grinding ✓

24. Heat Treating
    a. Aging
    b. Annealing ✓
    c. Austempering
    d. Austenitizing
    e. Carburizing
    f. Cyaniding
    g. Malleablizing
    h. Martempering
    i. Nitriding
    j. Normalizing
    k. Siliconizing
    l. Tempering ✓
    m. Other

25. Hot Dip Coating

MACHINERY MANUFACTURING, REBUILDING AND MAINTENANCE UNIT OPERATIONS (Continued)

26. Impact Deformation
    a. Coining
    b. Forging
    c. Heading
    d. High Energy Rate Forming
    e. Peening
    f. Shot Peening
    g. Stamping
    h. Other

27. Laminating

28. Laser Beam Machining

29. Machining
    a. Boring
    b. Broaching
    c. Chamfering
    d. Cutoff
    e. Drilling
    f. Hobbing
    g. Milling
    h. Planing
    i. Reaming
    j. Sawing
    k. Shearing
    l. Shaping
    m. Shaving
    n. Slotting
    o. Tapping
    p. Threading
    q. Turning
    r. Other

30. Metal Spraying

31. Painting
    a. Electropainting (Electrophoretic Painting)
    b. Electrostatic Painting
    c. Spray
    d. Other

32. Plating
    a. Electroless Plating
    b. Immersion Plating
    c. Mechanical Plating
    d. Vapor Plating
    e. Other

MACHINERY MANUFACTURING, REBUILDING AND MAINTENANCE UNIT OPERATIONS (Continued)

33. Plasma Arc Machining

34. Polishing

35. Pressure Deformation
    a. Bending
    b. Crimping
    c. Drawing
    d. Embossing
    e. Flaring
    f. Forming
    g. Necking
    h. Rolling
    i. Other

36. Rinsing
    a. Continuous Overflow Dip
    b. Countercurrent Cascade
    c. Spray
    d. Stagnant Dip
    e. Other

37. Salt Bath Descaling

38. Soldering ✓

39. Solvent Degreasing (Solvent Cleaning) ✓

40. Sputtering

41. Stripping
    a. Paint Stripping
    b. Plating Stripping
    c. Other

42. Testing
    a. Dye Penetrant Testing
    b. Hydraulic Testing
    c. Other

43. Thermal Cutting

44. Thermal Infusion

45. Ultrasonic Machining

46. Vacuum Metalizing

MACHINERY MANUFACTURING, REBUILDING AND MAINTENANCE UNIT OPERATIONS (Continued)

47. Welding
    a. Arc Welding ✓
    b. Cold Welding
    c. Electron Beam Welding
    d. Gas Welding ✓
    e. Laser Beam Welding
    f. Resistance Welding
    g. Other

Operations similar in nature to the operations listed above would also be considered machinery manufacturing, rebuilding, and maintenance operations. The list presented is as complete as possible, but is not intended to be an exhaustive representation of machinery manufacturing, rebuilding, and maintenance operations. If an operation or process at your site does not fit any of the terms provided, list the operation or process in Question 16 with as descriptive a name as possible. If the operation uses process water, please be sure to complete Question 17 for this operation.

The data collection portfolio is organized into six sections: General Information, Process Information, Water Supply and Use, Wastewater Treatment and Discharge, Process and Hazardous Wastes, and Financial and Economic Data. For your convenience, space has been provided so that you may respond directly on each page of the portfolio. If additional space is needed, please attach additional sheets. Extra blank forms for Questions 14, 17, and 20 are included in Attachment A.

A set of general instructions follows this introduction. These instructions provide direction for completion of the attached portfolio and include guidelines for nomenclature, production reporting, and wastewater flow rate reporting. The following have also been included along with the instructions: example machinery manufacturing, rebuilding, and maintenance block flow diagrams; an example of a wastewater treatment block flow diagram; a list of

wastewater and sludge treatment processes to assist in completing the wastewater treatment section; and a list of the 126 toxic pollutants along with additional pollutants of immediate concern. A list of defined terms that appear in the portfolio, including machinery manufacturing, rebuilding, and maintenance unit operations, is presented in the Definitions of Terms section beginning on page 31 of these instructions.

GENERAL INSTRUCTIONS

The data collection portfolio should be completed by any site that engaged in machinery manufacturing, rebuilding, or maintenance operations, as defined on page 32 of these instructions, during all or part of 1989.

If a particular part of the requested information is not applicable to a specific machinery manufacturing, rebuilding, or maintenance operation at your site, so indicate with "NA" in the space provided for your response. If the requested information is not known, or the information is not obtainable, so indicate with a "U" in the space provided for your response and include a brief explanation of why such information is not known or is not obtainable. If the number that you have provided is an estimated quantity, so indicate with an "(E)" following the value.

Data should be reported for the calendar year 1989.

In the case of shut down or suspended operations, report data for the last full calendar year for which data are available. In Question 4 of the data collection portfolio (dcp), note the last year of full production.

For a new site that first began operation in 1989, report data for the fraction of the operating year. In Question 4 of the

dcp, indicate this with a "N" and the number of operating months in the space provided for last full production year.

If the site operates on a seasonal basis (closed every year for part of the year), report data for the fraction of the operating year. In Question 4 of the dcp, indicate this with a "S" and the number of operating months in the space provided for last full production year.

Every attempt should be made to provide complete and accurate information. Please feel free to include any additional information about your site that you feel would be helpful to EPA in characterizing machinery manufacturing, rebuilding, and maintenance operations, the wastes generated by those operations, or waste treatment and disposal methods.

Units of Measure

The questions in the dcp ask for most measurements in English units since it is believed that generally most information at machinery manufacturing, rebuilding, and maintenance sites is available in these units. If the information is available more readily in metric units, then report in metric units, specifying as such. The following abbreviations for units of measure are used within the dcp:

ft - feet	m - meter
gal - gallon	l - liter
gpd - gallons per day	kg - kilogram
gph - gallons per hour	kkg - 1,000 kilograms or metric ton
gpm - gallon per minute	mg - milligram
kwh - kilowatt-hour	hr - hour
lb - pound	yr - year
wt - weight	
SCFM - standard cubic feet per minute	

ITEM-BY-ITEM INSTRUCTIONS

The remainder of the instructions sequentially follow the questions in the data collection portfolio. Questions not listed here are considered to be sufficiently clear so that no further instructions are necessary. Each section of the instructions is preceded by an explanation of why the data are required.

Part I. General Information

The information requested in this section is necessary to identify the site, to determine whether the site is performing machinery manufacturing, rebuilding, or maintenance operations, and to categorize the site by size, age, and location. Information concerning other products produced at the site and EPA permit and ID numbers is used to determine what other EPA regulations apply to this site.

Question No.

1. If this site is owned or controlled by a separate establishment, fill in the name of the establishment.

3. Fill in the name of a person who is familiar with site operations and who may be contacted during regular business hours (8 AM to 5 PM) if clarification or additional information is needed.

4. Reply "Yes" if any production processes at the site are described by any of the three definitions of machinery manufacturing, rebuilding or maintenance provided. A list of manufacturing, rebuilding, and maintenance operations and their definitions is provided in the Explanation of Terms section of these instructions; however, this list is not intended to be exhaustive. If these or other operations are performed during the manufacture, rebuilding, or maintenance of machinery at this site, a "yes" reply is required. Machinery manufacturing, rebuilding, and maintenance includes the manufacture or finishing of metal machinery, even if the machine itself is not assembled at this site. Machine shops are included in this definition.

Reply "No" only if none of the production processes at the site are described by the three definitions on page 32.

If your site shut down or suspended operations in 1989, indicate the last full production year. A full production year is 12 months of continuous site operation. If your site began operations in 1989 indicate this with a "N" and report the number of operating months in 1989 in the space provided for last full production year. If your site operates on a seasonal basis and was closed for part of 1989, indicate this with a "S" and the number of operating months in the space provided for last full production year.

6. The employment total should be measured in full-time equivalents for each of the four indicated months and should include all persons on the site's payroll. For each month, the payroll period should include the 12th day of that month. Management, supervisory, administrative, secretarial, and maintenance employees are included, as well as production workers. Part-time employees should be counted in terms of full-time equivalents. For example, two-half time employees equal one full-time equivalent. The format of Question 6 and Question 8 is the same as for providing employment data on Bureau of Census questionnaires.

7. The "year machinery manufacturing, rebuilding, and maintenance operations commenced" means the year that the machinery manufacturing, rebuilding, or maintenance operations began at this site. Note that this may be different from the year in which your company began operating the site.

8. The employees dedicated to machinery manufacturing, rebuilding, and maintenance (MM&R) operations include MM&R production workers, and any other persons whose employment is related to MM&R operations, including management, supervisory, administrative, secretarial and maintenance workers whose employment depends on MM&R operations. As in Question 6, the employment total should be reported in terms of full-time equivalents based on the payroll period that includes the 12th day of the month. For example, two management employees who spend half-time managing MM&R operations should be counted as one full-time MM&R employee.

Part II. Process Information

Process information is necessary to characterize machinery manufacturing, rebuilding, and maintenance sites. The data in this part (including block diagrams) are also required for a detailed understanding of processes on a site-specific basis. The data are used to evaluate raw waste characteristics, water usage and wastewater discharge, sources of pollutants, and the presence of unique or auxiliary operations.

14. The first two columns should contain the name and, if the name is not very descriptive or might be unfamiliar to someone uninvolved in the site's processes, a very brief description of the item being processed. In the third column, indicate whether the product or item is being manufactured, rebuilt or maintained. If a product, such as alternators, is both manufactured and rebuilt at the site, the information about manufacturing process and the rebuilding process should be reported separately. The quantity of product should be indicated in any convenient units. Provide the site 4-digit Standard Industrial Classification (SIC) Code in the last column if it is known. For SIC code, provide the same code as you report to the Department of Commerce or Dun & Bradstreet.

16. Guidelines are provided in Question 16 itself. Be sure to report manufacturing, rebuilding, and maintenance operations separately, even if they are conducted on the same product.

17. The operation identifier is particularly important in order to distinguish between identical operations conducted on different metal or alloy types or on different products. If discharge volumes are not known, provide an estimate if possible, and indicate with "(E)".

18. Guidelines are provided in Question 18 itself. Figure 1 is an example machinery manufacturing production process block diagram. Figure 2 presents an example rebuilding process block diagram. Figure 3 is an example maintenance process block diagram.

20. Be sure to indicate which machinery manufacturing, rebuilding, and maintenance operation is the source of dust or fumes being cleaned by this wet air pollution control device. Complete

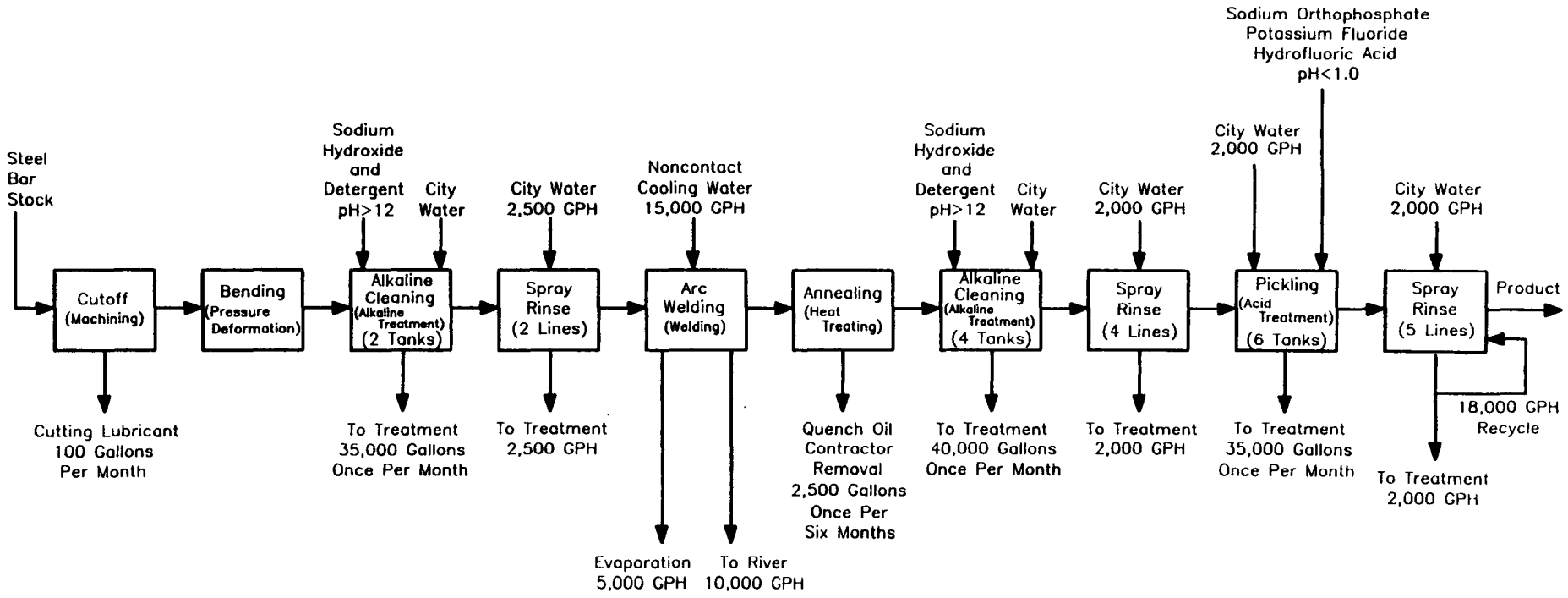


FIGURE 1
EXAMPLE MANUFACTURING PROCESS OPERATIONS BLOCK DIAGRAM

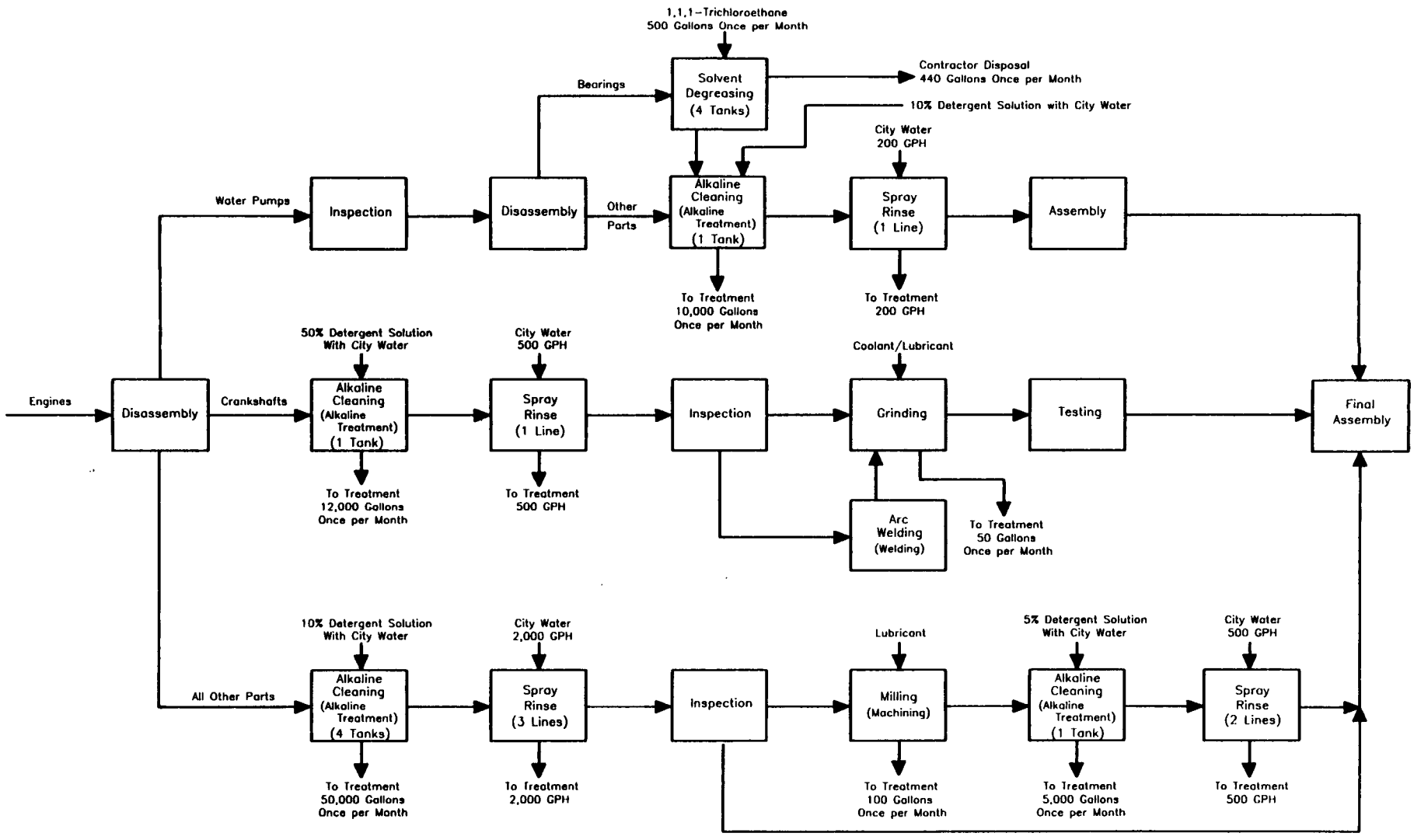


FIGURE 2
EXAMPLE REBUILDING PROCESS OPERATIONS BLOCK DIAGRAM

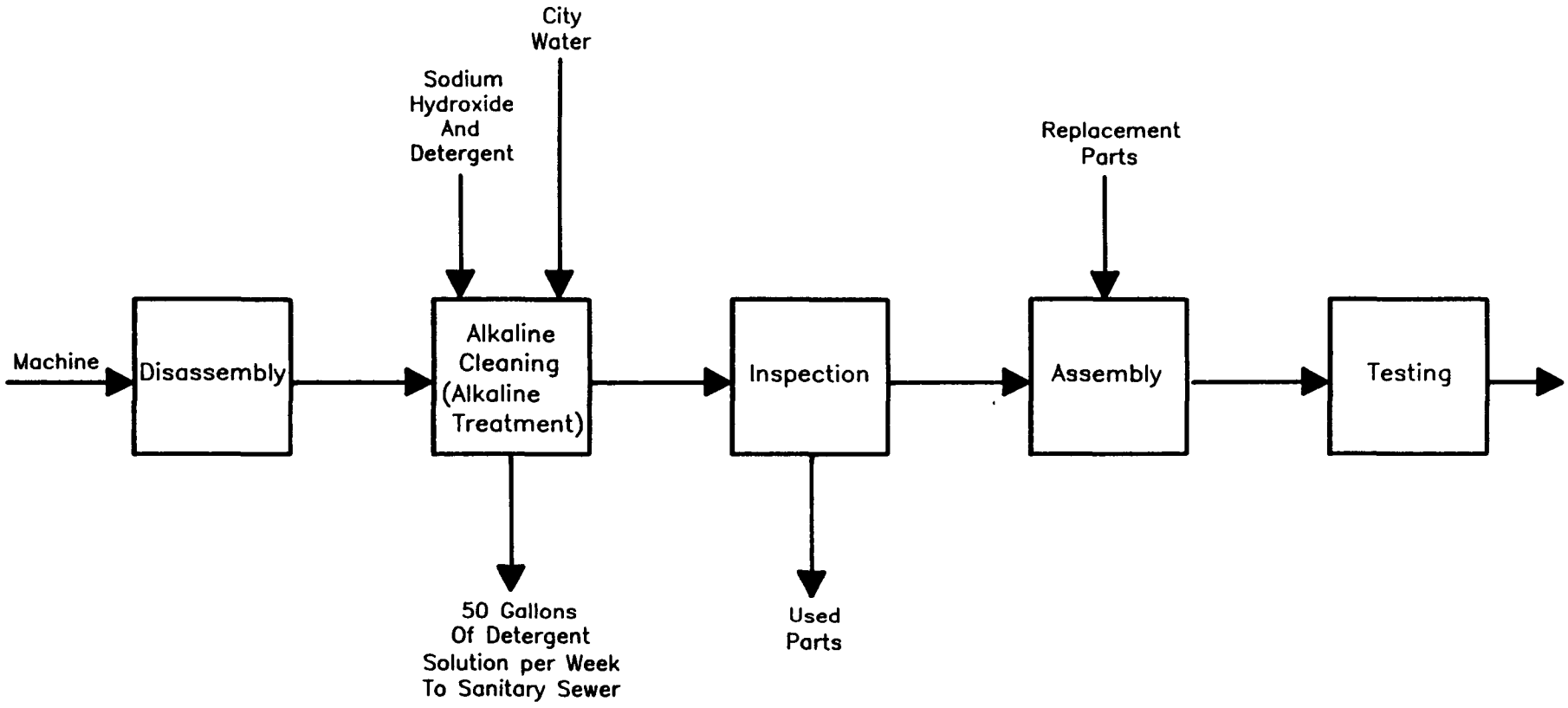


FIGURE 3
EXAMPLE MAINTENANCE PROCESS OPERATIONS BLOCK DIAGRAM

the question separately for each wet air pollution control device used to control emissions from MM&R operations at your site.

21. This question is designed to elicit information concerning sources of wastewater other than machinery manufacturing, rebuilding, and maintenance. It is important to include all sources of wastewater. If discharge volumes are not known, provide an estimate, and indicate with "(E)".

Part III. Water Supply

Data in this part are required for evaluating water use levels. This information is used in determining total water balance for the site.

22. Specify whether "Percentage of Intake Used for Machinery Manufacturing, Rebuilding, and Maintenance" is actual (A) or estimated (E).

Part IV. Wastewater Treatment and Discharge

Data in this part are required to assess the level of wastewater treatment in place and to describe adequately the operating parameters. Data on the presence of toxic pollutants are used for environmental assessments and to identify unique situations subject to confirmation. Cost and design data on the treatment unit operations are used for regulatory analysis.

23. This question is designed to obtain information on the overall wastewater discharge practices at the site. The volume of wastewater discharged from machinery manufacturing, rebuilding, and maintenance operations relative to other site operations should be indicated on the table.

25. Figure 4 is an example of a wastewater treatment block diagram. Pages 25 and 26 contain a list of treatment unit operations for use in drawing a diagram of your site's treatment system. Be sure to include any preliminary treatment steps performed to remove particular pollutants from segregated wastewater streams; recovery, dewatering, or

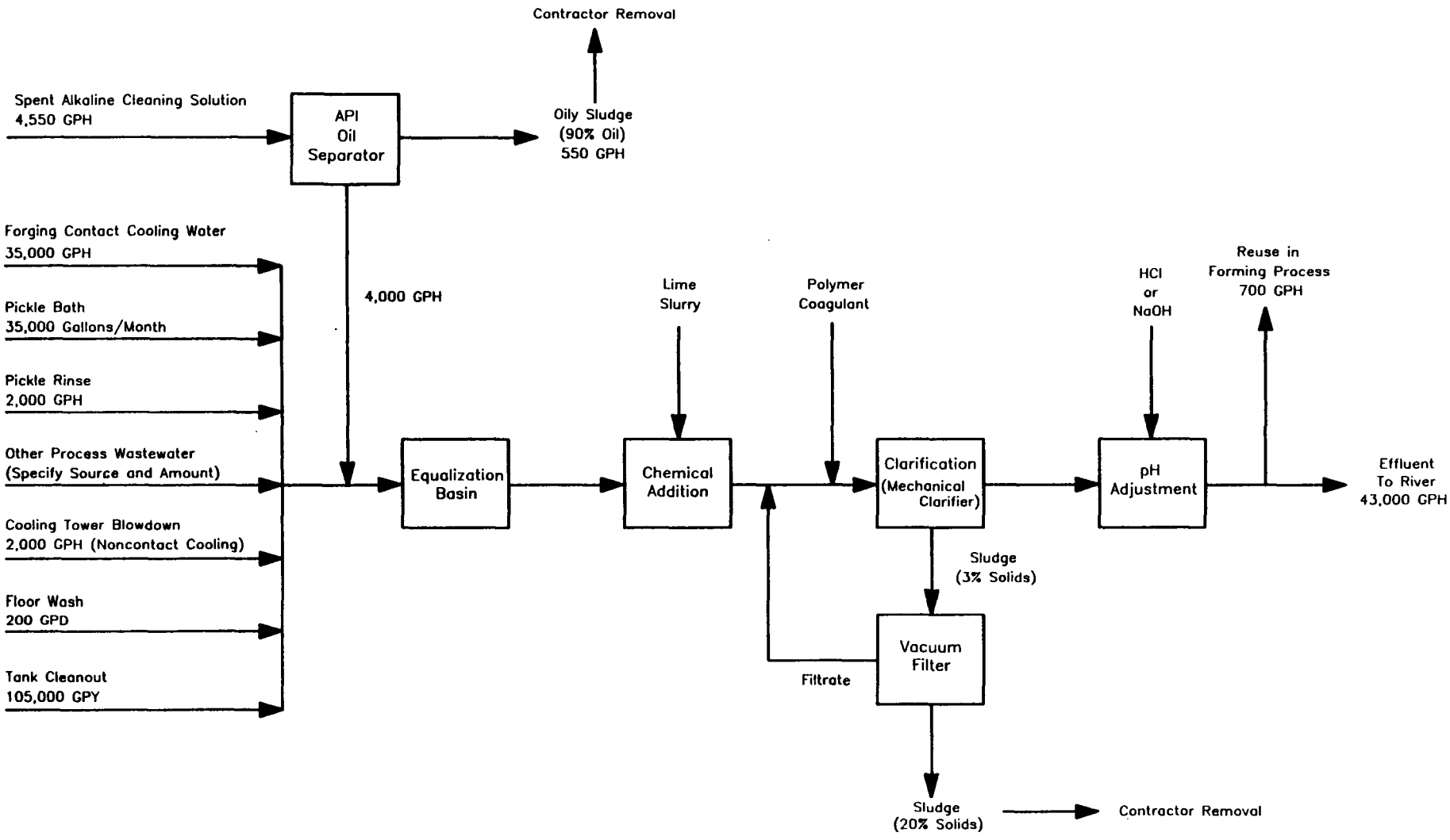


FIGURE 4
EXAMPLE WASTEWATER TREATMENT BLOCK DIAGRAM

LIST OF WASTEWATER AND SLUDGE TREATMENT PROCESSES FOR USE IN COMPLETING TREATMENT SYSTEM BLOCK DIAGRAM

Wastewater Treatment and Disposal

AC = Activated carbon adsorption
AD = Adsorption (other) - specify type
AE = Aeration
AP = API oil separator
BI = Biological process - specify type
CD = Cooling ponds
*CG = Coagulation (solids)
CM = Clarification - mechanical clarifier
CN = Contractor removal
*CO = Chemical oxidation
*CP = Chemical precipitation
*CR = Chemical reduction
CS = Clarification - settling ponds or lagoons
CT = Cooling towers
DF = Dissolved air flotation
EO = Electrochemical oxidation
EQ = Equalization
ES = Evaporation (solar)
EV = Evaporation (other) - specify type
FL = Flotation (other) - specify type
FT = Filtration (other) - specify type
*HD = Hydrolysis
IE = Ion exchange
MF = Multimedia filtration
MX = Mixing
*NE = Neutralization
OO = Other - describe
OS = Oil skimming
RO = Reverse osmosis
RU = Reuse - describe where reused
RY = Recycle - describe where recycled
SC = Screening
SF = Sand filtration
UF = Ultrafiltration

*Specify chemical used.

Sludge, Oily Waste, and Other Residues Treatment and Disposal

*CA = Chemical addition (conditioning)
CN = Contractor removal
CT = Centrifugation
DB = Drying bed
DI = Distillation
FT = Flotation thickening
GT = Gravity thickening
IN = Incineration or combustion
LO = Landfill (on-site)
LF = Landfill (off-site)
LT = Land treatment
OD = Ocean disposal
OO = Other - describe
PF = Pressure filtration
PL = Permanent storage lagoon
VF = Vacuum filtration

*Specify chemical used.

disposal steps for sludge and other treatment residue, such as skimmed oil; collection sumps; and holding or equalization tanks or basins.

30. Note that the information requested is for treatment residues only, and not for all process wastes. The second column, Treatment Unit Identification, should state the treatment unit from which the stream originates. The remainder of the table is self-explanatory.

33. The following is a list of the 126 toxic pollutants for use in completing Question 33.

LIST OF 126 TOXIC POLLUTANTS[1]

1. acenaphthene
2. acrolein
3. acrylonitrile
4. benzene
5. benzidene
6. carbon tetrachloride (tetrachloromethane)
7. chlorobenzene
8. 1,2,4-trichlorobenzene
9. hexachlorobenzene
10. 1,2-dichloroethane
11. 1,1,1-trichloroethane
12. hexachloroethane
13. 1,1-dichloroethane
14. 1,1,2-trichloroethane
15. 1,1,2,2-tetrachloroethane
16. chloroethane
17. bis (chloromethyl) ether - deleted
18. bis (2-chloroethyl) ether
19. 2-chloroethyl vinyl ether (mixed)
20. 2-chloronaphthalene
21. 2,4,6-trichlorophenol
22. para-chloro meta-cresol
23. chloroform (trichloromethane)
24. 2-chlorophenol
25. 1,2-dichlorobenzene
26. 1,3-dichlorobenzene
27. 1,4-dichlorobenzene
28. 3,3'-dichlorobenzidine
29. 1,1-dichloroethylene
30. 1,2-trans-dichloroethylene

---

[1]Note that pollutants 17, 49, and 50 have been deleted from the list of toxic pollutants.

LIST OF 126 TOXIC POLLUTANTS (Continued)

31. 2,4-dichlorophenol
32. 1,2-dichloropropane
33. 1,3-dichloropropylene (1,3-dichloropropene)
34. 2,4-dimethylphenol
35. 2,4-dinitrotoluene
36. 2,6-dinitrotoluene
37. 1,2-diphenylhydrazine
38. ethylbenzene
39. fluoranthene
40. 4-chlorophenyl phenyl ether
41. 4-bromophenyl phenyl ether
42. bis (2-chloroisopropyl) ether
43. bis (2-chloroethoxy) methane
44. methylene chloride (dichloromethane)
45. methyl chloride (chloromethane)
46. methyl bromide (bromomethane)
47. bromoform (tribromomethane)
48. dichlorobromomethane
49. trichlorofluoromethane - deleted
50. dichlorodifluoromethane - deleted
51. chlorodibromomethane
52. hexachlorobutadiene
53. hexachlorocyclopentadiene
54. isophorone
55. naphthalene
56. nitrobenzene
57. 2-nitrophenol
58. 4-nitrophenol
59. 2,4-dinitrophenol
60. 4,6-dinitro-o-cresol
61. N-nitrosodimethylamine
62. N-nitrosodiphenylamine
63. N-nitrosodi-n-propylamine
64. pentachlorophenol
65. phenol
66. bis (2-ethylhexyl) phthalate
67. butyl benzyl phthalate
68. di-n-butyl phthalate
69. di-n-octyl phthalate
70. diethyl phthalate
71. dimethyl phthalate
72. benzo (a)anthracene (1,2-benzanthracene)
73. benzo (a)pyrene (3,4-benzopyrene)
74. 3,4-benzofluoranthene
75. benzo (k)fluoranthane (11,12-benzofluoranthene)
76. chrysene
77. acenaphthylene
78. anthracene
79. benzo(ghi)perylene (1,12-benzoperylene)

LIST OF 126 TOXIC POLLUTANTS (Continued)

80. fluorene
81. phenanthrene
82. dibenzo (a,h) anthracene (1,2,5,6-dibenzanthracene)
83. indeno (1,2,3-cd)pyrene (2,3,-o-phenylenepyrene)
84. pyrene
85. tetrachloroethylene
86. toluene
87. trichloroethylene
88. vinyl chloride (chloroethylene)
89. aldrin
90. dieldrin
91. chlordane (technical mixture and metabolites)
92. 4,4'-DDT
93. 4,4'-DDE(p,p'DDX)
94. 4,4'-DDD(p,p'TDE)
95. a-endosulfan-Alpha
96. b-endosulfan-Beta
97. endosulfan sulfate
98. endrin
99. endrin aldehyde
100. heptachlor
101. heptachlor epoxide
102. a-BHC-Alpha
103. b-BHC-Beta
104. r-BHC (lindane)-Gamma
105. g-BHC-Delta
106. PCB-1242 (Arochlor 1242)
107. PCB-1254 (Arochlor 1254)
108. PCB-1221 (Arochlor 1221)
109. PCB-1232 (Arochlor 1232)
110. PCB-1248 (Arochlor 1248)
111. PCB-1260 (Arochlor 1260)
112. PCB-1016 (Arochlor 1016)
113. toxaphene
114. antimony
115. arsenic
116. asbestos (Fibrous)
117. beryllium
118. cadmium
119. chromium (Total)
120. copper
121. cyanide (Total)
122. lead
123. mercury
124. nickel
125. selenium
126. silver
127. thallium
128. zinc
129. 2,3,7,8-tetra chlorodibenzo-p-dioxin (TCDD)

LIST OF 32 ADDITIONAL POLLUTANTS OF IMMEDIATE CONCERN

500. acetone
501. acetonitrile
502. acrylamide
503. allyl alcohol
504. aniline
505. barium
506. butanone
507. carbon disulfide
508. chloromethyl methyl ether
509. o-cresol
510. m-cresol
511. p-cresol
512. 1,2-dibromoethane
513. 2,4-dichlorophenoxyacetic acid
514. 1,4-dioxane
515. diphenylamine
516. ethylene dibromide
517. isobutanol
518. methoxychlor
519. 3-methylcholanthrene
520. methyl ethyl ketone
521. methyl isobutyl ketone
522. MOCA; 4,4'-methylenebis(2-chlorobenzenamine)
523. N-nitrosopyrrolidine
524. pentachlorobenzene
525. pyridine
526. styrene
527. 1,2,4,5-tetrachlorobenzene
528. 1,1,1,2-tetrachloroethane
529. 2,3,4,6-tetrachlorophenol
530. 2,3,5,6-tetrachlorophenol
531. 2,4,5-TP (silvex)

Part V. Process and Hazardous Wastes

Data in this part are necessary to determine process and hazardous waste handling procedures and to evaluate the potential for process and hazardous chemicals to be introduced into wastewater discharge.

34. Process chemical waste and hazardous waste are defined in the Explanation of Terms section of these instructions. Examples of process chemical wastes include spent solvent, spent lubricant, or detergent waste from cleaning.

Part VI. Financial and Economic Data

Item-by-item instructions and definitions for this section are contained in Part VI of the data collection portfolio itself.

DEFINITIONS OF TERMS[2]

Batch Flow: A periodic or intermittent flow generally resulting from holding or collecting process water or process wastewater over a period of time prior to discharging from the process operation.

Continuous Flow: Flow of process water or process wastewater that is constant or without interruption, as opposed to batch or intermittent flow.

Discharge: For the purpose of this data collection effort, the term discharge shall include the release or removal of water or water containing materials from a production operation or process in addition to any process wastewater discharged or otherwise disposed.

Facility: One contiguous physical location at which machinery manufacturing or rebuilding operations occur (i.e., site).

Hazardous Waste: A solid waste, or combination of solid wastes, which because of its quantity, concentration, or physical, chemical or infectious characteristics may cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible, illness; or, may pose a substantial present or potential hazard to human health or the environment when it is improperly treated, stored, transported, disposed of, or otherwise managed.

Machine: As used for this project, machine is defined as any metal part, or an assembly of parts operating together to do work. Machine is applied technically to any device or parts used in or which may be used in a device to increase or change one form of motion or energy into another. Thus the lever, pulley, inclined plane, screw, wheel and axle, and any parts thereof are simple machines included under this study. Complex machines are complicated combinations of the simple machines. Certain machines

---

[2]Definitions for financial terms are included in Part VI of the data collection portfolio.

used to transform some other form of energy into mechanical energy are known as motors or engines.

Machinery Maintenance: Machinery maintenance includes the various mechanical operations on original or replacement components (primarily metal) required to keep machines in operating condition. Machinery maintenance is generally conducted in a non-production environment.

Machinery Manufacturing: Machinery manufacturing is the series of operations necessary to produce metal parts, machine components, or machines primarily from metal components. Machinery manufacturing is generally conducted in a production environment.

Machinery Rebuilding: Machinery rebuilding is the series of operations necessary to disassemble used machines into components (primarily metal), replace the components or subassemblies or restore them to original function, and then reassemble the restored machine. Machinery rebuilding is generally conducted in a production environment.

Make-Up Water: Water added to recycle water to comprise the total process water used in a process or operation. If there is no recycle, the make-up water flow equals the total process water flow. (Make-up water may be any combination of raw water, service water, or water reused from another process or operation.)

Metal components: Machinery parts or other metal objects made from castings or mill stock.

Noncontact Cooling Water: Water used for cooling that does not come into direct contact with any raw material, intermediate product, waste product, or finished product.

NPDES (National Pollution Discharge Elimination System) Permit Number: The number of the permit issued by your state or an EPA regional office permitting discharges to surface water.

Pollutant: Any dredged soil, solid waste, incinerator residue, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials, heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water.

Process Chemical Waste: Non-aqueous wastes used as processing liquids. Examples of process chemical wastes include spent solvent, spent lubricant, quench oil, etc.

DEFINITIONS OF TERMS (Continued)

Process Wastewater: Any water that, during manufacturing or processing, comes into direct contact with or results from the production or use of any raw materials, intermediate product, finished product, by-product, or waste product. Noncontact cooling water is not considered a process wastewater.

Process Water: Water prior to its direct contact use in a process or operation. (This water may be any combination of raw water, service water, or either process wastewater or treatment facility effluent to be recycled or reused.)

Raw Water: Site intake water prior to any treatment or use.

Recycled Water: Process wastewater or treatment facility effluent that is recirculated to the same process or operation.

Reused Water: Process wastewater or treatment facility effluent that is further used in a different operation.

Service Water: Water that has been treated preparatory to its use in a process or operation.

Site: One contiguous physical location at which machinery manufacturing or rebuilding operations occur.

Solid Waste: Any garbage, refuse, sludge from a wastewater treatment site, water supply treatment site, or air pollution control site and other discarded material, including solid, liquid, semisolid, or contained gaseous material resulting from industrial, commercial, mining, and agricultural operations, and from community activities, but does not include solid or dissolved materials in irrigation return flows or industrial discharges which are point sources subject to permits under Section 402 of the Federal Water Pollution Control Act, as amended (33 USC 1342), or source, special nuclear, or byproduct material as defined by the Atomic Energy Act of 1954, as amended (68 Stat. 923).

Toxic Pollutants: The 126 specific substances that were derived from the 65 compounds and classes of compounds specified in the NRDC consent decree and the 1977 Amendments to the Federal Water Pollution Control Act. Sometimes referred to as "priority" pollutants. See list on pages 27 through 29.

Treatment Facility Effluent: Treated process wastewater.

DEFINITIONS OF TERMS (Continued)

Unit Operations: Definitions of machinery manufacturing, rebuilding and maintenance unit operations follow. This list is not intended to be exhaustive, but is the most complete list EPA could compile with the information currently available. EPA is interested in learning about any other operations employed to manufacture, rebuild, or maintain machinery.

Abrasive Blasting - Removing surface films from a workpiece by the use of abrasive grains pneumatically impinged against the workpiece. Abrasive blasting includes bead, grit, shot, and sand blasting.

Abrasive Jet Machining (Vapor Blasting) - The removal of stock material from a workpiece by a high-speed stream of abrasive particles carried by a liquid or gas from a nozzle.

Acid Cleaning - Application of a dilute mineral acid to a metal surface primarily for removing acid soluble surface dirt. If any conversion coating results from the cleaning acid, it is considered as conversion coating rather than acid cleaning.

Acid Treatment - General term used to include any application of an acid solution to a metal surface. Acid cleaning, chemical etching, chemical conversion coating and pickling are types of acid treatment.

Adhesive Bonding - Joining of two or more pieces of material by applying thermoset, thermoplastic, or chemical reactive cure adhesive to the contact surfaces.

Aging - A change in the properties of certain metals and alloys that occurs at ambient or moderately elevated temperatures after hot working or a heat treatment.

Alkaline Cleaning - Application of solutions containing caustic soda, soda ash, alkaline silicates, alkaline phosphates or ionic and nonionic detergents to a metal surface primarily for removing mineral deposits, animal fats and oils.

Alkaline Treatment - General term used to include any application of an alkaline solution to a metal surface. Alkaline cleaning and chemical etching are types of alkaline treatment.

Annealing - A generic term for a treatment consisting of heating to and holding at a suitable temperature followed by cooling at a suitable rate, used primarily to soften metallic

materials but also to simultaneously produce desired changes in other properties or microstructure.

Anodizing - The production of a protective oxide film on aluminum or other light metal usually by passing a high voltage electric current through a bath in which the metal is immersed. Chromic acid anodizing, phosphoric acid anodizing, sulfuric acid anodizing, and chemical anodizing are types of anodizing. Anodizing also includes sealant baths.

Arc Welding - A group of welding processes that fuse metals together by heating them with an arc, with or without the application of pressure and with or without the use of filler metal.

Assembly - Fitting together previously manufactured or rebuilt parts or components into a complete machine, or unit of a machine.

Austempering - A heat treatment for ferrous alloys in which a part is quenched from the austenitizing temperature at a rate fast enough to avoid formation of ferrite or pearlite, and then held at a temperature until transformation to bainite is complete.

Austenitizing - Forming of austenite (a solid solution of one or more elements in face-centered cubic iron) by heating a ferrous alloy in the transformation range or above the transformation range.

Autophoretic Painting - The application by non-electrophoresis of an organic paint film when a workpiece is immersed in a suitable aqueous bath.

Barrel Finishing (or Tumbling) - Polishing or deburring a workpiece using a rotating or vibrating container and abrasive grains or other polishing materials to achieve a desired surface appearance.

Bending - Turning or forcing by a brake press or other device from a straight or even to a curved or angular condition.

Boring - Enlarging a hole by removing metal with a single or occasionally a multiple point cutting tool moving parallel to the axis of rotation of the work or tool. 1. Single-Point Boring - Cutting with a single-point tool. 2. Precision Boring - Cutting to tolerances held within narrow limits. 3. Gun Boring - Cutting of deep holes. 4. Jig Boring - Cutting of high-precision and accurate location holes. 5. Groove Boring - Cutting accurate recesses in hole walls.

DEFINITIONS OF TERMS (Continued)

Brazing - Joining metals by flowing a thin (capillary thickness) layer of nonferrous filler metal into the space between them. Metallurgical bonding results from the intimate contact produced by the dissolution of a small amount of base metal in the molten filler metal, without fusion of the base metal. The term brazing is used where the melting temperature of the filler exceeds 425°C (800°F).

Bright Dipping - The immersion of all or part of a workpiece in a medium designed to clean and brighten the workpiece; this may etch the surface and leave a coating on the surface of the workpiece.

Broaching - Cutting with a tool which consists of a bar having a single edge or a series of cutting edges (i.e., teeth) on its surface. The cutting edges of multiple-tooth, or successive single-tooth, broaches increase in size and/or change in shape. The broach cuts in a straight line or axial direction when relative motion is produced in relation to the workpiece, which may also be rotating. The entire cut is made in single or multiple passes over the workpiece to shape the required surface contour. 1. Pull Broaching - Tool pulled through or over workpiece. 2. Push Broaching - Tool pushed over or through workpiece. 3. Chain Broaching - A continuous high production surface broach. 4. Tunnel Broaching - Work travels through an enclosed area containing broach inserts.

Burnishing - Finish sizing or smooth finishing a workpiece (previously machined or ground) by displacement, rather than removal, of minute surface irregularities with smooth point or line-contact, fixed or rotating tools.

Calibration - Application of thermal, electrical, mechanical, hydraulic or other form of force to set or establish reference points for a part, assembly or complete unit.

Carburizing - Heat treating process for metals in which carbon is absorbed and diffused.

Chamfering - Making a sloping surface on the edge of a metal surface. Also called beveling.

Chemical Conversion Coating - The process of applying a protective coating in the surface of a metal. Such coatings include chromating, phosphating, complex oxides, coloring, passivating or other coatings.

DEFINITIONS OF TERMS (Continued)

Chemical Etching - To chemically dissolve a thin layer of the surface of a metal or all of a thin metal layer laminated to a base material to condition the surface for subsequent treatment, such as painting or electroplating.

Chemical Machining (or Chemical Milling) - Removing metal from a workpiece by controlled chemical attack or etching, to produce desired shapes and dimensions.

Chromate Conversion Coating (or Chromating) - Process of forming a conversion coating (protective coating) on a metal by immersing or spraying with a hexavalent chromium compound solution to produce a hexavalent or trivalent chromium compound coating. Also known as chromate treatment. Most often applied to aluminum, zinc, cadmium or magnesium surfaces.

Cleaning - General term used for the removal of soil and dirt (including grit and grease) from a workpiece using either an organic solvent or water with a detergent or other dispersing agent. Cleaning action may take place through either spray application or immersion of the part in the cleaning solution. Types of cleaning include acid cleaning, alkaline cleaning, and solvent cleaning.

Coining - A closed-die striking operation, usually performed cold, in which all surfaces of the work are confined or restrained, resulting in a well-defined imprint of the die upon the work.

Cold Welding - A solid-state welding process in which pressure is used at room temperature to produce coalescence of metals with substantial deformation at the weld.

Coloring - Process of producing desired colors on metal by a chemical or electrochemical reaction.

Complex Oxide Conversion Coating - Process of forming a conversion coating (protective coating) on a metal by immersing or spraying with a solution that will produce an oxide-metal coating. Fequently applied to zinc, aluminum, or iron surfaces.

Contact Cooling - Rapid cooling of a metal workpiece through heat transfer between the workpiece and a liquid medium. Usually done after casting, forging, rolling or heat treating operations by dipping or spraying the workpiece in or with a liquid medium.

DEFINITIONS OF TERMS (Continued)

Continuous Flow Dip Rinsing - A process wherein water contained in a vessel is used as a rinsing medium to remove impurities from the surface of metal workpieces. The workpieces to be rinsed are dipped in the rinse tank. A continuous flow of rinse water passes through the vessel during the rinsing process. The rinse water may be recirculated.

Corrosion Preventive Coating - Applying removable coatings used to protect metal surfaces against corrosive environments. Corrosion preventive coatings include: petrolatum compounds, oils, hard dry-film compounds, solvent-cutback petroleum-based compounds, emulsions, water-displacing polar compounds, and fingerprint removers and neutralizers.

Countercurrent Cascade Rinsing - A staged process that employs recycled, often untreated water as a rinsing medium to remove impurities from the surface of metal products. Water flow is opposite to product flow such that the most contaminated water encounters incoming product first.

Crimping - Forming relatively small corrugations in order to: (1) set down and lock a seam; (2) create an arc in a strip of metal; or (3) reduce an existing arc or diameter.

Cutoff - Severing or slotting any material or part usually with a thin abrasive wheel.

Cyaniding - Heat treating or case hardening process in which a metal is heated in a molten salt containing cyanide to cause simultaneous absorption of carbon and nitrogen at the surface.

Disassembly - Taking a complete machine or a unit of a machine apart into its parts or components.

Drawing - Reduction of cross-section area and increasing the length by pulling metal through conical taper dies.

Drilling - Hole making with a rotary, end-cutting tool having one or more cutting lips and one or more helical or straight flutes or tubes for the ejection of chips and the passage of a cutting fluid. 1. Center Drilling - Drilling a conical hole in the end of a workpiece. 2. Core Drilling - Enlarging a hole with a chamfer-edged, multiple-flute drill. 3. Spade Drilling - Drilling with a flat blade drill tip. 4. Step Drilling - Using a multiple diameter drill. 5. Gun Drilling - Using special straight flute drills with a single lip and cutting fluid at high pressures for deep hole drilling. 6. Oil Hole or Pressurized Coolant Drilling - Using a drill with one or more continuous holes through its body and shank to permit the passage

of a high pressure cutting fluid which emerges at the drill point and ejects chips.

Electrical Discharge Machining - Metal removal by a rapid spark discharge between different polarity electrodes, one the workpiece and the other the tool, separated by a small gap (about 0.0005 in. to 0.035 in.). The gap may be filled with air or a dielectric fluid and the metal particles removed are melted and partially vaporized, and expelled from the gap.

Electrochemical Machining - Process whereby the workpiece becomes the anode and a shaped cathode is maintained in close proximity. Electrolyte is pumped between the electrodes and a potential is applied. The result is that metal is rapidly dissolved from the workpiece in a selective manner. The final shape of the workpiece is directed by the shape of the cathode.

Electrolytic Cleaning - Removal of soil, scale, or surface oxides from a workpiece by electrolysis. The workpiece is one of the electrodes and the electrolyte is usually alkaline.

Electroless Plating - Deposition of a metallic coating by a controlled chemical reduction that is catalyzed by the metal or alloy being deposited.

Electron Beam Machining - Removal of material from a workpiece by a high-velocity, focused stream of electrons, which melts and vaporizes the workpiece at the point of impingement.

Electron Beam Welding - A welding process that produces coalescence of metals with the heat obtained from a concentrated beam composed primarily of high velocity electrons impinging upon the surfaces to be joined.

Electropainting (or Electrophoretic Painting) - Coating a workpiece by either making it anodic or cathodic in a bath that is generally an aqueous emulsion of the organic coating material.

Electroplating - The production of metal coatings on a surface by electrodeposition.

Electropolishing - Production of a highly polished surface on a workpiece using reversed electrodeposition in which the anode (workpiece) releases some metal ions into the electrolyte to reduce surface roughness.

DEFINITIONS OF TERMS (Continued)

Electrostatic Painting - Application of electrostatically charged paint particles to an oppositely charged workpiece followed by thermal fusing of the paint particles to form a coherent paint film.

Embossing - Raising a design in relief against a surface.

Extrusion - A material that is forced through a die to form lengths of rod, tube or special sections.

Flaring - (1) Forming an outward acute-angle flange on a tubular part. (2) Forming a flange by using the head of a hydraulic press.

Floor Cleaning - Removal of dirt, debris, process solution spills, etc., from process area floors. Floor cleaning can be either wet or dry, and includes techniques such as vacuum machining, dry sweeping, and hose rinsing.

Forging - Plastically deforming metal, usually hot, into desired shapes with compressive force, with or without dies.

Forming - Making a change, with the exception of shearing or blanking, in the shape or contour of a metal part without intentionally altering its thickness.

Gas Welding - (oxyfuel gas welding) - Any of a group of processes used to fuse metals together by heating them with gas flames resulting from combustion of a specific fuel gas such as acetylene, hydrogen, natural gas or propane. The process may be used with or without the application of pressure to the joint, and with or without adding any filler material.

Grinding - Removing stock from a workpiece by the use of abrasive grains held by a rigid or semi-rigid binder. The purpose of grinding is to shape or deburr the workpiece.

Heading - Upsetting wire, rod, or bar stock in dies to form parts that usually contain portions that are greater in cross-sectional area than the original wire, rod, or bar.

Heat Treating - Modification of the physical properties of a workpiece through the application of controlled heating and cooling cycles. Such operations as tempering, carburizing, cyaniding, nitriding, annealing, aging, normalizing, austenitizing, austempering, siliconizing, martempering, and malleablizing are included in this definition.

High-Energy-Rate Forming - A group of special forming processes in which metal undergoes deformation at high velocity. Commonly abbreviated HERF. Explosive forming, electrohydraulic forming, and electromagnetic forming are the most common HERF processes.

Hobbing - Gear cutting by use of a tool resembling a worm gear in appearance, having helically-spaced cutting teeth. In a single-thread hob, the rows of teeth advance exactly one pitch as the hob makes one revolution. With only one hob, it is possible to cut interchangeable gears of a given pitch of any number of teeth within the range of the hobbing machine.

Hot Dip Coating - Coating of a metallic workpiece with another metal by immersion in a bath of molten metal to provide a more useful surface, usually a protective layer.

Immersion Plating - Coating a workpiece with a metallic deposit that is produced by displacement reaction, in which atoms of base metal are displaced by atoms of metal from solution, through electron transfer.

Impact Deformation - Applying impact force to a workpiece such that the workpiece is permanently deformed or shaped. Impact deformation may include mechanical operations such as shot peening, peening, forging, coining, high-energy-rate forming, heading, or stamping.

Laminating - Adhesive bonding of layers of metal, plastic or wood to form a workpiece.

Laser Beam Machining - The process whereby a highly focused, mono-frequency collimated beam of light is used to melt or sublime material at the point of impingement on a workpiece.

Laser Beam Welding - A welding process that joins metal parts using the heat obtained by directing a beam from a laser onto the weld joint.

Machining - Removing stock from a workpiece by forcing a cutting tool through the workpiece, which removes a chip from the workpiece. Machining operations such as turning, milling, drilling, boring, tapping, planing, broaching, sawing, cutoff, shaving, shearing, threading, reaming, shaping, slotting, hobbing, and chamfering are included in this definition.

Malleablizing - Annealing white cast iron in such a way that some or all of the combined carbon is transformed into graphite or, in some instances, so that part of the carbon is removed completely.

Martempering - Quenching an austenitized ferrous alloy in a medium at a temperature in the upper part of the martensite range, or slightly above that range, and holding it in the medium until the temperature throughout the alloy is substantially uniform. The alloy is then allowed to cool in air through the martensite range.

Metal Spraying - Applying a metallic coating to a workpiece by projecting finely powdered molten fragments of wire, together with suitable fluxes, through a cone of flame or through an electric arc onto the workpiece.

Milling - Using a rotary tool with one or more teeth which engage the workpiece and remove material as the workpiece moves past the rotating cutter. 1. Face Milling - Milling a surface using perpendicular cutting edges to remove the bulk of the material while the face cutting edges provide the finish of the surface being generated. 2. End Milling - Milling accomplished with a tool having cutting edges on its cylindrical surfaces as well as on its end. In end milling-peripheral, the peripheral cutting edges on the cylindrical surface are used; while in end milling-slotting, both end and peripheral cutting edges remove metal. 3. Slide and Slot Milling - Milling of the side or slot of a workpiece using a peripheral cutter. 4. Slab Milling - Milling of a surface parallel to the axis of a helical, multiple-toothed cutter mounted on an arbor. 5. Straddle Milling - Peripheral milling a workpiece on both sides at once using two cutters spaced as required.

Necking - (1) Reducing the cross-sectional area of metal in a localized area by stretching. (2) Reducing the diameter of a portion of the length of a cylindrical shell or tube.

Nitriding - Heat treating process in which a metal is heated or cooled and is put into contact with a nitrogeneous material, usually ammonia or molten cyanide to introduce nitrogen into the surface layer.

Normalizing - Heating a ferrous alloy to a suitable temperature above the transformation range and then cooling in air to a temperature substantially below the transformation range.

Paint Stripping - Removing an organic coating from a workpiece by chemical or thermal means. Stripping is usually performed with caustic, acid, solvent, or molten salt.

Painting - Applying an organic coating to a workpiece. The application of coatings such as paint, varnish, lacquer, shellac and plastics using processes such as spraying, dipping, brushing, roll coating, lithographing, powder coating, and wiping.

DEFINITIONS OF TERMS (Continued)

Passivating - Changing the chemically active surface of a metal to a much less reactive state, usually by means of immersion in an acid solution.

Peening - Mechanical working of metal by hammer blows or shot impingement.

Phosphate Conversion Coating - Process of forming a conversion coating (protective coating) on a metal by immersing or spraying with a solution that will produce a phosphate-metal coating (usually iron or zinc, as well as aluminum, manganese, titanium, or zirconium). Also known as phosphatizing or phosphating.

Pickling - Immersion of all or part of a workpiece in a corrosive acid medium such as mineral acid to remove scale and surface oxides.

Planing - Producing flat surfaces by linear reciprocal motion of the work and the table to which it is attached relative to a stationary single-point cutting tool.

Plasma Arc Machining - Material removal or shaping of a workpiece by a high velocity jet of high-temperature, ionized gas.

Plating Stripping - Removing a plated metal coating.

Polishing - Removing stock from a workpiece by the action of loose or loosely held abrasive grains carried to the workpiece by a flexible support. Usually, the amount of stock removed in a polishing operation is only incidental to achieving a desired surface finish or appearance.

Pressure Deformation - Applying force (other than impact force) to permanently deform or shape a workpiece. Pressure deformation operations may include operations such as rolling, drawing, bending, embossing, sizing, extruding, squeezing, spinning, necking, forming, crimping or flaring.

Printed Circuit Board Manufacturing - The formation of a circuit pattern of conductive metal (usually copper) on non-conductive board materials such as plastic or glass. There are five basic steps involved in the manufacture of printed circuit boards: cleaning and surface preparation, catalyst and electroless plating, pattern printing and masking, electroplating, and etching.

Reaming - An operation in which a previously formed hole is sized and contoured accurately by using a rotary cutting tool (reamer) with one or more cutting elements (teeth). The principal support for the reamer during the cutting action is obtained from

the workpiece. 1. Form Reaming - Reaming to a contour shape. 2. Taper Reaming - Using a special reamer for taper pins. 3. Hand Reaming - Using a long lead reamer which permits reaming by hand. 4. Pressure Coolant Reaming (or Gun Reaming) - Using a multiple-lip, end cutting tool through which coolant is forced at high pressure to flush chips ahead of the tool or back through the flutes for finishing of deep holes.

Resistance Welding - Welding with resistance heating and pressure, the work being part of an electric circuit.

Rinsing - The removal of impurities, contaminants, or solution from the surface of a workpiece using water. Rinsing differs from cleaning in that no active cleaning agents are used in rinsewater. Types of rinsing include countercurrent cascade rinsing, stagnant dip rinsing, recirculating dip rinsing, and spray rinsing.

Rolling - Reducing the cross-sectional area of metal stock, or otherwise shaping metal products, through the use of rotating rolls.

Salt Bath Descaling - Removing surface oxides or scale from a workpiece by immersion of the workpiece in a molten salt bath or hot salt solution.

Sawing - Using a toothed blade or disc to sever parts or cut contours. 1. Circular Sawing - Using a circular saw fed into the work by motion of either the workpiece or the blade. 2. Power Band Sawing - Using a long, multiple-tooth continuous band resulting in a uniform cutting action as the workpiece is fed into the saw. 3. Power Hack Sawing - Sawing in which a reciprocating saw blade is fed into the workpiece.

Shaping - Using single point tools fixed to a ram reciprocated in a linear motion past the work. 1. Form Shaping - Shaping with a tool ground to provide a specified shape. 2. Contour Shaping - Shaping of an irregular surface, usually with the aid of a tracing mechanism. 3. Internal Shaping -Shaping of internal forms such as keyways and guides.

Shaving - 1. As a finishing operation, the accurate removal of a thin layer by drawing a cutter in straight line motion across the work surfaces. 2. Trimming parts like stampings, forgings, and tubes to remove uneven sheared edges or to improve accuracy.

DEFINITIONS OF TERMS (Continued)

Shearing - Severing or cutting a workpiece by forcing a sharp edge or opposed sharp edges into the workpiece stressing the material to the point of shear failure and separation.

Shot Peening - Cold working the surface of a metal by metal shot impingement.

Siliconizing - Diffusing silicon into solid metal, usually steel, at an elevated temperature.

Sizing - 1. Secondary forming or squeezing operations, required to square up, set down, flatten or otherwise correct surfaces, to produce specified dimensions and tolerances. 2. Some burnishing, broaching, drawing and shaving operations are also called sizing. 3. A finishing operation for correcting ovality in tubing. 4. Powder metal - Final pressing of a sintered compact.

Slotting - Cutting a narrow aperture or groove with a reciprocating tool in a vertical shaper or with a cutter, broach or grinding wheel.

Soldering - Joining metals by flowing a thin (capillary thickness) layer of nonferrous filler metal into the space between them. Bonding results from the intimate contact produced by the dissolution of a small amount of base metal in the molten filler metal, without fusion of the base metal. The term soldering is used where the melting temperature of the filler is below 425°C (800°F).

Solvent Degreasing (Solvent Cleaning) - Removal of oils and grease from a workpiece using organic solvents or solvent vapors.

Spinning - Shaping of seamless hollow cylindrical sheet metal parts by the combined forces of rotation and pressure.

Spray Rinsing - A process which uses the expulsion of water through a nozzle as a means of rinsing.

Sputtering - Covering a metallic or non-metallic workpiece with thin films of metal. Sputtering is conducted in chambers evacuated to 10 to 100 micrometers of mercury. Under the influence of an arc of 400 volts or greater, a cathode disintegrates and the metal is deposited on the surroundings, including the workpiece.

Squeezing - The process of reducing the size of a piece of heated material so that it is smaller but more compressed than it was before.

Stagnant Dip Rinsing - A process wherein water contained in a vessel is used as a rinsing medium to remove impurities from the surface of metal workpieces. The workpieces to be rinsed are dipped in the rinse tank. Water is not circulated through the vessel; the rinse water may be dumped periodically as a batch.

Stamping - A general term covering almost all press operations, including blanking, shearing, hot or cold forming, drawing, bending, coining.

Stripping - Removing a coating from a metal basis material.

Swaging - Tapering bar, rod, wire or tubing by forging, hammering or squeezing; reducing a section by progressively tapering lengthwise until the entire section attains the smaller dimensions of the taper.

Tapping - Producing internal threads with a cylindrical cutting tool having two or more peripheral cutting elements shaped to cut threads of the desired size and form. By a combination of rotary and axial motion, the leading end of the tap cuts the thread while the tap is supported mainly by the thread it produces.

Tempering - Heat treating process in which hardened steel or cast iron is reheated for the purpose of decreasing hardness and increasing roughness.

Testing - Application of thermal, electrical, mechanical, hydraulic, or other form of force to determine the suitability or functionality of a part, assembly or complete unit. Testing may also include the application of surface penetrants to detect surface imperfections.

Thermal Cutting - Cutting, slotting or piercing a workpiece using an oxy-acetylene oxygen lance, electric arc cutting tool, or laser.

Thermal Infusion - Applying a fused zinc, cadmium or other metal coating to a ferrous workpiece by thermally infusing the surface of the workpiece with metal powder or dust.

Threading - Producing external threads on a cylindrical surface. 1. Die Threading - A process for cutting external threads on cylindrical or tapered surfaces by the use of solid or

self-opening dies. 2. Single-Point Threading -Turning threads on a lathe. 3. Thread Grinding - See definition under grinding. 4. Thread Milling - A method of cutting screw threads with a milling cutter.

Turning - Removing material by forcing a cutting tool against the surface of a rotating workpiece.

Ultrasonic Machining - Treatment of a workpiece by unbonded abrasive grains in a slurry, which receives energy from a source of ultrasonic or high frequency vibrations. Ultrasonic machining also includes the process of selective material removal with a diamond or carbide tip cutting tool vibrating at an ultrasonic frequency.

Vacuum Metalizing - Coating a workpiece with metal by flash heating metal vapor in a high-vacuum chamber containing the workpiece. The vapor condenses on all exposed surfaces.

Vapor Plating - Deposition of a metal or compound upon a heated surface by reduction or decomposition of a volatile compound at a temperature below the melting point of either the deposited or the base material.

Welding - Joining two or more pieces of material by applying heat, pressure or both, with or without filler material, to produce a metallurgical bond through fusion or recrystallization across the interface. Included in this definition are gas welding, resistance welding, arc welding, cold welding, electron beam welding, and laser beam welding.

THIS PAGE HAS BEEN INTENTIONALLY LEFT BLANK

SULZER

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
United States of America
www.sulzermetco.com
(516) 334-1300

FEDERAL EXPRESS

December 9, 2005

Mr. Scott Hamarich
Eastern Environmental Services
69 Seatuck Avenue
Eastport, NY 11941

Subject: Hazardous Waste Compliance

Dear Mr. Hamarich:

In accordance with the ***Official Compilation Code Rules and Regulations of the State of New York*** NYCRR 373-3.3(g)(1)(iii), *Arrangements with local authorities*, this letter is intended to notify Eastern Environmental Services that Sulzer Metco (US), Inc., located at 1101 Prospect Avenue, Westbury, NY, is a small quantity generator of hazardous waste. Therefore, due to the nature of this waste and in case of an emergency requiring assistance, it is necessary to make arrangements with emergency response contractors as appropriate for the type of waste handled at the this facility.

Sulzer Metco requests that Eastern Environmental Services be familiarized with the layout of this facility, properties of hazardous waste handled at this facility and associated hazards, places where facility personnel would normally be working, entrances and roads inside this facility, and possible evacuation routes.

Sulzer Metco has satellite storage areas where a hazardous waste in each location is accumulated into a 55 gallon drum. Those locations have one drum which is under the control of an employee working in that area. Those areas are shown on the attached facility diagram. A description of each hazardous waste is as follows:

Dust Collectors: Highlighted in yellow on the facility diagram. This material is a powder which contains chromium and may also contain nickel, aluminum, cobalt, iron, and other metals and ceramics. Nickel and cobalt are possible carcinogens. Hexavalent chromium is a known carcinogen. Please see the attached Material Safety Data Sheet for other hazards.

Machine Shop: Highlighted in blue on the facility diagram. This waste is a liquid which contains approximately 98% water and 2% chromic acid. Hexavalent chromium is a known carcinogen. Chromic acid is corrosive and causes burns to eyes and skin.

Analytical Lab: Highlighted in green on the facility diagram. This waste is a liquid which contains approximately 15% acid, 85% water and trace quantities of metals. The acids in this liquid, including sulfuric, hydrochloric, nitric, hydrofluoric and phosphoric acids, are corrosive and cause burns to eyes and skin.

Sulzer Metco has designated a hazardous waste accumulation area to hold the above waste materials. That area is also shown on the facility diagram and is highlighted in orange. Notices are posted outside this area with many emergency response telephone numbers. One of these numbers is Eastern Environmental Services.

Sulzer Metco would like to have Eastern Environmental Services as its primary emergency response contractor in the event of an emergency or spill. Please let me know whether you agree to assume that role.

If you have any questions regarding this matter please feel free to contact me at (516) 338-2337. Thank you for your cooperation.

Sincerely,
Sulzer Metco (US) Inc.

Peter DiPietrantonio
Environmental, Health & Safety Specialist

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA
United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: Copper Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

For EPA use only

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: JMacri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Metco Division Perkin-Elmer

TRI Facility ID Number: 11590PRKNL1101P

Street Address: 1101 Prospect Avenue

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3542	b.	c.	d.	e.	f.

4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		075	09	50	027	53	16

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663	b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD131318651	b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A	b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-50-8
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Copper
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	**Manufacture the toxic chemical:**	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	**Process the toxic chemical:**	a. ☐ As a reactant b. ☐ As a formulation component	c. ☐ As an article component d. ☐ Repackaging
3.3	**Otherwise use the toxic chemical:**	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☒ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	03	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/ year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	B	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name: N/A				
5.3.2	Stream or Water Body Name: N/A				
5.3.3	Stream or Water Body Name: N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: Copper Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1100	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Chemical, Category, or Generic Name
Copper Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	910	1100	1300	1300
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)	YES	NO
			X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

Bliss Exterminators
Pesticide applicator License
C 2652536

Bliss Exterminators
Pesticide applicator License
C 2652536

SPECIMEN LABEL

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 7

To Constance Conroy	From Steven Albanese
Co. Metro Inc.	Co. Bliss Ext Co
Dept.	Phone # 516 781 7902
Fax # 516 334 1938	Fax # 212 927 0437

Ficam® W

76% WETTABLE POWDER INSECTICIDE

RECOMMENDED FOR USE ONLY BY PEST CONTROL OPERATORS

ACTIVE INGREDIENT:	Percent by Weight
Bendiocarb (2,2-dimethyl-1,3-benzodioxol-4-yl methylcarbamate*)	76%
INERT INGREDIENTS:	24%
Total	100%

EPA Reg. No. 45639-1

PRECAUCION AL USUARIO: Si usted no lee ingles, no use este producto hasta que el etiqueta haya sido explicado ampliamente.

KEEP OUT OF REACH OF CHILDREN

WARNING—AVISO

STATEMENT OF PRACTICAL TREATMENT

IF SWALLOWED — DRINK 1 OR 2 GLASSES OF WATER AND INDUCE VOMITING BY TOUCHING BACK OF THROAT WITH FINGER. DO NOT INDUCE VOMITING OR GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. GET MEDICAL ATTENTION.

IF INHALED — KEEP PATIENT STRICTLY AT REST AND TRANSFER TO HOSPITAL IMMEDIATELY TO GET MEDICAL ATTENTION.

IF ON SKIN — WASH WITH SOAP AND WARM WATER.

IF IN EYES — RINSE THOROUGHLY WITH CLEAN WATER.

NOTE TO PHYSICIAN: CONTAINS ANTICHOLINESTERASE CARBAMATE INSECTICIDE. IN CASES OF OVER EXPOSURE, ATROPINE SULFATE (2 MG. EQUIVALENT TO 1/30 GRAIN ADULT DOSE) SHOULD BE GIVEN AND REPEATED AS NECESSARY UNTIL FULLY ATROPINIZED.

NOR-AM®
© NOR-AM CHEMICAL COMPANY
3509 Silverside Road, P.O. Box 7495
Wilmington, DE 19803

NET CONTENTS

Protected by U.S. Patent No. 3,736,338

PT® 270 Dursban® Residual

CRACK AND CREVICE INJECTION USE ONLY

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

HOW TO USE WHITMIRE CRACK AND CREVICE INJECTION SYSTEM. Whitmire PT 270 is for use only with the supplied actuator and injector tubes or other Whitmire equipment. PT 270 is to be injected only into cracks and crevices or void space where insects may be harboring, living and breeding. Place injector tip ⅛" into cracks and crevices, holes and other small openings. Release approximately one-second spray per spot. For a serious infestation, place spots approximately 12" apart. For light infestation or for preventative treatment, place spots approximately three feet apart. In long running cracks, move injector tip along the crack while spraying at the rate of three linear feet per second. For heavy infestations move injector tip along at one linear foot per second. For inaccessible closed voids calculate the voids cubic area and treat at rate of five to ten seconds per three cubic feet. Several holes may be required in long-running voids. Repeat as necessary.

Crawling Insects: Cockroaches, Dermestids, Scorpions, Spiders, Ticks, Earwigs, Crickets, Sowbugs, Millipedes, Centipedes: Inject into cracks and crevices and void spaces where insects may be harboring at the selected dosage. These may include, but are not limited to: openings around pipes and sinks, under refrigerators, behind baseboards, washing machines, stoves, cabinets, meter boxes and man holes. Repeat as necessary.

Booklice & Silverfish: Inject into cracks and crevices associated with baseboards, door frames, bookcases and other harborage sites. Repeat as necessary.

Ants: Inject cracks and crevice and voids where ant may be traveling and/or harboring, including but not limited to around doors, window frames, behind electric switches and outlets and other structural cracks and crevices.

Grain Weevils, Flour Beetles, Chocolate Moths, Drugstore Beetles (in exposed adult and larva stages) and hibernating stages of **Boxelder Bugs, Elm Leaf Beetles, Cluster Flies and Clover Mites.** Inject cracks and crevices and/or voids where these insects may be harboring or hibernating. Infested areas include but are not limited to cracks and crevices in cabinets and pantries, wall voids, around window and door frames, under siding and in machinery. Repeat as necessary.

Localized treatment of wood-infesting insects: Beetles and Borers (such as the following families: Anobiidae, Bostrichidae, Buprestidae, Cerambycidae, Lyctidae, Oedemeridae, Scolidae), **Carpenter Ants, Carpenter Bees, Termites and Wood Wasps: Locate suspected infestation** and or insect tunnels and cavities. Inject 5 to 10 seconds of spray into insect tunnels, gallery and inaccessible closed voids. In infested sites, pilot holes should be drilled eight to ten inches apart to insure thorough insecticide gallery treatment. Make sure not to contact electrical wiring, plumbing, etc. when drilling and never use Whitmire metal wood injectors where electrical shock could occur. Use Whitmire standard plastic void injector if there is danger of electrical contact. For Carpenter Bees, seal entrance openings with small pieces of stainless steel wool after application.

Copyright, 1988
Whitmire Research Laboratories, Inc.
St. Louis, Missouri

IMPORTED FIRE ANTS: To treat mounds, use the Whitmire soil injector. To maximize spray distribution, insert injector into the mound full length if possible. Inject the mound at 3-6 sites at a rate of 5-10 seconds spray per site. For very large mounds (over 36" diameter), increase the number of injection sites. Space injection sites in a circular pattern on the mound surface with one site in the center. To quiet active ants on mound surface, sweep surface with spray from a distance of 18 inches. For best results, apply in cool weather, 65-80°F, or in early morning or late evening hours. Treat new mounds as they appear.

APPLICATIONS IN FOOD HANDLING ESTABLISHMENTS: Places other than private residences in which food is held, processed, prepared or served.

FOOD AREAS - APPLICATION LIMITED TO CRACK AND CREVICE TREATMENT ONLY: Includes areas for receiving, storage, packing (canning, bottling, wrapping, boxing), preparing, edible waste storage and enclosed processing systems (mills, dairies, edible oils, syrups). Serving areas (when food is exposed and facility is in operation) also would be considered a food area.

Apply prescribed amounts of insecticide directly into cracks and crevices or voids using injection tube or Whitmire equipment in points between different elements of construction, between equipment and floors, openings leading to voids and hollow spaces in walls, equipment legs and bases where insects hide. Care should be taken to avoid depositing the product on exposed surfaces or introducing the material into the air. Avoid contamination of food, food contact surfaces or food processing surfaces.

APPLICATIONS OF THIS PRODUCT IN THE FOOD AREAS OF FOOD HANDLING ESTABLISHMENTS, OTHER THAN AS A CRACK AND CREVICE TREATMENT ARE NOT PERMITTED.

STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in a cool dry area away from heat or open flame and inaccessible to children.

PESTICIDE DISPOSAL: Wastes resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Replace cap and discard container in trash, sanitary landfill or by other approved state and local procedures. Do not incinerate or puncture.

PRECAUTIONARY STATEMENT

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

WARNING: May cause eye irritation. Harmful if swallowed or inhaled. May be absorbed through the skin. Avoid breathing of spray mist and provide adequate ventilation of area being treated. Avoid contact with skin, eyes, or clothing. Wash thoroughly after using and before smoking or eating. Avoid contamination of food, utensils, and food preparation surfaces.

ENVIRONMENTAL HAZARDS. This product is toxic to fish, birds, and other wildlife. Do not apply directly to water. Apply this product only as specified on the label. Do not contaminate water by cleaning of equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS: Contents under pressure. Do not puncture or incinerate container. Do not use or store near heat or open flame. Exposure to temperatures above 130°F may cause bursting.

Do not spray on plastic, painted, or varnished surfaces or directly into any electronic equipment such as radios, televisions, computers, etc.

FOR USE WITH SYSTEM III

PT® 270 Dursban®

Residual Crack & Crevice™ Injection System

SPECIMEN LABEL

KILLS: Ants, Booklice, Boxelder Bugs, Carpenter Ants, Carpenter Bees, Centipedes, Chocolate Moths, Clover Mites, Cluster Flies, Cockroaches, Crickets, Drug Store Beetles, Earwigs, Elm Leaf Beetles, Flour Beetles, Grain Weevils, Millipedes, Silverfish, Sowbugs, Spiders, Termites, Ticks, Wood Infesting Borers and Beetles and Wood Wasps.

For use in food storage areas, homes, hospitals, hotels, meat packing and food processing plants (inedible areas), motels, nursing homes, restaurants and other food handling establishments, supermarkets, transportation equipment (buses, boats, ships, trains, planes) and utilities.

Authorized by USDA for use in inedible areas of federally inspected meat and poultry plants.

ACTIVE INGREDIENTS:	
Chlorpyrifos (O,O-Diethyl O-(3,5,6-Trichloro-2-Pyridyl) Phosphorothioate)**	0.500%
INERT INGREDIENTS:	99.500%

**DURSBAN INSECTICIDE is Reg. TM of the Dow Chemical Company.

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center immediately. Do not induce vomiting or give anything by mouth to an unconscious person. Gastric lavage is indicated. DO NOT INDUCE VOMITING. Vomiting may cause aspiration pneumonia.
If on skin: Remove contaminated clothing and wash affected areas with soap and water.
If on eyes: Flush eyes with plenty of water. Get medical attention immediately.
Note to physician: If symptoms of cholinesterase inhibition are present, atropine sulfate is antidotal. 2-PAM is also antidotal and may be administered in conjunction with atropine.

See side panel for additional precautionary statements

EPA Reg. No. 499-147 EPA Est. No. 499-MO-1

Talon®-G
RODENTICIDE PELLETS

For Effective Control of Commensal Mice and Rats

Kills warfarin-resistant Norway Rats and House mice. Rodents may consume a lethal dose in one feeding with first dead rodents appearing four or five days after treatment begins.

Keep Out of Reach of Children

CAUTION

May Be Harmful or Fatal If Swallowed. Read Additional Precautionary Statements Below.

EPA Reg. No. 10182-38

This product is protected by US patent numbers 3957824 and 4035505 which are the property of Ward Blenkinsop and Company Limited.

Net Contents: 45 lb (20.4 kg)

ICI Americas Inc.
Agricultural Chemicals Division
Wilmington, Delaware 19897

ACTIVE INGREDIENT:

Brodifacoum- 3-[3-(4'-bromo-[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one	0.005%
INERT INGREDIENTS	99.995%
TOTAL	100.000%

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

MAY BE HARMFUL OR FATAL IF SWALLOWED. KEEP AWAY FROM HUMANS, DOMESTIC ANIMALS, AND PETS. WASH HANDS AFTER HANDLING BAIT.

IF BAIT IS EATEN BY HUMANS, CALL A PHYSICIAN AT ONCE. For 24-hour emergency assistance call **ICI Americas Inc.** 302/575-3000.

IF BAIT IS EATEN BY ANIMALS OR PETS, call the **National Animal Poison Control Center** 217/333-3611 or **ICI Americas Inc.** 302/575-3000 for 24-hour emergency assistance.

In case of significant spill, call CHEMTREC 800/424-9300.

NOTE TO PHYSICIAN OR VETERINARIAN
This product may reduce the clotting ability of the blood and cause hemorrhaging. If poisoning occurs, intramuscular and oral administration of vitamin K_1 are indicated, as in poisoning from overdose of bishydroxy coumarin. For human cases, vitamin K_1 is antidotal at doses of 10-20 mg (not mg/kg). For animal cases, vitamin K_1 is antidotal at 2-5 mg/kg. Repeated doses may need to be given up to two weeks (based on monitoring of prothrombin times). In severe cases, blood transfusions may be necessary.

ENVIRONMENTAL HAZARDS
This product is toxic to fish, birds and wildlife. This product can pose a secondary hazard to birds of prey and mammals. Keep out of any body of water.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: Store in original container only in a dry place inaccessible to children and pets.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Dispose of bait container in a sanitary landfill or by incineration if allowed by state and local authorities.

DIRECTIONS FOR USE

GENERAL CLASSIFICATION
It is a violation of federal law to use this product in a manner inconsistent with its labeling.

USE RESTRICTIONS: For control of Norway Rats, Roof rats and House mice in and around homes, industrial, commercial, agricultural and public buildings. TALON may also be used in and around transport vehicles (ships, trains, aircraft) and related port or terminal buildings. Do not use in sewers. This product must be placed in tamper-proof bait boxes or in locations not accessible to children, pets, domestic animals or wildlife. Do not place bait in areas where there is a possibility of contaminating food or surfaces that come in direct contact with food.

Authorized by the USDA for use in federally inspected meat, poultry and egg processing plants.

Talon-G

SELECTION OF TREATMENT AREAS: Determine areas where rats and/or mice will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in or beside burrows, in corners and concealed places, between floors and walls, or in locations where rodents or their signs have been observed. Remove as much food as possible.

APPLICATION DIRECTIONS

Norway and Roof Rats:
Apply 4 to 16 ounces of bait (usually at intervals of 15 to 30 feet) per placement. Maintain an uninterrupted supply of fresh bait for 10 days or until signs of rat activity cease.

House Mice:
Apply ¼ to ½ ounce of bait at intervals of 8 to 12 feet per placement. Larger placements (up to 2 ounces) may be needed at points of very high mouse activity. Maintain an uninterrupted supply of fresh bait for 15 days or until signs of mouse activity cease.

Rats & Mice:
Replace contaminated or spoiled bait immediately. Collect and dispose of all dead animals and unconsumed bait according to "Disposal" paragraph. To prevent reinfestation, eliminate food, water, and harborage as much as possible. If reinfestation does occur, repeat treatment. Where a continuous source of infestation is present, establish permanent bait stations and replenish bait as needed.

NOTICE TO BUYER AND USER: Seller warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions or under conditions not reasonably foreseeable to Seller and Buyer and User assumes the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

The information and specimen labels contained in this booklet are correct as of the publication date but are subject to change without notice. For current information, contact ICI Americas Inc.

ICI Americas Inc.

Agricultural Chemicals Group
Wilmington, Delaware

WeatherBlok® BAIT

Made with TALON® Rodenticide

SPECIMEN

MAY BE HARMFUL OR FATAL IF SWALLOWED. KEEP AWAY FROM HUMANS, CONVERSE ANIMALS AND PETS. WASH HANDS AFTER HANDLING BAIT.

IF BAIT IS EATEN BY HUMANS, CALL A PHYSICIAN AT ONCE. [illegible] emergency assistance [illegible] ICI Americas Inc. Medical Emergency Information Center [illegible] Poison Control Center 1-800-527-0530 [illegible] 24 hour emergency [illegible]

In case of sign[illegible]

This product may [illegible] the blood and cause bleeding. Toxicity [illegible] muscular and cardiac [illegible] indicated as possibly [illegible] cause of death [illegible] humans. For human cases, vitamin K is an effective dose of [illegible] mg. For the canine [illegible] rodenticide at 2-5 mg/kg. Repeated dosing may need to be given if [illegible] cases of human poisoning [illegible] severe cases, blood transfusions may be necessary.

This product [illegible] dangerous to life. This could cause a secondary hazard to birds and other mammals. Keep out of any body of water.

NOTICE TO BUYER AND USER [illegible] conditions [illegible] the extent [illegible] the law, any [illegible] shall be [illegible] in accordance with [illegible] conditions of sale. This warranty does not extend to the buyer [illegible] or other persons [illegible] OTHER WARRANTIES EXPRESSED OR IMPLIED, INCLUDING [illegible] WARRANTY OF FITNESS OR MERCHANTABILITY, SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, INCIDENTAL OR SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT. [illegible] SELLER'S SOLE LIABILITY, AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE SELLER OF THE PURCHASE PRICE.

Kills warfarin-resistant Norway Rats and House mice.

Rodents may consume a lethal dose in one feeding with first dead rodents appearing four or five days after treatment begins.

Active Ingredient

Brodifacoum- 3-[3-(4'-bromo-[1,1'-biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one	0.005%
Inert Ingredients	99.995%
Total	100.000%

May Be Harmful or Fatal If Swallowed. Read Additional Precautionary Statements on Side Panel.

Agricultural Products

Wilmington, Delaware 19897

A Business Unit of ICI Americas Inc.

This product is protected by US patent numbers [illegible] and 4,[illegible] which are the property of Wellcome and licensed under license.

EPA Reg. No. 10182-48 EPA Est. No. 10554-EN-[illegible]

Net Contents: 300 Grams (21 blocks)

Do not contaminate water, food or feed by storage or disposal. Cannot use empty container except for holding complete WEATHER BLOK bait.

STORAGE: Store in original container only in a dry place inaccessible to children and pets.

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Dispose of container in a sanitary and safe way in accordance with local and state authorities.

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

USE RESTRICTIONS: For control of Norway Rats, Roof Rats and House mice around sewers, homes, industrial, commercial, agricultural and outdoor [illegible] WEATHER BLOK must be placed in secure and tamper-proof bait stations. [illegible] WEATHER BLOK must be placed in tamper-proof bait stations in [illegible] there is a possibility of contaminating food [illegible]

SPECIMEN

Norway and Roof Rats: Apply 6-25 WEATHER BLOKS (subject to the [illegible] per placement. Maintain [illegible] supply of fresh bait for 3 days or until signs of rat activity cease. When infestations are limited to overhead areas in and around buildings, place WEATHER BLOK only in areas or locations in fences, poles, beams or other overhead areas where rats indicate they are active.

For use in secure secondary attachment devices with WEATHER BLOK in a tamper-proof manner [illegible] block to rest on ample perching. If perching is not present, suspend block a few inches below the high water mark. Place WEATHER BLOK on a board suspended by cords to stops on the fence. Secure WEATHER BLOK in this manner will prevent chewing by rats or other pests. Place at least 5 WEATHER BLOKS per mammal. Maintain an uninterrupted supply of fresh bait for at least 3 days or until feeding stops.

House Mice: Apply 1 WEATHER BLOK at intervals of 8-12 feet in placement large enough to prevent [illegible] may be needed in some of very high mouse activity. Maintain an uninterrupted supply of fresh bait for 3 days or until signs of mouse activity cease. For use in sewers and according to above directions for rats.

Made in [illegible]

OCTOBER 1982

MAXFORCE™

SPECIMEN

ROACH CONTROL SYSTEM

FOR USE BY PROFESSIONAL PEST CONTROL OPERATORS

(In any area where cockroaches are a problem)

Active Ingredient:
Tetrahydro-5,5-dimethyl-2 (1H)-pyrimidinone {3-[4-(trifluoromethyl)phenyl]-1-{2-[4-(trifluoromethyl)phenyl]-ethenyl}-2-propenylidene} hydrazone 1.65%
Inert Ingredients 98.35%
Total 100.00%

CYANAMID

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Back Panel For Additional Precautions

¡PRECAUCION!

AL USUARIO: Si usted no lee ingles, no use este producto hasta que la etiqueta le haya sido explicada ampliamente.

ENGLISH TRANSLATION

(TO THE USER: If you cannot read English, do not use this product until the label has been fully explained to you.)

EPA Reg. No. 241-267
Net Weight: 7.62 oz. (216.0 g)

EPA Est. No. 1730-MA-01
Product Code

™ Trademark American Cyanamid Company

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

MAY BE HARMFUL IF SWALLOWED
Wash Thoroughly After Handling

STATEMENT OF PRACTICAL TREATMENT

If swallowed, drink one or two glasses of water and induce vomiting by touching back of throat with finger. Do not induce vomiting or give anything by mouth to an unconscious person. Get medical attention.

STORAGE AND DISPOSAL DIRECTIONS

Do not contaminate water, food or feed by storage or disposal. Do not remove bait from containers. Wrap used containers and put in a garbage can.

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

MAXFORCE may be used for the control of cockroaches in any area where cockroaches are a problem, such as residential, institutional, and commercial establishments, including food service, food manufacturing and food processing facilities, hospitals, laboratories, computer facilities, pet shops, zoos, buses, boats and trains.

MAXFORCE is packaged in a child-proof container.

Place MAXFORCE in areas where cockroaches have been seen and where they hide. Cockroaches infest dark, warm damp locations. Feeding stations should be placed in or near the areas of greatest infestation. The stickers provided in the plastic bag can be used to attach feeding stations in out-of-way places. Use 4-6 feeding stations per 100 square feet of the surface area to be treated. Roaches will begin feeding immediately and population reduction can be expected in about a week. Replace all feeding stations every two to three months to maintain control. Keep feeding stations away from food contact surfaces, open food and out of reach of children.

DISCLAIMER

American Cyanamid Company warrants only that the material contained herein conforms to the chemical description on the label and is reasonably fit for the use therein described when used in accordance with the directions for use. American Cyanamid Company makes no other express or implied warranty of FITNESS or or MERCHANTABILITY.

In case of an emergency endangering life or property involving this product, call collect, day or night,

Area Code 201-835-3100.

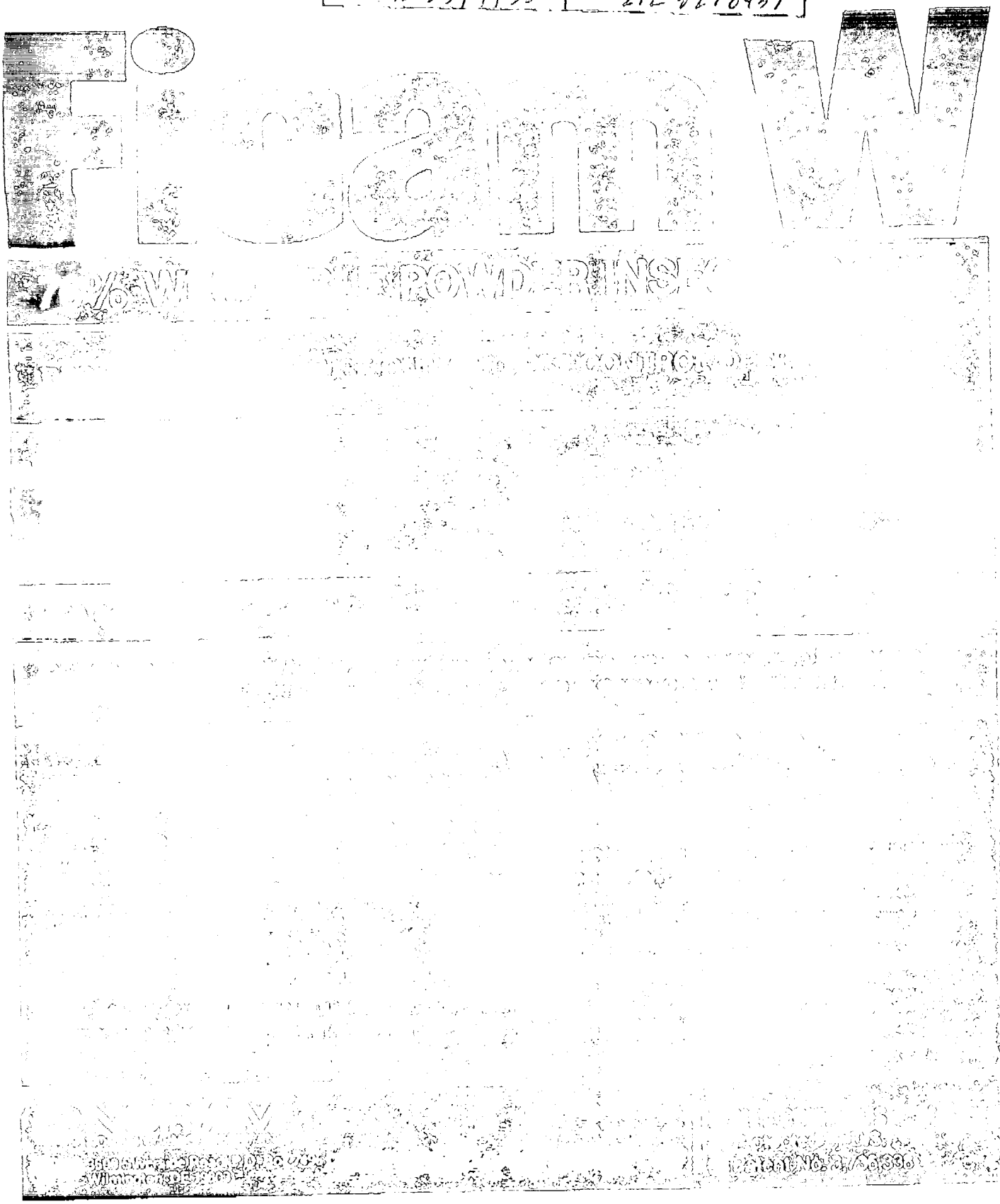
CYANAMID

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
Wayne, New Jersey 07470

SPECIMEN LABEL

Post-It™ brand fax transmittal memo 7671 | # of pages ▸ 7

To Constance Conway	From Steven Albanese
Co. Aleko Inc	Co. Bliss Ext Co
Dept	Phone # 516 781 7902
Fax # 416 334 1938	Fax # 212 8270437



Whitmire PT® 270 Dursban® Residual

CRACK AND CREVICE INJECTION USE ONLY

DIRECTIONS FOR USE

It is a violation of Federal Law to use this product in a manner inconsistent with its labeling.

HOW TO USE WHITMIRE CRACK AND CREVICE INJECTION SYSTEM. Whitmire PT 270 is for use only with the supplied actuator and injector tubes or other Whitmire equipment. PT 270 is to be injected only into cracks and crevices or void space where insects may be harboring, living and breeding. Place injector tip [illegible] into cracks and crevices, holes and other small openings. Release approximately one-second spray per spot. For a serious infestation, place spots approximately 12" apart. For light infestation or for preventative treatment, place spots approximately three feet apart. In long running cracks, move injector tip along the crack while spraying at the rate of three linear feet per second. For heavy infestations, move injector tip along at one linear foot per second. For inaccessible closed voids, calculate the voids cubic area and [illegible] one to ten seconds per cubic foot [illegible] required in void. Repeat as necessary.

Crawling Insects: Cockroaches, Dermestids, Silverfish, Spiders, Ticks, Earwigs, Crickets, [illegible] Millipedes, Centipedes. Inject into [illegible] void spaces where insects may [illegible] of the selected dosage. These may include but are not limited to: [illegible] under refrigerators, behind [illegible] dishwashers, stoves, [illegible] ranges. Repeat as necessary.

Cockroaches & Silverfish: [illegible] contacted with [illegible] and other hard surfaces. Repeat [illegible]

[illegible] Inject cracks and crevices [illegible] may be traveling and or harboring including but [illegible] to wooden doors, wood in frames, behind [illegible] and other structures [illegible]

Flying Insects: Flour Beetles, Chocolate Moths, [illegible] of exposed adult [illegible] of human [illegible] stages of Beneficial Bugs, Ambrosia Beetles, Cluster Flies and Clover Mites [illegible] and crevices and in voids where [illegible] may be harboring or in breeding infestations [illegible] are not limited to cracks and crevices, [illegible] and pantries, wall voids, [illegible] necessary.

[illegible]

EXPORTED FIRE ANTS. To treat mounds: use the Whitmire soil injector. To maximize spray distribution, use injector into the mound for length of possible. Inject the mound at 3-6 sites at a rate of 5-10 seconds spray per site. For very large mounds (over 36" diameter), increase the number of injection sites. Space injection sites in a circular pattern on the mound surface, with one site in the center. To quiet active ants on mound surface, sweep surface with spray from a distance of 18 inches. For best results, apply in cool weather, 65-80°F, on a early morning or late evening hours. Treat new mounds as they appear.

APPLICATIONS IN FOOD HANDLING ESTABLISHMENTS: Places other than private residences in which food is held, processed, prepared or served.

FOOD AREAS. APPLICATION LIMITED TO CRACK AND CREVICE TREATMENT ONLY. Includes areas for receiving, storage, packing, canning, bottling, [illegible] bowling), preparing, edible waste storage and enclosed processing systems (mills, dairies, [illegible] (whole). Serving areas (when food is exposed and facility is in operation) also would be considered food areas.

[illegible] amounts of the pesticide directly into cracks and crevices or voids using injection tube or Whitmire equipment in points between different equipment, [illegible] between equipment and floors, openings leading to voids and [illegible] spaces in voids, equipment legs and bases where insects hide. [illegible] to avoid depositing the product on exposed surfaces or contaminating the [illegible] surfaces.

[illegible] FOOD HANDLING ESTABLISHMENTS. [illegible] FOOD CREVICE TREATMENT [illegible].

STORAGE & DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

STORAGE: [illegible] cool, dry area away from heat or open flame and inaccessible to children.

PESTICIDE DISPOSAL: Waste resulting from use of this product may be disposed of on site or at an approved waste disposal facility.

CONTAINER DISPOSAL: Replace cap and discard container in trash, sanitary landfill or by other approved state and local procedures. Do not reuse or puncture.

SPECIAL CONSUMER STATEMENT

WARNINGS TO HUMANS AND DOMESTIC ANIMALS

WARNING: May cause eye irritation. Harmful if swallowed, inhaled or absorbed through the skin. Avoid breathing of spray mist. Avoid contact with eyes, skin or clothing. Wash thoroughly after handling and before smoking or eating. Avoid contamination of food or food preparation surfaces.

ENVIRONMENTAL HAZARDS: This product is toxic to fish, birds and other wildlife. Do not apply directly to water. Apply this product only as specified on the label. Do not contaminate water by cleaning equipment or disposal of wastes.

PHYSICAL OR CHEMICAL HAZARDS: Contents under pressure. Do not puncture, incinerate or store above 130°F. Do not use or store near heat or open flame. Exposure to temperatures above 130°F may cause bursting. Do not spray on plastic, painted or varnished surfaces, [illegible] equipment such as television, computers, etc.

Copyright 1988
Whitmire Research Laboratories, Inc.
St. Louis, Missouri

FOR USE WITH SYSTEM III

Whitmire

PT® 270 Dursban®

Residual Crack & Crevice Injection System

KILLS Ants, Bedbugs, Beetles, Bugs, [illegible] Ants, Carpenter Bees, Centipedes, Chocolate Moths, Clover Mites, Cluster Flies, Cockroaches, [illegible] Drug Store Beetles, Earwigs, Elongat Beetles, Flour Beetles, Grain Weevils, Millipedes, Silverfish, Spiders, Spiders, Termites, Ticks, Wood Infesting Borers and Beetles and Wood Wasps.

For use in food storage areas, homes, hospitals, hotels, meat packing and food processing plants (inedible areas), motels, nursing homes, restaurants and other food handling establishments, supermarkets, transportation equipment (buses, boats, ships, trains, planes) and utilities.

Authorized by USDA for use in inedible areas of federally inspected meat and poultry plants.

ACTIVE INGREDIENTS:
Chlorpyrifos (O,O-Diethyl O-(3,5,6-Trichloro-2-Pyridyl) Phosphorothioate)** 0.500%
INERT INGREDIENTS: 99.500%
**DURSBAN INSECTICIDE is a Reg. Trademark of Dow Chemical Company.

KEEP OUT OF REACH OF CHILDREN

WARNING

STATEMENT OF PRACTICAL TREATMENT

If swallowed: Call a physician or Poison Control Center immediately. Do not induce vomiting or give anything by mouth to an unconscious person. Gastric lavage is indicated. DO NOT INDUCE VOMITING. Vomiting may cause aspiration pneumonia.
If on skin: Remove contaminated clothing and wash affected area with soap and water.
If on eyes: Flush eyes with plenty of water. Get medical attention if irritation persists.
Note to physician: [illegible] is antidote. 2-PAM is also antidote, and may be administered in conjunction with atropine.

See side panel for additional precautionary statements

EPA Reg. No. 499-147 EPA Est. No. 499 MO-1

Talon®-G

RODENTICIDE PELLETS

For Effective Control of Commensal Mice and Rats

Kills warfarin-resistant Norway Rats and House mice. Rodents may consume a lethal dose in one feeding with first dead rodents appearing four or five days after treatment begins.

Keep Out of Reach of Children

CAUTION

May Be Harmful or Fatal If Swallowed. Read Additional Precautionary Statements Below.

EPA Reg. No 10182-38

This product is protected by US patent numbers 3959824 and 4035505 which are the property of Ward Blenkinsop and Company Limited

Net Contents: 45 lb (20.4 kg)

ICI Americas Inc.
Agricultural Chemicals Division
Wilmington, Delaware 19897

ACTIVE INGREDIENT:

Brodifacoum-
3-[3-(4'-bromo-[1,1' biphenyl]-4-yl)-1,2,3,4-tetrahydro-1-naphthalenyl]-4-hydroxy-2H-1-benzopyran-2-one 0.005%
INERT INGREDIENTS 99.995%
TOTAL 100.000%

PRECAUTIONARY STATEMENTS
HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

MAY BE HARMFUL OR FATAL IF SWALLOWED. KEEP AWAY FROM HUMANS, DOMESTIC ANIMALS, AND PETS. WASH HANDS AFTER HANDLING BAIT.

IF SWALLOWED BY HUMANS, CALL A PHYSICIAN AT ONCE. For 24-hour emergency assistance call ICI Americas Inc. 302/575-3000.

IF SWALLOWED BY ANIMALS OR PETS, call the National Animal Poison Control Center 217/333-2611 or ICI Americas Inc. 302/575-3000 for 24-hour emergency assistance.

In case of significant spill, call CHEMTREC 800/424-9300

NOTE TO PHYSICIAN OR VETERINARIAN

This product may reduce the clotting ability of the blood and cause hemorrhaging. If poisoning occurs, intramuscular and oral administration of vitamin K, are indicated, as in poisoning from overdose of dichydroxy coumarin. For human cases, vitamin K, is antidotal at doses of 10-20 mg (not mg/kg). For animal cases, vitamin K, is antidotal at 2-5 mg/kg. Repeated doses may need to be given up to two weeks (based on monitoring of prothrombin times). In severe cases, blood transfusions may be necessary.

ENVIRONMENTAL HAZARDS

This product is toxic to fish, birds and wildlife. This product can pose a secondary hazard to birds of prey and mammals. Keep out of any body of water.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal

STORAGE: Store in original container only in a dry place inaccessible to children and pets

PESTICIDE DISPOSAL: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility

CONTAINER DISPOSAL: Dispose of bait container in a sanitary landfill or by incineration if allowed by state and local authorities

DIRECTIONS FOR USE

GENERAL CLASSIFICATION

It is a violation of federal law to use this product in a manner inconsistent with its labeling

USE RESTRICTIONS: For control of Norway Rats, Roof rats and House mice in and around homes, industrial, commercial, agricultural and public buildings. TALON may also be used in and around transport vehicles (ships, trains, aircraft) and related port or terminal buildings. Do not use in sewers. This product must be placed in tamper-proof bait boxes or in locations not accessible to children, pets, domestic animals or wildlife. Do not place bait in areas where there is a possibility of contaminating food or surfaces that come in direct contact with food.

Authorized by the USDA for use in federally inspected meat, poultry and egg processing plants.

Talon-G

SELECTION OF TREATMENT AREAS: Determine areas where rats and/or mice will most likely find and consume the bait. Generally, these areas are along walls, by gnawed openings, in or beside burrows, in corners and concealed places, between floors and walls, or in locations where rodents or their signs have been observed. Remove as much food as possible.

APPLICATION DIRECTIONS

Norway and Roof Rats:
Apply 4 to 16 ounces of bait (usually at intervals of 15 to 30 feet) per placement. Maintain an uninterrupted supply of fresh bait for 10 days or until signs of rat activity cease.

House Mice:
Apply ¼ to ½ ounce of bait at intervals of 3 to 12 feet per placement. Larger placements (up to 2 ounces) may be needed at points of very high mouse activity. Maintain an uninterrupted supply of fresh bait for 15 days or until signs of mouse activity cease.

Rats & Mice:
Replace contaminated or spoiled bait immediately. Collect and dispose of all dead animals and unconsumed bait according to "Disposal" paragraph. To prevent reinfestation, eliminate food, water, and harborage as much as possible. If reinfestation does occur, repeat treatment. Where a continuous source of infestation is present, establish permanent bait stations and replenish bait as needed.

NOTICE TO BUYER AND USER: Seller warrants that the product conforms to the chemical description on the label and is reasonably fit for the purposes stated on the label when used in accordance with directions under normal conditions of use. This warranty does not extend to the use of this product contrary to label instructions, or under abnormal use conditions or under conditions not reasonably foreseeable to Seller and Buyer and User assumes the risk of any such use. SELLER DISCLAIMS ALL OTHER WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING ANY WARRANTY OF FITNESS OR MERCHANTABILITY. SELLER SHALL NOT BE LIABLE FOR CONSEQUENTIAL, SPECIAL OR INDIRECT DAMAGES RESULTING FROM THE USE OR HANDLING OF THIS PRODUCT AND SELLER'S SOLE LIABILITY AND BUYER'S AND USER'S EXCLUSIVE REMEDY SHALL BE LIMITED TO THE REFUND OF THE PURCHASE PRICE.

The information and specimen labels contained in this booklet are correct as of the publication date but are subject to change without notice. For current information, contact ICI Americas Inc.

Agricultural Chem[illegible]
Wilmington, De[illegible]

ICI Americas Inc.

WeatherBlok BAIT

Made with TALON Rodenticide

SPECIMEN

SPECIMEN

Agricultural Products

NOTICE TO BUYER AND USER

Active Ingredient

Other Ingredients

SPECIMEN

OCTOBER 1982

MAXFORCE™

ROACH CONTROL SYSTEM

SPECIMEN

FOR USE BY PROFESSIONAL PEST CONTROL OPERATORS

(... any area where cockroaches are a problem)

Active Ingred...
... pyrimidinone [3-[4-
... (trifluoromethyl)phenyl]-
... zone ....
....
Total

CYANAMID

KEEP OUT OF REACH OF CHILDREN

CAUTION

See Back Panel For Additional Precautions

¡PRECAUCION!

... no use este producto hasta que la etiqueta le haya sido ... plenamente

ENGLISH TRANSLATION

... do not use this product until the label has been fully exp...

EPA Reg. No. 241-237

Net Weight 7.32 oz. (218.0 g)

EPA Est. No. ...-MA-01

Product Code

D-40

Trademark American Cyanamid Company

PRECAUTIONARY STATEMENTS

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

CAUTION

MAY BE HARMFUL IF SWALLOWED
Wash Thoroughly After Handling

STATEMENT OF PRACTICAL TREATMENT

If swallowed, drink [illegible] two glasses of water and induce vomiting by [illegible] inducing vomiting by mouth to an unconscious person. Get medical attention.

STORAGE AND DISPOSAL DIRECTIONS

[illegible] spread or lead by storage or disposal. Do not [illegible] container [illegible]

DIRECTIONS FOR USE

[illegible]

[illegible] pets [illegible]

[illegible]

[illegible] out of reach of children.

DISCLAIMER

[illegible]

[illegible]

[illegible] 201 835-3100

AMERICAN CYANAMID COMPANY
AGRICULTURAL DIVISION
Wayne, New Jersey 07470

47-15-14 (7/99)

Region: 1

INSPECTION FORM

CESQG ____
SQG ____
GENERATOR X
TSDF ____
OTHER ____
UNANNOUNCED X
ANNOUNCED ____

NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT
(Chapter 639, Laws of 1978)

Prepared for: Commissioner
NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION

Send to:

NYSDEC
Division of Solid & Hazardous Materials
Compliance Section
50 Wolf Road - Room 448
Albany, New York 12233-7251

SULZER

Peter DiPietrantonio
Specialist
Environmental, Health and Safety

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590-0201
United States of America
Phone +1 516 338 2337
Fax +1 516 338 2123
E-mail peter.dipietrantonio@sulzer.com
Web www.sulzermetco.com

EPA I.D. NUMBER: NYD131318651

COMPANY NAME (Corporate): Sulzer Metco

(Division): ____

COMPANY MAILING ADDRESS: 1101 Prospect Avenue

City & State Westbury, NY Zip Code 11590-0201

COMPANY LOCATION ADDRESS: ____

(if different than mailing) ____

City & State ____ NY Zip Code ____

COUNTY Nassau

COMPANY TELEPHONE NUMBER: 516 338 2337 Extension ____

NAME OF COMPANY CONTACT: Peter DiPietrantonio

TITLE OF COMPANY CONTACT: Specialist - Environmental, Health & Safety

INSPECTION DATE: 6/12/03 TIME OF INSPECTION: 10[15] (a.m.) ____ (p.m.)

INSPECTOR'S NAME: Theresa Colabella

NAME: ____

REPORT PREPARED BY: Theresa Colabella DATE: 6/13/03

REPORT APPROVED BY: Katy Murphy DATE: 7-11-03

TABLE OF CONTENTS

		Page No.
Part I	General Information and Classification of Facility	
	1. Identification of Hazardous Waste	I-1
	2. Exemptions	I-2
	3. Hazardous Waste Generation/Treatment/Storage/Disposal	I-5
	4. Status Identification	I-7
Part II	Comments, Conclusions and Recommendations (Not for release to company, protected information)	II-1
	Generator, TSDF and Transporter Requirements (Circle and attach Parts III through VII and Appendices A through X as applicable)	
Part III	CESQG - Conditionally Exempt Small Quantity Generator	III-1
Part IV	SQG - Small Quantity Generator	IV-1
Part IV-A	Tank Storage Requirements for Small Quantity Generator	IV-A-1
Part V	LQG - Large Quantity Generator	V-1
Part VI	Interim Status Treatment, Storage and Disposal Facility	VI-1
Part VII	Transporter Transfer Facility	VII-1
Part VIII	Municipal Notification	VIII-1

APPENDICES

Appendix A	Land Disposal Restrictions - SQG & Generator
Appendix B	Land Disposal Restrictions - TSDF
Appendix C	Permitted Facility Inspection
Appendix D	Consent Order Follow-up Inspection
Appendix E	Requirements for Tanks
Appendix F	Elementary Neutralization Units/Wastewater Treatment Units
Appendix G	Requirements for Specific Hazardous Wastes
Appendix H	Closure/Post Closure Inspection
Appendix I	Incinerators and Energy Recovery Facilities
Appendix J	Thermal Treatment
Appendix K	Chemical, Physical and Biological Treatment
Appendix L	Universal Waste Handler Requirements
Appendix X	Air Emissions Checklist

Part I

General Information and Classification of Facility

1. Identification of Hazardous Waste - 371 — Yes / No

A. Facility generates and/or stores hazardous waste on-site. — Yes: X — No: ___

(1) X Company has used knowledge of the waste to determine if it is hazardous.

(2) ___ The material has shown the characteristic of:

(X) Ignitability (D001) - 371.3(b)
(X) Corrosivity (D002) - 371.3(c)
( ) Reactivity (D003) - 371.3(d)
(X) Toxicity (D004 - 043) - 371.3(e) D007

(3) ___ The material is listed in the regulations as a hazardous waste from non-specific sources (F-Waste). 371.4(b).

(4) ___ The waste is listed in the regulations as a hazardous waste from specific sources (K-Waste). 371.4(c).

(5) ___ The material is listed in the regulations as an acute hazardous waste (P-Waste). 371.4(d)(5).

(6) ___ The material or product is listed in the regulations as a discarded commercial chemical product, off-specification species or manufacturing chemical intermediate (U-Waste). 371.4(d)(6).

(7) ___ The material is listed in the regulations as a waste containing PCBs (B-Waste). 371.4(e).

B. If the facility is a treatment, storage or disposal facility, have they:

___ Submitted a Part A application.

___ Should the Part A be modified by the Company? If so, explain.

_____

___ Submitted a Part 373 permit application.

___ Been granted a Part B permit.* expiration date: _____

___ Been granted a Part 373 permit.* expiration date: _____

*Complete Appendix C - indicate compliance status with permit conditions.

C. ___ Has the facility signed a consent order to resolve violations found during a previous inspection?**

**Complete Appendix D indicating compliance with conditions of the order.

2. Exemptions

A. Generator Exemptions

(1) ___ Not a regulated Handler.

(2) ___ Samples collected for testing - 372.1(e)(5).

(3) ___ Residues of hazardous waste in empty containers - 372.1(e)(6).

(4) X A hazardous waste which is generated in a product or raw material storage tank, transport vehicle or vessel, pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated, manufacturing, or for storage or transportation. - 372.1(e)(7)(i).

B. TSD Exemptions

(1) ___ Storage of hazardous waste that is generated on-site in containers or tanks for a period not exceeding 90 days - 373-1.1(d)(1)(iii).

(2) ___ Storage of liquid hazardous waste in containers (>185 gallons) or tanks generated on-site over the designated sole source aquifers for a period not exceeding 90 days. - 373-1.1(d)(1)(iv).

(3) ___ The on-site storage and treatment of hazardous waste by generators that generate less than 100 kilograms of hazardous waste in any calendar month and store less than 1,000 kilograms. - 373-1.1(d)(1)(v).

(4) ___ The storage and recycling of the recyclable materials identified in subparagraphs 371.1(g)(1)(iii) and (iv) of this Title - 373-1.1(d)(1)(vi).

(5) ___ The storage of the following recyclable materials is exempt from permitting provided that Subpart 374-1 is complied with. (NOTE: Subpart 374-1 requires that the facility also complies with selected sections of this Part.) - 373-1.1(d)(1)(vii):

(a) ___ recyclable materials used in a manner constituting disposal (see section 374-1.3);

(b) ___ hazardous wastes burned for energy recovery in boilers and industrial furnaces that are not regulated under section 373-2.15 or 373-3.15 of this Title (see section 374-1.8);

(c) ___ recyclable materials from which precious metals are reclaimed (see section 374-1.6);

(d) ___ spent lead-acid batteries that are being reclaimed (see section 374-1.7).

(6) ___ The recycling of hazardous wastes is exempt from permitting provided 373-2.2(c) (identification number), 372.4(b) (use of manifest system), 372.4(d)(1) (manifest discrepancies) and clause 373-1.1(d)(1)(viii)(d) are complied with. (Storage prior to recycling is not exempt under this subparagraph.) In addition: 373-1.1(d)(1)(viii):

(a) ___ This exemption is available to:

(1) ___ Commercial facilities that reclaim precious metals, as defined in 374-1.6 of this Title;

(2) ___ Mobile or transportable commercial facilities which operate on the generator's site, if a containment area, meeting the requirements of 373-2.9(f), is provided for the reclaiming facility and any associated, temporary container holding or storage area.

(b) ___ This exemption is <u>not</u> available to any units, other than boilers and industrial furnaces, that burn hazardous wastes for energy recovery.

(c) ___ Exempted processes that recycle the hazardous wastes listed in 2B(5)(a-d) must comply with Part 374 of this Title in lieu of the requirements specified in this subparagraph. (Note: Part 374 will require that the facility also complies with selected sections of this Part.)

(d) ___ Owners or operators of facilities subject to RCRA permitting requirements with hazardous waste management units that recycle hazardous waste are subject to the requirements of sections 373-2.27, 373-2.28, 373-3.27 and 373-3.28 of this Part.

(7) ___ The on-site treatment of hazardous waste, by the generator, in the same tanks or containers used for accumulation and storage is exempt provided the generator complies with Part 373-1.1(d)(1)(iii) and (iv) and Part 372.2(c)(4). Any treatment or placement of hazardous waste in a manner that constitutes land disposal, as defined in subdivision 370.2(b), does not qualify for this exemption - 373-1.1(d)(1)(ix).

(8) ___ Totally enclosed treatment facility - 373-1.1(d)(1)(xi).

(9) ___ Elementary neutralization units or wastewater treatment units, as defined in Part 370 of this Title - 373-1.1(d)(1)(xii).

(10) X Accumulation areas - 373-1.1(d)(1)(xiv).

(11)___ A transporter storing manifested shipments of hazardous waste in containers at a transfer facility for a period of ten calendar days or less - Complete Part VII - 373-1.1(d)(1)(xi).

3. Hazardous Waste Generation/Treatment/Storage/Disposal

A. Describe only the activities that result in the generation of hazardous waste. Include manufacturing processes that generate hazardous waste. [Do not include hazardous waste treatment processes.]

- Waste is generated from R+D when they develop or modify new powder coatings. It is also generated when they test new spraying equipment. D007
- Degreaser operation, petroleum, naptha D001
- Chromic dip rinsate - D007 (using Cr^{+6}).

B. Describe any on-site hazardous waste treatment processes that result in the generation of hazardous waste (exempt and/or non-exempt). Include process diagrams if available.

NA

C. Identify the hazardous wastes that are on-site, the quantity of each, the storage method, the type and size of containers or tanks used and their location in the storage area. (Be as specific as possible.)

(1) Accumulation Areas [NOTE: Waste in accumulation areas must be included as part of the total quantity of waste stored on-site]:

Solid powder waste is collected outside facility from dust collectors. The waste is presumed Hazardous until tested for TCLP - D007.

There are seven dust collectors, all had partial barrels plus an additional 4 barrels waiting analysis.

(2) Container Storage Areas for CESQG, SQG or Generator:

1-55gal D001
1-5gal D002 (Phosphoric acid)
2-55gal D002/D007 (chromic acid)

(3) Tank Storage Areas for CESQG,SQG or Generator:

NA

(4) Interim Status/Permitted Container Storage Areas:

NA

(5) Interim Status/Permitted Tank Storage Areas:

NA

(6) Treatment, storage or disposal units such as surface impoundments, landfills, waste piles or incinerators:

NA

4. Status Identification:

A. **Generator Status**

(1) ___ Conditionally Exempt Small Quantity Generator (CESQG) - generates less than 100 kg/mo of non-acute hazardous waste or 1 kg/mo of acute hazardous waste. Complete Part III - 372.1(f)(6), 371.1(f)(7).

(2) ___ Small Quantity Generator (SQG) - generates more than 100 kg/mo but less than 1,000 kg/mo of non-acute hazardous, and accumulates no more than 6,000 kg of non-acute hazardous waste on-site. Complete Part IV - 372.2(a)(8)(iii).

(3) X Generator - generates more than 1,000 kg/mo of non-acute hazardous waste or generates more than 1 kg of acute hazardous waste in a calendar month. Complete Part V - 372.2(a)(8)(ii).

B. **Treatment, Storage or Disposal Facility (TSDF)**

(1) ___ Hazardous waste is stored greater than 90 days.*,**

(2) ___ Hazardous waste is received from off-site and not beneficially used, reused or legitimately recycled or stored.*

(3) ___ Hazardous waste is treated on-site in non-exempt units.*

(4) ___ Hazardous waste is disposed of on-site.*

* (If checked Complete Part VI and/or appropriate Appendices)
** (Do not complete for generators only that have exceeded the 90 day storage limit.)

C. **Transporter Status**

Yes ___ No X Transporter operates a 10-day transfer facility.

If Yes, Complete Part VII Permit No. _____

D. **Universal Waste Handler**

(1) X Small Quantity Handler - company accumulates no more than 5,000 kg total of universal waste at any time - Complete Appendix L.

(2) ___ Large Quantity Handler - Company accumulates 5,000 kg or more of universal waste at any time - Complete Appendix L.

(3) ___ Universal Waste Managed On-Site (list type and quantity).

Approx 120 4' fluorescent lamps labeled-dated @ time of inspection
Batteries lead acid none @ time
They use Clean Harbors.

E. **RCRA Air Emission Rule (Subpart AA/BB/CC)**

Is facility subject to RCRA Air Emission Rules (Subpart AA/BB/CC)?

X If Yes, Complete Appendix-X.

__ If No, Please explain _____

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 7M63 ELECTRODE

MSDS No.: METCO / 50-442
Revision No.: 1
Revision Date: December 11, 1992
Original Date of Issue: December 1, 1992

EMERGENCY CONTACT: CHEMTREC800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 7M63 ELECTRODE

Description: Electrode

Other Designation: N/A

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Flange Diameter:					
Electrolytic Copper *	100	7440-50-8	0.1 mg/m³ TWA fume 1 mg/m³ TWA dusts and mists, as Cu	0.2 mg/m³ TWA fume 1 mg/m³ TWA dusts and mists, as Cu	
Tip of the Electrode:					
Tungsten	99	7440-33-7	1 mg/m³ TWA Soluble 3 mg/m³ STEL Soluble 5 mg/m³ TWA Insoluble 10 mg/m³ STEL Insoluble	1 mg/m³ TWA Soluble 3 mg/m³ STEL Soluble 5 mg/m³ TWA Insoluble 10 mg/m³ STEL Insoluble	
Thorium Oxide *	1	1314-20-1	N/A	N/A	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point: W: 5900° C (6173 K), Cu: 2563° C (2836 K), Tip of the electrode: 5900° C (6173 K).

Vapor Pressure (mmHg): Not Volatile

Vapor Density (Air=1): Not Volatile

Solubility in water (%): Insoluble

Appearance and Odor: Flange Diameter: Gray to reddish surface, no odor. Tip of the electrode: Steel-grey to black metal, no odor.

Specific Gravity (H_2O = 1): Flange diameter: 12 - 17.3 g/cm³, Tip of the electrode: 19.3 g/cm³.

Melting Point: N/A

Percentage Volatiles: 0

Evaporation Rate: Not Volatile

pH of Solution: N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable Limits: LEL %: N/A UEL%: N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Thoriated tungsten powder/grinding dust may be a weak fire and explosion hazard depending on particle size and dispersion in air. Wear self-contained breathing apparatus. After ignition source is removed, the metal may continue to glow until complete oxidation has occurred. Cover all exposed surfaces, do not disturb until completely extinguished and allowed to cool.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): None known.

Hazardous Decomposition Products: Flange Diameter: Chemical solutions (especially Cu solutions) and vapor/dust (especially Cu).
Tip of the Electrode: WO_3 vapor at high temperatures (greater than or equal to 800° C, 1073 K), not toxic Thorium and Thorium Oxide fume weakly radioactive.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
ELECTROLYTIC COPPER:	Hazard by inhalation, skin and eye contact. Inhalation may cause irritation to the upper respiratory tract and the nasal mucous membranes. Contact may cause irritation to the eyes and discoloration of hair and skin. Target Organ(s): Respiratory tract, skin, eyes.
TUNGSTEN:	Hazard by inhalation and skin contact. Inhalation may cause respiratory abnormalities such as cough, dyspnea, wheezing, hypersensitivity, asthma and radiological changes. Skin contact may cause dermatitis, eczema. Target Organ(s): Lungs, skin.

SECTION VI HEALTH HAZARD DATA CONTINUED

THORIUM OXIDE: Hazard by inhalation, ingestion and contact. Thorium is a naturally occurring radioactive element. Thorium oxide has been proven to be a carcinogen due to its radioactive nature. Thorium emits alpha, beta and gamma radiation. Alpha and beta radioactive contamination of surfaces (skin, clothing, equipment, etc.) and the subsequent inhalation and/or ingestion of thorium may cause liver and kidney tumors, angiosarcoma, lymphoma, and other tumors of the blood forming organs. In thorium alloys and other materials containing a small proportion of thorium, external irradiation from gamma rays has no practical significance. Skin and eye contact may cause irritation. Skin contact may cause dermatitis. Thorium Oxide is found to be a carcinogen and is listed in the NTP Annual Report on Carcinogens. The NRC exposure limit for natural thorium in air is 2×10^{-12} microcuries per ml of air (9 micrograms per m^3). For further exposure limit and general information consult title 10 CFR, Parts 20 and 40.

Target Organ(s): Liver, kidney, blood forming organs, skin.

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Irritation.

Skin Contact: Possible dermatitis.

Inhalation: Irritation.

Ingestion: Possible irritation.

FIRST AID

Eye Contact: Flush eye with sufficient amounts of water. Consult a physician.

Skin Contact: Wash with soap and water. If person is contaminated with dust or dissolved products, remove from exposure and clean with water. Consult a physician.

Inhalation: Expose to fresh air. Consult a physician.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Avoid generating airborne dust. Do not sweep. Provide clean-up employees with respirators for dusty conditions (grinding dust). If possible avoid contact with grinding dust and smoke. Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with metallic dusts should be utilized. Wipe the area clean. Do not use water for clean up operations. Tungsten has a very high density and powder/dusts will settle quickly.

Waste Management and Disposal: Product waste and cleaning media should be stored and disposed of according to the appropriate local, state, and federal regulatory guidelines.

SECTION VIII SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: Goggles/safety glasses may be appropriate during phases of product handling.

Gloves: Protective gloves may be worn as necessary during phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the grinding process to protect the operator from exposure to dust/mists and fumes. Respirators may also be worn when product handling/cleaning operations generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin. Other protective equipment may be necessary depending upon local conditions.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash hands thoroughly after handling, before eating or smoking. Wash/shower at the end of the work shift. Do not shake clothing or other items to remove dust. Dust should be removed by a vacuum equipped with HEPA filtration prior to laundering. Vacuums appropriate for use with metallic dusts should be utilized. Store work clothes separate from other clothes. Generation of dust/mist during clean-up operations should be minimized by use of a vacuum equipped with HEPA filtration. Periodical medical examinations are recommended for individuals regularly exposed to dust and mist. Protect employees and the environment from contact with corrosion products, dust or gases and with chemical compounds of thorium.

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: Avoid ingestion, inhalation and excessive skin contact.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA
United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Nickel Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: JMacri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Metco Division Perkin-Elmer Corporation

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address): 1101 Prospect Avenue

City: Westbury

State: New York

Zip Code: 11590

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.

4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	47	00

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663	b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570	b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A	b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-02-0
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Nickel
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

			If produce or import:
3.1	Manufacture the toxic chemical:	a. ☐ Produce b. ☐ Import	c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	Process the toxic chemical:	a. ☐ As a reactant b. ☐ As a formulation component	c. ☒ As an article component d. ☒ Repackaging
3.3	Otherwise use the toxic chemical:	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Nickel Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name N/A				
5.3.2	Stream or Water Body Name N/A				
5.3.3	Stream or Water Body Name N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 poun
C = 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3 Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 poun

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Nickel Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 31,000	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 poun

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Chemical, Category, or Generic Name: Nickel Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	11900	31,000	31,000	31,000
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

TRANSMISSION REPORT

:ENV COMP & C FAC (SEP 17 '92 04:24PM

DATE	START TIME	[illegible]	[illegible] LOCATION	MODE	TIME	RESULTS	TOTAL PAGES	DEPT. CODE	FILE NO.
SEP 17	04:23PM		AT&T IN ENGS GOST		01'46"	OK	03	0569	

FAX TRANSMITTAL FROM:

METCO PERKIN-ELMER

ENVIRONMENTAL

COMPLIANCE AND CONTROL

1101 PROSPECT AVENUE

WESTBURY, NY 11590-0201

(516) 334-1300 MAIN NUMBER

(516) 338-2337 ENVIRONMENTAL COMPLIANCE AND CONTROL

(516) 338-2336 FAX NUMBER

DATE: SEPTEMBER 17, 1992

TO: COMPANY: BELL LABS

ATTENTION: MS. MARIANNE SANTARELLI

DEPT. /M.S.: FAX 908-582-7233

FROM: C.L. CONROY

2 PAGES TO FOLLOW

HAZARD NOTICE: This material is for the thermal spraying process. Consult the METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be injested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:

Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.

Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.

Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.

2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.

Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/ chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning stinging.

Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.

Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.

Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.

Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney disfunction. DYSFUNCTION

Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.

Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.

Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:

Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.

Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible auto ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1- 800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IS USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
** Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.	
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 36° F
UN1263 PAINT

WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

Please keep these facts in mind when reviewing the accuracy and completeness of this report:

1) The report lists only those Form R reports which have completed our internal data quality checks. If one or more of the forms submitted by your facility is not listed here, you will be receiving additional correspondence from us soon.

2) The data represented here may not reflect any voluntary revisions submitted by your facility, if those revisions were not processed by the time we produced this report.

3) We observe certain conventions in the way your facility is represented. For example, we always list the main company name first, followed by the division name. We also use standard abbreviations for certain words such as Corporation (Corp.) and Highway (Hwy.). Please correct this information only if the actual data are incorrect.

4) Releases, off-site transfers, and other waste stream quantities are entered to the nearest pound.

If you have any questions about the information on this report, please call the EPCRA Reporting Center:

(703) 816-4445

Indicate that you are calling about the 'TRI 100% Industry Review'. You will be referred to a Reporting Center staff member who can answer your questions.

Finally, we would like to suggest that you consider using EPA's magnetic media Automated Form R (AFR) reporting software package for submitting your reports in the future. AFR reporting by a facility allows EPA to enter your data exactly as you provide it, and reduces if not eliminates, EPA data processing errors. AFR software, available from EPA, will be sent to you along with your next reporting package, free of charge. We think that reporting on diskette is easier and more cost effective, both for facilities and the government, and that it helps to ensure a high standard of quality.

Thank you for your efforts to make Toxic Release Inventory data as accurate as possible.

_____

Steven D. Newburg-Rinn, Chief
Toxic Release Inventory Information
Management Branch (7407)
Information Management Division
Office of Pollution Prevention and Toxics
Office of Prevention, Pesticides
and Toxic Substances
U.S. Environmental Protection Agency

SULZER METCO

February 25, 1998

Certified Mail # P 341 833 576

Sulzer Metco (Westbury) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone:(516) 334-1300
Fax: (516) 338-2477

Fire Chief
Westbury Fire Department
Maple Avenue
Westbury, New York 11590

Subject: SARA TITLE III - Tier II Report

Dear Sir / Madam:

Enclosed please find the 1997 reporting year SARA TITLE III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

If you have any questions or comments please call me at the number listed below.

Thank you.

Laurence F. Miles
Facilities Department
Phone #: (516) 338-2374
FAX #: (516) 338-2336

Enclosure

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY
ID #:
Date Received:

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Container Type / Temperature / Pressure	Storage Locations	Optional
CAS 7429905 Trade Secret ☐ Chem. Name: Aluminum Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories Warehouse Warehouse	☐
CAS 1344281 Trade Secret ☐ Chem. Name: Aluminum Oxide Check all that apply: Pure ☐, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories Warehouse Warehouse	☐
CAS 7439896 Trade Secret ☐ Chem. Name: Iron Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 D 1 4	Engineering Laboratories, Warehouse Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact
Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure ☐ Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name: Chromium Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐
CAS 1314 23 4 Trade Secret ☐ Chem. Name: Zirconium Oxide Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) ☐ Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 Engineering Laboratories, Warehouse D 1 4 Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0339

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact
Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safety
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Container Type / Temperature / Pressure	Storage Locations	Optional
CAS 26099-71-8 Trade Secret ☐ Chem. Name: Polyester "POB" Check all that apply: Pure [X] Mix [X] Solid [X] Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity [X] Immediate (acute) [X] Delayed (chronic)	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 D 1 4	Engineering Laboratories, Warehouse Warehouse	☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):			☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):			☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC

Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 7440-02-0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type / Temperature / Pressure / Storage Locations: D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 7440-47-3 Trade Secret ☐ Chem. Name: Chromium Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐
CAS 7440-48-4 Trade Secret ☐ Chem. Name: Cobalt Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	D 1 4 Warehouse, Production Floor N 1 4 Production Floor R 1 4 Production Floor, Hardened Steel Hoppers E 1 4 Warehouse, Production Floor I 1 4 Warehouse, Production Floor	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact

Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Container Type	Temperature	Pressure	Optional
CAS 7429905 Trade Secret ☐ Chem. Name: Aluminum Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Warehouse, Production Floor Production Floor Production Floor, Hardened Steel Hoppers Warehouse, Production Floor Warehouse, Production Floor	D 1 4 N 1 4 R 1 4 E 1 4 I 1 4			☐
CAS 1344281 Trade Secret ☐ Chem. Name: Aluminum Oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Warehouse, Production Floor Production Floor Production Floor, Hardened Steel Hoppers Warehouse, Production Floor Warehouse, Production Floor	D 1 4 N 1 4 R 1 4 E 1 4 I 1 4			☐
CAS 1314234 Trade Secret ☐ Chem. Name: Zirconium Oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) ☐ Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Warehouse, Production Floor Production Floor Production Floor, Hardened Steel Hoppers Warehouse, Production Floor Waerhouse, Production Floor	D 1 4 N 1 4 R 1 4 E 1 4 I 1 4			☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc.
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: Laurence F. Miles Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westubury, NY 11590

Emergency Contact
Name: Laurence F. Miles Title: Manager, Facilities
Phone: (516) 334-1300 ext. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Michael S. Lydon Title: Environment, Health & Safet
Phone: (516) 334-1300 ext. 2337 24 Hr. Phone: (800) 424-9300 CHEMTREC

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 97

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Container Type / Temperature / Pressure	Storage Locations	Optional
CAS 26099-71-8 Trade Secret ☐ Chem. Name: Polyester "POB" Homopolymer Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 N 1 4 R 1 4 E 1 4 I 1 4	Warehouse, Production Floor Production Floor Production Floor, Hardened Steel Hoppers Warehouse, Production Floor Warehouse, Production Floor	☐
CAS 13038-38-9 Trade Secret ☐ Chem. Name: Chromium oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 N 1 4 R 1 4 E 1 4 I 1 4	Warehouse, Production Floor Production Floor Production Floor, Hardened Steel Hoppers Warehouse, Production Floor Warehouse, Production Floor	☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐, Mix ☐, Solid ☐, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)			☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Laurence F. Miles Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

02/25/98
Date signed

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, 4a, and 4b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write *"Return Receipt Requested"* on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
Fire Chief
Westbury Fire Department
Maple Avenue
Westbury, NY 11590

4a. Article Number
P 341 833 576

4b. Service Type
☐ Registered ☑ Certified
☐ Express Mail ☐ Insured
☐ Return Receipt for Merchandise ☐ COD

7. Date of Delivery

5. Received By: *(Print Name)*

8. Addressee's Address *(Only if requested and fee is paid)*

6. Signature: *(Addressee or Agent)*
X

PS Form **3811**, December 1994 Domestic Return Receipt

Thank you for using Return Receipt Service.

P 341 833 576

US Postal Service
Receipt for Certified Mail
No Insurance Coverage Provided.
Do not use for International Mail (See reverse)

Sent to
Fire Chief, Westbury Fire Dpt.
Street & Number
~~Westbury~~ Maple Ave.
Post Office, State, & ZIP Code
Westbury, NY 11590

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, April 1995

Fold at line over top of envelope to the right of the return address

CERTIFIED MAIL

P 341 833 576

P2SUL004986

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300
Fax: (516) 338-2488

July 31, 1995

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Subject: Toxic Chemical Release Inventory
Reporting Form R

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our Prospect Avenue and Miller Place facilities.

Please note that as of September 30, 1994, the three properties on Long Island owned by the Perkin-Elmer Corporation, doing business as the Metco division of Perkin-Elmer, were sold by Perkin-Elmer to Sulzer Metco (US), Inc., a Delaware Corporation having a principal place of business at the Prospect Avenue facility. We hope that our delayed reporting has not caused any inconvenience.

Please call me if you have any questions or require clarification.

Very truly yours,

Joseph D. Reardon, Ph.D.
Global Quality
Phone: (516) 338-2316
FAX: (516) 338-2336

JR/clc
Enclosure

c: Mario H. Kyd, Sulzer Metco
Daniel Moraschetti, Sulzer Metco
Constance L. Conroy, Sulzer Metco

METCO AMDRY

U.S. Environmental Protection Agency
Office of Prevention, Pesticides and Toxic Substances
Office of Pollution Prevention and Toxics
Information Management Division

JOSEPH D. REARDON
SULZER METCO INC.
220 MILLER PL.
HICKSVILLE, NY 11801

11/15/95

TRI ID #: 11801-PRKNL-220MI
Reporting Year: 1994

TOXIC RELEASE INVENTORY (TRI)

RELEASE VALUE REPORT

The attached reports list the chemical identities and corresponding release values for your Form R reports.

EPA wishes to represent accurately the data reported by your facility. We believe our data entry is of excellent quality; however, as a final quality measure, we ask that you verify the release values listed on this report against your own Form R records. If the data reported do not match those on the Forms R you submitted, please let us know within 21 days of receipt of this report, by following these instructions:

- On the attached report, mark through the erroneous value and write the correct value next to it;
- Return the corrected report to:

  The EPCRA Reporting Center
  P.O. Box 3348
  Merrifield, VA 22116-3348
  Attn: TRI RVR

If you do not find any errors in the report, no further action is required. Please note:

1) The report lists only those Form R reports which have completed our internal data quality checks. If any reports or revisions submitted by your facility are not listed, you will be receiving additional correspondence from us.

2) We observe certain conventions in the way your facility identification information is represented. For example, we list the main company name first, followed by the division name. We use standard abbreviations for certain words such as Corp. for Corporation and Hwy. for Highway. Please correct this type of information only if the actual data are incorrect.

3) Releases, off-site transfers, and other waste stream quantities are entered to the nearest pound. Thus amounts smaller than 0.5 will appear as 0.

Please do not use the reports to make changes to release values or any other data you reported incorrectly. If your original submission contains information you now believe to be incorrect, please resubmit a complete Form R with the corrected information. Follow the voluntary revision guidelines outlined in the TRI Reporting Form R and Instructions. If you wish to make the required corrections on magnetic media, please resubmit ONLY for the chemical being corrected. Within 21 days, send the revised complete Form R and a copy of this notice to the address above, 'Attn: Revision'. You must also send a copy of your corrected Form R to the same State organization to which you sent a copy of your original submission. EPA recommends that Government-Owned Contractor-Operated (GOCO) facilities send copies of their corrections to their associated Federal facilities.

If you have any questions about the information on this report, please call the Emergency Planning and Community Right-to-Know (EPCRA) Reporting Center at:

(703) 816-4445

Tell the operator that you are calling about the TRI RVR.

For a copy of the TRI Reporting Instructions, call the EPCRA Hotline at:

(800) 535-0202 (toll free, outside the D.C. Metro area)
(800) 553-7682 (TDD #)
(703) 412-9877 (D.C. Metro and Northern Virginia areas)

Thank you for assisting in our efforts to make the TRI data as accurate as possible.

/s/ Ruby N. Boyd

Ruby N. Boyd, Acting Chief
Toxic Release Inventory
Information Management Branch (7407)

Attachment(s)

TRI FACILITY ID: 11801-PRKNL-220MI
DATE: 11/15/95

SULZER METCO INC.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-94-08533990-9-NY	ALUMINUM (FUME OR DUST)	007429-90-5

6.1.A	Total quantity transferred to POTWs	NA
5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	1 - 10
5.3.A	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI-JO METAL CORP.	2,800
6.2.02	Transfer to other off-site	NA
8.1.A	Quantity released	2
8.1.B	Quantity released	2
8.1.C	quantity released	2
8.1.D	Quantity released	2
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	6,100
8.5.B	Quantity recycled off-site	2,800
8.5.C	Quantity recycled off-site	3,000
8.5.D	Quantity recycled off-site	3,000
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.90

TRI FACILITY ID: 11801-PRKNL-220MI
DATE: 11/15/95

SULZER METCO INC.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-94-08533991-1-NY	CHROMIUM	007440-47-3

6.1.A	Total quantity transferred to POTWs	NA
5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	1 - 10
5.3.A	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI-JO METAL CORP.	3,900
6.2.02	Transfer to other off-site	NA
8.1.A	Quantity released	1
8.1.B	Quantity released	1
8.1.C	quantity released	1
8.1.D	Quantity released	1
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	8,500
8.5.B	Quantity recycled off-site	3,900
8.5.C	Quantity recycled off-site	4,000
8.5.D	Quantity recycled off-site	4,000
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.90

TRI FACILITY ID: 11801-PRKNL-220MI
DATE: 11/15/95

SULZER METCO INC.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-94-08533992-3-NY	COBALT	007440-48-4

6.1.A	Total quantity transferred to POTWs	NA
5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	1 - 10
5.3.A	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI-JO METAL CORP.	11 - 499
6.2.02	Transfer to other off-site	NA
8.1.A	Quantity released	3
8.1.B	Quantity released	3
8.1.C	quantity released	3
8.1.D	Quantity released	3
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	790
8.5.B	Quantity recycled off-site	360
8.5.C	Quantity recycled off-site	400
8.5.D	Quantity recycled off-site	400
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.90

TRI FACILITY ID: 11801-PRKNL-220MI
DATE: 11/15/95

SULZER METCO INC.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-94-08533993-5-NY	NICKEL	007440-02-0

6.1.A	Total quantity transferred to POTWs	NA
5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	1 - 10
5.3.A	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI-JO METAL CORP.	19,000
6.2.02	Transfer to other off-site	NA
8.1.A	Quantity released	5
8.1.B	Quantity released	5
8.1.C	quantity released	5
8.1.D	Quantity released	5
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	31,000
8.5.B	Quantity recycled off-site	19,000
8.5.C	Quantity recycled off-site	20,000
8.5.D	Quantity recycled off-site	20,000
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.90

DUR - ALL ENVIRONMENTAL INC.
~~44-21 30th Ave.~~ 30-51 14TH ST
Long Island City NY 11102
(718) 278-8945

LETTER OF TRANSMITTAL

DATE 9-30-97
JOB NO
ATTENT ON MICHAEL LYDON
RE ASBESTOS REMOVAL PO # 209999

TO
SULZER METCO
1101 PROSPECT AVE
WESTBURY

GENTLEMEN

WE ARE SENDING YOU ☒ Attached ☐ Under separate cover via _____ the following items:

☐ Shop drawings ☐ Prints ☐ Plans ☐ Samples ☐ Specifications

☐ Copy of letter ☐ Change order ☐ _____

COPIES	DATE	NO	DESCRIPTION
		1	REQUISITION FOR FINAL PAYMENT
		2	NYS CONTRACTORS LICENSE / NYS NOTIFICATION
		3	CERTIFICATE OF INSURANCE
		4	AIR MONITORING REPORT
		5	OSHA AIR MONITORING REPORT
		6	WASTE MANIFEST
		7	WASTE HAULERS LICENSE
		8	LANDFILL PERMIT

THESE ARE TRANSMITTED as checked below:

☒ For approval ☐ Approved as submitted ☐ Resubmit _____ copies for approval

☒ For your use ☐ Approved as noted ☐ Submit _____ copies for distribution

☐ As requested ☐ Returned for corrections ☐ Return _____ corrected prints

☐ For review and comment ☐ _____

☐ FOR BIDS DUE _____ 19 _____ ☐ PRINTS RETURNED AFTER LOAN TO US.

REMARKS _____

COPY TO _____

SIGNED: RICHIE

STATE OF NEW YORK - DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH
License and Certificate Unit
ONE MAIN STREET
BROOKLYN, NY 11201

ASBESTOS HANDLING LICENSE

LICENSE NUMBER: AC-97-0015
DATE OF ISSUE: 01-03-97
EXPIRATION DATE: 12-31-97

Contractor: DUR-ALL ENVIRONMENTAL, INC.

Address: 30-51 14TH STREET
LONG ISLAND CITY, NY 11102

Duly Authorized Representative: RICHARD P. MUCELLI, PRES.

This license has been issued in accordance with applicable provisions of Article 30 of the Labor Law of New York State and of the New York State Codes, Rules and Regulations (12 NYCRR Part 56). It is subject to suspension or revocation for a (1) serious violation of state, federal or local laws with regard to the conduct of an asbestos project, or (2) demonstrated lack of responsibility in the conduct of any job involving asbestos or asbestos material.

This license is valid only for the contractor named above and this license or a photocopy must be prominently displayed at the asbestos project worksite. The licensee verifies that all persons employed by the licensee on an asbestos project in New York State have been issued an Asbestos Certificate, appropriate for the type of work they perform, by the New York State Department of Labor.

Maria L. Colavito

Maria L. Colavito, Director
FOR THE COMMISSIONER OF LABOR

DOSH-432 (2-91)

STATE OF NEW YORK - DEPARTMENT OF LABOR
DIVISION OF SAFETY AND HEALTH
ASBESTOS CONTROL BUREAU
State Office Campus
Building 12 - Room 454
Albany, N.Y. 12240

ASBESTOS PROJECT NOTIFICATION

AMENDED NOTIFICATION
a. ☐ Postponed ☐ Cancelled
b. New Start Date _____
c. New End Date _____
d. Submitted By

Refer to Information Sheet or Code Rule 56 for Time Deadlines

EMERGENCY NOTIFICATION REQUESTED
a. Date of Request | b. Time of Day
c. Name of Person Granting Request

WITHIN TWO WORKING DAYS OF T- EMERGENCY APPROVAL, you must subr duplicate copies of this form with t appropriate fee to the Asbestos Cont Bureau at the address shown.

1. NAME AND ADDRESS OF CONTRACTOR
Dur-All Environmental, Inc.
30-51 14th Street
LIC, NY 11102

2. FEDERAL EMPLOYER IDENTIFICATION NO. 13-3494090
3. ASBESTOS LICENSE NO. AC-97-0015
4. MAILING ADDRESS, (if different than listed in ITEM 1)
5. NAME AND ADDRESS OF PARTY FOR WHOM THE PROJECT IS BEING PERFORMED
Sulzer Metco
1101 Prospect Ave., Westbury, NY

6. a. NAME AND TITLE OF DULY AUTHORIZED REPRESENTATIVE
Richard P. Mucelli, President
b. TELEPHONE NO. (718-278-8945

PROJECT INFORMATION

PROVIDE ALL INFORMATION REQUESTED FOR THE BUILDING/SITE AT WHICH THE ASBESTOS PROJECT WILL BE CONDUCTED.

7. ADDRESS (INCLUDE NAME OF BUILDING, ROOM NO., CITY, TOWN, VILLAGE)
1101 Prospect Ave., Westbury
8. NAME OF BUILDING OWNER
Sulzer Metco

9. COUNTY
Nassau
10. CURRENT USE OF BUILDING
Industrial
11. AGE OF BUILDING
over 25 yrs.
12. TOTAL CONTRACT AMOUNT
TBA

13. PROJECT DATE(S) - List phased project dates in **REMARKS** (Item 28)
a. ACTUAL STARTING DATE
9/13/97
b. PROJECTED ENDING DATE
9/14/97

14. TYPE OF ASBESTOS WORK (*CHECK ALL WHICH APPLY*)
☒ Pipe Related
☐ Sprayed on Insulation
☐ Roofing/Flashing
☒ Vessel Covering
☐ Siding
☐ VAT
☐ Demolition
☐ Other (Specify) _____

15. WILL WORK ON THE PROJECT BE CONDUCTED UNDER A VARIANCE? If yes, specify the type of variance:
☐ APPLICABLE VARIANCE - NO.: _____
☐ INDIVIDUAL VARIANCE - PETITION NO.: _____

16. WILL SUBCONTRACTORS BE USED ON THE PROJECT? ☒ NO ☐ YES
If yes, please list name and federal employer identification number of each subcontractor in **REMARKS** (Item 28) on reverse of form.

17. ASBESTOS PROCEDURE(S) TO BE USED (*CHECK ALL WHICH APPLY*)
☒ REMOVAL
☐ ENCLOSURE
☐ ENCAPSULATION
☐ OTHER (Specify) _____
☐ DEMOLITION
☐ DISTURBANCE
☐ HANDLING

18. TYPE OF ASBESTOS MATERIAL
☒ FRIABLE
☐ NON-FRIABLE

19. AMOUNT OF ASBESTOS INVOLVED - *CHECK ALL APPLICABLE BOX(ES)*

LINEAR FEET	SQUARE FEET
☐ Less than 260 _____ (Specify)	☐ Less than 160 _____ (Specify)
☒ ($100) 260-429	☒ ($100) 160-259
☐ ($200) 430-824	☒ ($200) 260-499
☐ ($500) 825-1649	☐ ($500) 500-999
☐ ($1000) 1650 OR MORE	☐ ($1000) 1000 OR MORE
_____ (Specify)	_____ (Specify)

20. METHODS TO BE USED AT PROJECT SITE TO PREVENT ASBESTOS DISSEMINATION (INCLUDING TYPE OF EQUIPMENT AND VENTILATION SYSTEMS USED)
Air-tight containment Barriers, differential pressurization, decontamination facilities and amended water.

21. I verify that the information specified on this notification is true and accurate and that the project will be conducted in compliance with the requirements of Code Rule 56.

a. Signature of the Contractor or Duly Authorized Representative — *b. Date* 9-2-97

PREPARE THIS APPLICATION IN TRIPLICATE AND SUBMIT:

- An original and one copy (with an ink signature on both copies) to the New York State Department of Labor, Division of Safety and Health, Asbestos Control Bureau, State Office Campus, Building 12-Room 454, Albany, NY 12240; *retain one copy for your records.*
- A check or money order, made payable to the Commissioner of Labor, for the fee due based on the project size as shown in Item 19.
This notification must be submitted at least 10 days prior to the starting date of the asbestos project.

ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY) 9/9/97

PRODUCER

UES, INCORPORATED
17 BATTERY PLACE
NEW YORK, NY 10004

CODE SUB-CODE

INSURED

DUR-ALL ENVIRONMENTAL, INC.
30-51 14TH STREET
LIC, NY 11102

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW

COMPANIES AFFORDING COVERAGE

COMPANY LETTER A SAVOY REINSURANCE

COMPANY LETTER B CNA INSURANCE COMPANY

COMPANY LETTER C

COMPANY LETTER D

COMPANY LETTER E

COVERAGES

THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED, NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	ALL LIMITS IN THOUSANDS	
A	GENERAL LIABILITY				GENERAL AGGREGATE	$ 1,000
	X COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OPS AGGREGATE	$ 1,000
	CLAIMS MADE X OCCUR.	SRI 8904147	11/14/96	11/14/97	PERSONAL & ADVERTISING INJURY	$ 1,000
	OWNER'S & CONTRACTOR'S PROT.				EACH OCCURRENCE	$ 1,000
					FIRE DAMAGE (Any one fire)	$ 50
					MEDICAL EXPENSE (Any one person)	$ 5
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	$
	ANY AUTO				BODILY INJURY (Per person)	$
	ALL OWNED AUTOS				BODILY INJURY (Per accident)	$
	SCHEDULED AUTOS				PROPERTY DAMAGE	$
	HIRED AUTOS					
	NON-OWNED AUTOS					
	GARAGE LIABILITY					
	EXCESS LIABILITY				EACH OCCURRENCE $	AGGREGATE $
	OTHER THAN UMBRELLA FORM					
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY	
B		WC122163536	11/14/96	11/14/97	$ 100	(EACH ACCIDENT)
					$ 500	(DISEASE—POLICY LIMIT)
					$ 100	(DISEASE—EACH EMPLOYEE)
	OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/RESTRICTIONS/SPECIAL ITEMS

PROJECT LOCATION: 1101 PROSOECT AVENUE, WESTBURY, NEW YORK.

CERTIFICATE HOLDER

SULZER METCO
1101 PROSPECT AVENUE
WESTBURY, NY 11590

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 10 DAYS WRITTEN NOTICE TO THE CERTIFICATE HOLDER NAMED TO THE LEFT, BUT FAILURE TO MAIL SUCH NOTICE SHALL IMPOSE NO OBLIGATION OR LIABILITY OF ANY KIND UPON THE COMPANY, ITS AGENTS OR REPRESENTATIVES.

AUTHORIZED REPRESENTATIVE

Tony D'Angelo

©ACORD CORPORATION 1988

IMPERIAL AIR MONITORING CORP.
84-16F Astoria Boulevard
Jackson Heights, NY 11370

Telephone 718-278-9655

Project No. 1667

REPORT OF ASBESTOS AIR MONITORING
AT

1101 PROSPECT AVENUE
WESTBURY, NEW YORK

SEPTEMBER 15, 1997

Project No. 1667

REPORT OF AIR MONITORING

DATE OF REPORT: September 15, 1997

SUBJECT: Asbestos Air Monitoring at:
Sulzer Metco
1101 Prospect Avenue
Westbury, New York

CONTRACTOR: Dur-All Environmental, Inc.
30-51 14th Street
Long Island City, NY 11102

DATE OF MONITORING: September 13 & 14, 1997

SCOPE OF WORK

Imperial Air Monitoring Corp. monitors all phases of asbestos abatement projects, this monitoring service includes:

1. Conducting air monitoring for all areas of encapsulation/ repair in the following schedule:

   Pre, During and Final air sampling of work areas to confirm compliance levels for ACM removal projects.

SAMPLING PROCEDURES

The sampling procedure followed during the monitoring conforms to that prescribed by the National Institute for Occupational Safety and Health (NIOSH) Method 7400. All samples were collected on a fully exposed, 25 millimeter cellulose esther filter having a pore size of 0.8 microns.

The filter cassette was attached to a stand at a height approximating the breathing zone of any person liable to be present during the operation. Samples are taken as the typical room air concentration.

ANALYTICAL PROCEDURES

The method of sample analysis was performed in accordance with the National Institute of Occupational Safety and Health (NIOSH) Method 7400.

This method employs a permanent slide mount of the sample using Acetone/Triacetin Hot Block procedures. After the sample is mounted, the slide goes under a phase contrast microscope or PCM for analysis. After the slide is analyzed or fiber counted, a formula calculation is applied to determine the fiber per cubic centimeter for that particular slide or sample. This method does not differentiate between asbestos and other fibers.

Project No. 1667

LABORATORY QUALIFICATIONS

The laboratory analysis was performed by:

Public Service Testing Laboratories, Inc.
37-31 57th Street
Woodside, New York 11377

Public Service Testing is a New York State Environmental Interim Approved Laboratory (ELAP #10921) for environmental analysis/air and emissions, and is a participant in the National Institute of Occupational Safety and Health (NIOSH) Proficiency Analytical Testing (PAT) Program. All samples undergo a quality assurance program regulated by the State of New York.

RESULTS

This project was monitored as specified in the Scope of Work. The schedule of monitoring was performed as follows:

Location	Activity	Results
Boiler Room - S	Pre	0.004 f/cc
Boiler Room - E	Pre	0.004 f/cc
Boiler Room Hall	Pre	<0.004 f/cc
Boiler Room - W	Pre	0.004 f/cc
Boiler Room - N	Pre	0.004 f/cc
Outside Decon	During	<0.004 f/cc
Inside Clean Rm	During	<0.004 f/cc
5' from Neg Air Exh	During	<0.004 f/cc
Boiler Room - S	Final	<0.004 f/cc
Boiler Room - E	Final	<0.004 f/cc
Boiler Room Hall	Final	<0.004 f/cc
Boiler Room - W	Final	<0.004 f/cc
Boiler Room - N	Final	<0.004 f/cc
Field Service Area	During/Final	<0.004 f/cc
Shipping Department	During/Final	<0.004 f/cc
Computer Room Hall	During/Final	<0.004 f/cc

The results of the laboratory analysis of the air samples collected for finals were below the New York State's Division of Sefety and Health's Clearance Level of 0.01 f/cc.

CERTIFICATIONS AND SIGNATURES

We certify that this report is a true and authentic report of results obtained from our monitoring.

Respectfully submitted,

J. Reynaldo
Imperial Air Monitoring Corp.

IMPERIAL AIR MONITORING CORP.
84-16F Astoria Boulevard
Jackson Heights, NY 11370

Telephone 718-278-9655

Dur-All Environmental, Inc.
30-51 14th Street
LIC, NY 11102

Date of monitoring: 9/13/97
Project No.: 1668
Project Name: OSHA Monitoring
1101 Prospect Ave.
Westbury, NY

REPORT OF AIR MONITORING

Name ID No.	Description	Results - 8hr TWA
Vincente Riera 020-69-9050	Prep/Gross Removal/Cleanings Glovebag Operations	0.008 f/cc
Miguel Palomeque 051-64-9148	Prep/Gross Removal/Cleanings	0.012 f/cc
Angel Asmal 072-74-7528	Prep/Gross Removal/Cleanings Glovebag Operations	0.007 f/cc
Tarquino Carpio 060-74-3019	Prep/Gross Removal/Cleanings	0.010 f/cc
Humberto Cusco 318-43-9824	Prep/Gross Removal/Cleanings	0.007 f/cc

All samples were analyzed using Phase Contrast Microscopy (PCM) analysis, in accordance with the NIOSH 7400 Method.

Personnal monitored represented 20% of workforce.
Respiratory protection donned during:

Prep	-	Half Face Neg. Pressure
Gross Removal	-	Full Face PAPR
Cleanings	-	Full Face PAPR
Glovebag Oper.	-	Half Face Neg. Pressure

The results of the analysis of the personal air samples collected below the OSHA Action Level of 0.1 f/cc.

J. Reynaldo
Imperial Air Monitoring Corp

NYDEC 1A-371

NYDCA 483056

Asbestos Transportation Co., Inc.

P.O. BOX 1044
HAMPTON BAYS, N.Y. 11946

TOLL FREE
1-800-755-ØATC
"EMERGENCY NUMBER"

PHONE 516-924-5050
FAX 516-924-5085

Waste Manifest #	Job #	Floor or Location	Cust #
15862			117

1. Work Site Name and Mailing Address	Owner's Name, Address, Phone Number
1101 PROSPECT AVE WESTBURY, N.Y.	SULZER METCO 1101 PROSPECT AVE WESTBURY, N.Y.
Contractor's Name, Address	**Waste Disposal Site**
DURALL 39-51 14TH ST LIC, NY 11106	SOUTHERN ALLEGHENIES DISPOSAL SVCS RD 3 BOX 310 VALLEYVIEW DRIVE BOLLEGSPPLE, PA 15935

Name and Address of Responsible NESHAPS Agency — Other ☐ _____

U.S. EPA 26 FEDERAL PLAZA, NEW YORK, NY

Description of Materials	Bags -	Cubic Yds. -
☑ **RQ Waste Asbestos, Class 9, NA2212, PGIII** ☐ **Other** _____		15
☐ **RQ Waste White Asbestos, Class 9, UN2590, PGIII**	Drums or Tons -	OTHER -

Special Handling Instructions and Additional Information

OPERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked and labeled and are in all respects in proper condition for transport by highway according to applicable international government regulations.

Printed/Typed Name	Title	Signature	Date (M/DD/YY)
RICHARD MUCCIO	SUPV	X [signature]	9/17/97

Transporter 1 (Acknowledgement of Receipt of Materials)

Company Name and Address		Telephone No.
ASBESTOS TRANSPORTATION CO., INC. **P.O. BOX 1044** **HAMPTON BAYS, NY 11946**	Signature: [signature]	**516-924-5050**
	Printed Name: Chris Pesce	Date
	Title: **DRIVER**	9/17/97

Transporter 2 (Acknowledgement of Receipt of Materials)

Company Name and Address		Telephone No.
ASBESTOS TRANSPORTATION CO., INC. **P.O. BOX 1044** **HAMPTON BAYS, NY 11946**	Signature: [signature]	**516-924-5050**
	Printed Name: Keith Miller	Date
	Title: **DRIVER**	9/23/97

Discrepancy Indication Space:

Waste Disposal Site Owner or Operator's Certification (Receipt of Above Waste Accepted)

Company Name and Address		Telephone No.
SOUTHERN ALLEGHENIES DISP. SVCS.	Signature: [signature]	
	Printed Name: [signature]	Date
	Title:	9-24-97

ATC
516-924-5050
Fax 924-5085
NYDEC #1A-371
EPA #NY0000148163

U.S. E.P.A. ID # NY0000148163

-NYS DEC 364 Waste Transporter Permit
Permit #1A371
Expiration date: Automatic renewal until further notice
(see attached D.E.C. correspondence)

-Conneticut Hazardous waste transporter permit
Permit # CT-HW-664
Expiration date: June 30, 2000

-Pennsylvania Hazardous waste transporter permit
Permit # PA-AHS243
Expiration date: April 30, 1999

-Delaware Solid waste transporter permit
Permit # DE-SW-604
Expiration date: December 5, 1997

-Falls Township Pa Waste Conveyance Permit
Permit # 2355-2358
Expiration date: March 31, 1998

D.O.T. Haz-mat registration renewal submitted

New York State Department of Environmental Conservation
Division of Compliance Services - Room 538
50 Wolf Road, Albany, New York 12233-1750
Telephone: (518) 457-7424
Fax: (518) 457-5965

Michael D. Zagata
Commissioner

401

NY0000146163 14371 August 2, 1996
ASBESTOS TRANSPORTATION CO D/B
PO BOX 1044
HAMPTON BAYS NY 11946

Dear Waste Transporter:

The New York State Department of Environmental Conservation has instituted an interim restructuring of the waste transporter permitting program. These are temporary measures designed to provide immediate relief to the industry and are based, in large part, on recommendations from the industry. The requirements of the interim program are effective as of July 31, 1996 and remain in effect until further notice.

The requirements are as follows:

1. ALL CURRENTLY VALID WASTE TRANSPORTER PERMITS ARE AUTOMATICALLY EXTENDED UNTIL FURTHER NOTICE. By virtue of this letter, all permits are considered to be automatically renewed at the end of the current permit term. Until further notice transporters do not need to submit an application for renewal. Instead, carry a copy of the most recent permit and a copy of this letter in each vehicle transporting waste.

2. AT THIS TIME, TRANSPORTERS DO NOT NEED TO MODIFY A PERMIT TO ADD SPECIFIC WASTE RECEIVING FACILITIES. Transporters may take waste to any authorized facility. It is the responsibility of the transporter to ensure that the waste delivered conforms to the operating requirements of the receiving facility and to maintain records of the amount of each waste type delivered to each facility. Transporters no longer need to modify the existing waste transporter permit to add specific receiving facilities or waste types.

3. TRANSPORTERS MUST CONTINUE TO NOTIFY THE DEPARTMENT OF VEHICLE CHANGES. Transporters must continue to submit written application which will serve as notice of vehicle additions or deletions. However, the transporters no longer need to wait until they receive an amended permit before using added vehicles. Instead, carry in each new vehicle a copy of the written request submitted to the Department. This will serve as temporary authorization to carry waste in the vehicles listed.

4. TRANSPORTERS MUST CONTINUE TO PAY REGULATORY FEES.. Transporters will continue to be billed for the regulatory fee based on the number of vehicles included on the permit. Providing the Department with up-to-date notification regarding the vehicles used will help ensure that billing is accurate. For this reason, notification of deletions is as important as notification of additions.

5. **TRANSPORTERS ARE OBLIGATED TO MEET OPERATING STANDARDS AS REQUIRED BY NEW YORK STATE LAW AND REGULATION.** Transporters must meet regulatory requirements for surety, manifesting, placarding and annual reporting as required by 6 NYCRR Part 364 and 381. A summary of the primary requirements is appended to this letter for your convenience.

The Department has sought to balance environmental considerations with industry needs in designing these interim measures. We will be developing a permanent solution to reform the Waste Transporter Permit Program during the next six months, and welcome your suggestions. We expect that the permanent program will be implemented by April 1, 1997. The measures described above will remain in effect at least until then.

Please direct any correspondence to:

Division of Compliance Services
NYS Department of Environmental Conservation
50 Wolf Road, Rm. 538
Albany, New York 12233-1750
Telephone: (518)457-2224

Thank you for your continued patience and cooperation.

Sincerely,

Jeffrey J. Sama, Director
Division of Compliance Services

DISTRIBUTION:
R. Randles
B. Barrell
G. Caito
Lt. J. Haskins
N.G. Kaul
J. Willson
N. Nosenchuck
S. Ansley
J. Grossman
A. DeBarbieri
Regional Permit Administrators
Regional Engineers
Regional Captains

47-20-3 (2/95)—26x

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF REGULATORY AFFAIRS / BUREAU OF REGULATORY MANAGEMENT
50 WOLF ROAD, ALBANY, NEW YORK 12233-3750

WASTE TRANSPORTER PERMIT

Pursuant to 6 NYCRR Part 364 and Part 381 — No. of Additional Sheets Attached: 01

NYSDEC PERMIT NUMBER	EPA TRANSPORTER ID NUMBER	VEHICLE STATE & LICENSE NUMBER
1A-371	NY0000148163	SEE LIST OF VEHICLES

THIS IS TO CERTIFY THAT:

BUSINESS NAME
ASBESTOS TRANSPORTATION CO D/B/A ATC INC

MAILING ADDRESS
PO BOX 1044

CITY	COUNTY	STATE	ZIP CODE
HAMPTON BAYS	SUFFOLK	NY	11946

Having complied with the provisions of the Environmental Conservation Law Titles 3 and 15, of Article 27, is hereby authorized to engage in waste transporting within the State of New York in the manner described herein:

TYPE OF WASTE AND LOCATION OF TREATMENT, STORAGE OR DISPOSAL FACILITY:

TSDF # 1 INFORMATION	WASTE	WASTE DESCRIPTION
00004 PEKIN METRO LANDFILL 11916 TOWERLINE RD PEKIN IL 61554	N807	ASBESTOS WASTE

TSDF # 2 INFORMATION	WASTE	WASTE DESCRIPTION
00023 MOUNTAINVIEW SANITARY LAN ROUTE 1 BOX 502 FROSTBURG MD 21532	MD10	AUTHORIZED WASTE TO CHAMBERS/MOUNTAINVIEW

TSDF # 3 INFORMATION	WASTE	WASTE DESCRIPTION
NYD000632372 LAIDLAW ENVIRONMENTAL SER 4255 RESEARCH PKWY CLARENCE NY 14031	NY00 NY99	HAZ WASTE FACILITY IS AUTHORIZED TO ACCEPT NON-HAZ INDUSTRIAL WASTE FACILITY CAN ACCE

********** CONTINUED ON NEXT PAGE **********

THIS PERMIT WILL EXPIRE AT MIDNIGHT APRIL 30 19 97 and is subject to revocation at any time. This permit is not transferrable.

In witness whereof, the Department of Environmental Conservation has caused this permit to be executed on this 17 day of JUNE 19 96

By Margaret E. Kelly
New York State Department of Environmental Conservation Representative

NOTE: This Permit does not relieve the transporter of the responsibility of complying with any other applicable federal, state or local regulations. Please refer to warning notice on back of this Permit.

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
SOUTHWEST REGION - FIELD OPERATIONS
WASTE MANAGEMENT
400 Waterfront Drive
Pittsburgh, Pennsylvania 15222-4745
(412) 442-4000 (answers 24 hrs.)

December 1, 1993

CERTIFIED MAIL #P 375 831 805

Southern Alleghenies Disposal Service, Inc.
10700 Frankstown Road
Pittsburgh, PA 15235

Attention: Shawn Meenihan

RE: Southern Alleghenies Landfill
Conemaugh Township
Somerset County
ID #100081

Dear Mr. Meenihan:

Enclosed is a modification to Permit No. 100081 for the operation of your municipal waste landfill. It is issued in accordance with Article 5 of the Solid Waste Management Act (Act 97).

Compliance with the limitations and stipulations that have been set forth on your permit is mandatory. You have the right to appeal any limitation or stipulation as stated on your permit.

Any person aggrieved by this action may appeal, pursuant to Section 4 of the Environmental Hearing Board Act, 35 P.S. Section 7514, and the Administrative Agency Law, 2 Pa. C.S., Chapter 5A, to the Environmental Hearing Board, Second Floor, Market Street State Office Building, 400 Market Street, P.O. Box 8457, Harrisburg, PA 17105-8457, (717) 787-3483. TDD users may contact the Board through the Pennsylvania Relay Service, (800) 654-5984. Appeals must be filed with the Environmental Hearing Board within 30 days of receipt of written notice of this action unless the appropriate statute provides a different time period. Copies of the appeal form and the Board's rules of practice and procedure may be obtained from the Board. The appeal form and the Board's rules of practice and procedure are also available in braille or on audiotape from the Secretary to the Board at (717) 787-3483. This paragraph does not, in and of itself, create any right of appeal beyond that permitted by applicable statutes and decisional law.

If you have any questions concerning the enclosed permit and/or the requirements set forth by Act 97, please contact me at 412-442-4000.

Sincerely,

Anthony D. Orlando
Regional Manager
Waste Management
Southwest Region - Field Operations

ADO:DEE:jc

Enclosure

cc: Regional - w/enclosure
Chron - w/enclosure
Central - Division of Municipal/Residual Permits - w/enclosure
Conemaugh Township - w/enclosure - CERTIFIED MAIL #P-375 831 806
Somerset County - w/enclosure - CERTIFIED MAIL #P-375 831 807

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
WASTE MANAGEMENT

FORM NO. 13-A
MODIFICATION TO SOLID WASTE DISPOSAL AND/OR PROCESSING PERMIT

Under the provisions of Act 97, the Pennsylvania Solid Waste Management Act, the Act of July 7, 1980, P.L. 380, 35 P.S. §6018.101 et seq., Solid Waste Permit Number 100081 issued on April 18, 1990 to Southern Alleghenies Disposal Service, Inc., 10700 Frankstown Road, Pittsburgh, PA 15235 for the operation of the Southern Alleghenies Landfill located in Conemaugh Township, Somerset County is hereby modified as follows:

1. All non-friable asbestos containing waste accepted and disposed at the site shall be covered with a minimum of six inches of earthen cover material (or another material approved by the Department) by the end of each working day. Care shall be exercised to ensure that no drums or bags are ruptured during the covering operation.

2. Friable asbestos containing waste shall be covered immediately after deposition with at least 12 inches of nonasbestos containing cover material.

3. ACW shall not be stored on site unless within an enclosed vehicle for a time period approved by the Department. If for any reason it is not possible to cover the waste immediately, ACW shall not be disposed at the facility.

4. Unless amended by this permit modification, all design and operational requirements stipulated in Solid Waste Permit No. 100081 remain valid for this permit modification.

This modification shall be attached to the existing Solid Waste Permit described above and shall become a part thereof effective on December 1, 1993.

FOR THE DEPARTMENT OF ENVIRONMENTAL RESOURCES

ATTACHMENT I

Unless otherwise authorized by the Department, the following procedure shall be utilized at Southern Alleghenies Landfill for the disposal of asbestos containing waste(s) (ACW):

1. Prior to the disposal of ACW from any source Southern Alleghenies Disposal Services, Inc. shall receive a letter from the contractor or waste generator stating the source of the waste, type of the waste (friable or non-friable), method of packaging, and amount of waste. Unless otherwise stipulated by the Department, if the amount of ACW from a particular source for disposal at the landfill is less than 1,000 bags or drums, prior written approval from the Department for the ACW disposal is not necessary. However, the disposal facility shall submit a copy of the disposal request from the contractor or source within five (5) working days after receiving the request.

2. The disposal facility shall keep and maintain daily logs regarding the disposal of ACW. These logs shall contain at a minimum the following information for each shipment of ACW: date of each shipment of ACW received at Southern Alleghenies Landfill, source(s) of ACW and contractor(s) if applicable, transporter, method(s) of packaging, type(s) of ACW (friable or non-friable), and amount(s) for disposal (normally in bags or drums if friable or by weight or cubic yards if non-friable). These logs shall be made available for inspection by Department personnel or personnel from the Allegheny County Health Department. Copies of the logs shall be submitted to the Department on a monthly basis within five (5) days after the end of each month.

3. The ACW shall be transported to the landfill in a covered non-compaction vehicle.

4. The asbestos containing waste(s) (ACW) if it is friable, shall be placed in either multiple leak-proof plastic bags having a total thickness of 12 mils or placed in single/multiple leak-proof plastic bags having a total thickness of 6 mils and sealed in steel or heavy duty fiberboard drums. The friable ACW shall have been previously formed into a non-friable form, or alternatively treated with water before packaging. The containers shall be labeled "ASBESTOS" prior to being transported to the disposal facility. If the ACW is non-friable it does not require processing or special packaging (bagging), as long as the waste is not rendered friable at any stage.

5. If the non-friable ACW is transported through Allegheny County, the Allegheny County Health Department (ACHD) requires that the plastic bags which contain the ACW be sealed in steel or heavy-duty fiberboard drums for transportation purposes to the landfill. This requirement by the ACHD applies regardless of total bag thickness. However, if the total bag thickness is 12 mils or the bags can be removed from the drums at the disposal site and only the bags with the ACW buried. On the other hand, if the total bag thickness is 6 mils, Southern Alleghenies Disposal Services, Inc. shall comply with condition 6 below.

6. If the ACW has been placed in bags having a total thickness of 6 mils then sealed in drums, the bags with the ACW cannot be removed from the drums and the drums must be buried intact at the disposal site.

7. The location(s) of cell(s) in which ACW are placed must be delineated on a topographical map which utilizes a grid and/or coordinate system as specified in the Solid Waste Management Rules and Regulations, Chapter 75.23(b)(ii). This map or copies of this map shall be kept as part of the daily logs and must be presented for inspection if requested by the Department.

8. All ACW accepted at the site for disposal are to be covered with a minimum of six inches of earthen cover material immediately. Care is to be exercised to ensure that no drums or bags are ruptured during the covering operation.

9. No asbestos containing waste(s) may be stored on site. If for any reason it is not possible to cover the waste immediately, no ACW may be accepted at the disposal facility.

10. The ACW should either be placed in a segregated area of the landfill, or if the ACW is co-disposed with other waste, it must be placed together in one place as a part of a lift(s) and/or cell(s) separate from all other wastes. The other wastes should only be disposed after the ACW is covered. This should be accomplished in a manner that would insure that no visible emission will be released by disturbing the cover and puncturing the containers of the ACW.

11. It will also be necessary that Air Quality Regulations as stated in 40 CFR Part 61, Subpart B, National Emission Standards for Hazardous Air Pollutants shall be met.

12. This permit modification only pertains to ACW. Other wastes which may be similar to ACW may require prior written Department approval before disposal. Additionally, ACW which is packaged in a manner different than described above shall require prior approval by the Department.

13. This disposal of ACW may be restricted or revoked by the Department if the following conditions are determined to exist:

    a. If Southern Alleghenies Disposal Services, Inc. does not comply with the above stated procedures for ACW disposal.

    b. The waste is not handled and disposed of in an environmentally sound manner.

    c. The disposal of the waste creates, alone or in conjunction with other waste, a nuisance, environmental harm, or a hazard to the public.

North Shore Energy Saver Inc.
Environmental Contracting
127 Glen Cove Avenue * Glen Cove, New York 11542 * (516) 671-7208 * FAX (516) 671-7269

Date **August 18, 1997**

Name **SULZER METCO Inc.**
Address **1101 Prospect Avenue**
Westbury, NY 11590-0201
Att: Mr. Michael S. Lydon

FAX **516-338-2336**

Re: Asbestos Abatement

We are pleased to submit our proposal to provide all labor, materials, supplies, tools and equipment to execute the safe abatement of suspect Asbestos Containing Materials (A.C.M.) in accordance with Federal, State, and Local safety and health standards.

The purpose of this proposal is to provide information which describes our methods and procedures which are necessary due to strict exposure protection required by Government agencies, regulations, and guidelines for working with asbestos. Some of the information contained within this proposal package may vary due to the extent of altering, eliminating, or adding to the methods and/or procedures for this particular job.

VISUAL SITE INSPECTION

Inspection of the above referenced building was made on **August 15, 1997** where asbestos containing materials were found in the form of insulation on the pipes, fittings, boiler and DHW heater as it has been shown at the walkthrough.

Removal of the designated asbestos containing material (ACM) was requested.

All our work is in strict compliance with all federal, state, and local regulations and guidelines governing asbestos.

REMOVAL PROCEDURES

Prior to the start of any removal, the area will be sealed off to any unauthorized visitors.

The work area shall be enclosed with polyethylene containment barriers, two layers of six mil sheeting on the walls and two layers of six mil poly on the floors of the work area.

Negative air pressure H.E.P.A. (High Efficiency Particulate Absolute) filtration equipment shall be used to direct air flow and provide extensive air filtering exchanges of a minimum of four times per hour.

All workers shall wear complete protective clothing and O.S.H.A. Approved respirators.

Actual removal shall be done only after the material is sufficiently wetted by spraying the outer surface and injecting the inner core with amended water.

All asbestos debris shall be placed in double six mil plastic bags with EPA and N.I.O.S.H. approved warning labels and removed from the premises.

Surfaces from where asbestos was removed shall be wiped down and two coats of sealant applied in order to lock down any possible remaining fibers.

Contained Glove-Bag Method, Tent Containment Method, or a combination of the two, may be used under certain circumstances where applicable and feasible.

DECONTAMINATION

Decontamination consists of, but is not limited to, HEPA vacuuming the work area, wet-wiping the surfaces from where asbestos was removed, mopping the floors, and applying sealant where feasible and necessary.

DISPOSAL OF WASTE

All asbestos waste is placed in double six mil labeled plastic bags which are securely sealed with duct tape. This waste shall be consigned to a carting company which is licensed to handle asbestos and transported to the proper landfills. Copies of Waste Manifest documenting proper disposal are provided after disposal.

AIR MONITORING

Air sample monitoring tests of personnel are performed by contractor in compliance with OSHA Standard 1910.1001. Environmental air samples are taken and then analyzed by an outside, independent laboratory. Final "Clean Air Test" shall not exceed 0.01 F/CC. Fibers per Cubic Centimeter of Air, as measured by Phase Contrast Microscopy, Analytical Procedure NIOSH 7400 or 239.

SPECIFIC PROJECT CONDITIONS

Removal shall be performed via full containment Tent/Glove-Bag Method under excessive negative pressure and should take one day to complete. Full project documentation including Company License, Worker(s) License, Transfer Permit, Insurance, Visual Inspection, and Waste Manifest shall be forwarded after completion of the project.

COST ESTIMATE

Removal and proper disposal of visible and accessible suspect ACM as specified in this proposal is:

Estimated Cost:	$24,000.00
3rd party air sampling and report:	$880.00

Price does not include New York State Sales Tax, which is exemptible if project qualifies as a capital improvement (i.e. project is part of a renovation). A form to qualify can be provided.

Price does not include fee for NYS Department of Labor, which is $1,000.00 and will be paid by the owner.

The above cost estimate may be withdrawn and/or altered by us if it is not accepted within 30 calendar days from the date of this proposal.

STANDARD TERMS OF PAYMENT

Payment is due upon completion of project.

SUBMISSION OF DOCUMENTS

A short time after the job is completed, you shall be provided with a report containing the following: OSHA personal and environmental air sample results, copy of the waste manifest documenting proper disposal of asbestos waste, and any other job specific information.

INSURANCE

North Shore Energy Saver, Inc. certifies to carry Workers Compensation Insurance, Comprehensive General Liability Insurance, and Asbestos Liability Insurance in the Occurrence form.

Insurance for each project involving asbestos abatement work is reported separately as coverage is issued only for reported projects. The premium for this coverage has been included in the estimate.

Please do not hesitate to call if you have any questions or wish to discuss this further. We are looking forward to hearing from you and hope we will have the opportunity to serve you

Respectfully Submitted,
North Shore Energy Saver, Inc.

Jaro Zitnansky,
Project Manager

Accepted By:

Authorized Signature

DUR-ALL ENVIRONMENTAL INC.
30-51 14th Street
L.I.C., N.Y. 11102
(718) 278-8945 Fax (718) 545-3440

August 20, 1997

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Attn: Mr. Michael Lydon

ASBESTOS ABATEMENT PROJECT
1101 Prospect Avenue
Westbury, New York

We are pleased to submit our proposal to provide the necessary supervision, labor, equipment, licenses, and insurances to remove the specified Asbestos Containing Materials from 1101 Prospect Avenue, Westbury, New York.

The scope of work is as follows:

Remove and dispose of the specified asbestos containing pipe insulation from the following areas: Computer Room Hall (15 LF), Shipping Department (120 LF), Field Service Area (130 LF). Cost: $4,200.00

Remove and dispose of all the asbestos containing, boiler, tank, transite stack, and pipe insulation from the entire boiler room. Cost: $9,200.00

Filing project with NYS and furnishing the filing fee.

Provide third party air monitoring as required by code.

All work to be performed over a weekend period.

The following documents shall be submitted at the completion of the project: NYS Contractor's License, NYS Notification, Air Monitoring Report, OSHA Air Monitoring Report, Waste Manifest, Hauler's Permit, Landfill's Permit, Insurance Certificate.

Terms of Payment:
30% due upon contract acceptance,
Balance due upon project completion.

We hope this proposal meets with your approval. Should you have any questions, please do not hesitate to call.

Proposed by,

Richard P. Mucelli
Dur-All Environmental, Inc.

DUR-ALL ENVIRONMENTAL INC.
30-51 14th Street
L.I.C., N.Y. 11102
(718) 278-8945 Fax (718) 545-3440

August 20, 1997

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Attn: Mr. Michael Lydon

ASBESTOS ABATEMENT PROJECT
1101 Prospect Avenue
Westbury, New York

We are pleased to submit our proposal to provide the necessary supervision, labor, equipment, licenses, and insurances to remove the specified Asbestos Containing Materials from 1101 Prospect Avenue, Westbury, New York.

The scope of work is as follows:

Remove and dispose of the specified asbestos containing pipe insulation from the following areas: Computer Room Hall (15 LF), Shipping Department (120 LF), Field Service Area (130 LF). Cost: $4,200.00

Remove and dispose of all the asbestos containing, boiler, tank, transite stack, and pipe insulation from the entire boiler room. Cost: $9,200.00

Filing project with NYS and furnishing the filing fee.

Provide third party air monitoring as required by code.

All work to be performed over a weekend period.

The following documents shall be submitted at the completion of the project: NYS Contractor's License, NYS Notification, Air Monitoring Report, OSHA Air Monitoring Report, Waste Manifest, Hauler's Permit, Landfill's Permit, Insurance Certificate.

Terms of Payment:
30% due upon contract acceptance,
Balance due upon project completion.

We hope this proposal meets with your approval. Should you have any questions, please do not hesitate to call.

Proposed by,

Richard P. Mucelli
Dur-All Environmental, Inc.

DUR-ALL ENVIRONMENTAL INC.
30-51 14th Street
L.I.C., N.Y. 11102

(718) 278-8945

Fax (718) 545-3440

August 12, 1997

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Attn: Mr. Michael Lydon

ASBESTOS ABATEMENT PROJECT
1101 Prospect Avenue
Westbury, New York

We are pleased to submit our proposal to provide the necessary supervision, labor, equipment, licenses and insurance to remove the specified Asbestos [illegible] Materials from 1101 Prospect Avenue, Westbury, New York.

The scope of work is as follows:

Remove and dispose of the specified asbestos [illegible] insulation from the following areas: Engineer Room Wall (15 LF), Shipping Department (12 LF), Fuel Service Area (130 LF). Cost: $4,200.00

Remove and dispose of all the asbestos [illegible] tank, transite stack, and pipe insulation from the turbine boiler room. Cost: $9,200.00

Filing project with NYS and [illegible]

Provide third party air monitoring [illegible]

All work to be performed over a weekend period

Terms of Payment:
50% [illegible] upon contract acceptance.
Bal. [illegible] upon [illegible]

We hope this proposal [illegible] have any questions, please [illegible]

Prepared by:

Richard P. Murel
Dur-All [illegible]

June 9, 1997

Mr. Michael Lydon
Environment, Health & Safety Department
Sulzer-Metco
1101 Prospect Avenue
Westbury, New York 11590

Re: Asbestos Abatement Project Close-Out Submittals
220 Miller Place, Hicksville, New York
Boiler Insulation Removal

Dear Mr. Lydon:

Enclosed please find copies of the submittals for the completion of the project as per your request. These submittals include;

- Copy of Trade-Winds NYS Asbestos Handling License
- Copy of Insurance Certificate
- Copy of Notifications
- Copy of Waste Manifest
- Copy of Waste Transporter's Permit
- Copy of Landfill Permits
- Copy of OSHA Results
- Air Monitor Report and Sample Results

If you should have any further questions, you can call me in the office.

Sincerely,

Bernard Browne
Project Manager

Environmental Restoration Inc.

72B Cabot Street, West Babylon, NY 11704 • 516-755-4000 • Fax: 516-755-4018 • 1-800-282-8701

P2S0L000731

North Shore Energy Saver Inc.

Environmental Contracting
127 Glen Cove Avenue * Glen Cove, New York 11542 * (516) 671-7208 * FAX (516) 671-7269

Date August 18, 1997

Name SULZER METCO Inc.
Address 1101 Prospect Avenue
Westbury, NY 11590-0201
Att: Mr. Michael S. Lydon

FAX 516-338-2336

Re: Asbestos Abatement

We are pleased to submit our proposal to provide all labor, materials, supplies, tools and equipment to execute the safe abatement of suspect Asbestos Containing Materials (A.C.M.) in accordance with Federal, State, and Local safety and health standards.

The purpose of this proposal is to provide information which describes our methods and procedures which are necessary due to strict exposure protection required by Government agencies, regulations, and guidelines for working with asbestos. Some of the information contained within this proposal package may vary due to the extent of altering, eliminating, or adding to the methods and or procedures for this particular job.

VISUAL SITE INSPECTION

Inspection of the above referenced building was made on August 15, 1997 where asbestos containing materials were found in the form of insulation on the pipes, fittings, boiler and DHW heater as it has been shown at the walkthrough.

Removal of the designated asbestos containing materials (ACM) was requested.

All our work is in strict compliance with all federal, state and local regulations and guidelines governing asbestos.

REMOVAL PROCEDURES

Prior to the start of any removal, the area will be sealed off to any unauthorized visitors.

The work area shall be enclosed with polyethylene containment barriers: two layers of six mil sheeting on the walls and two layers of six mil poly on the floors of the work area.

Negative air pressure H.E.P.A. (High Efficiency Particulate Absolute) filtration equipment shall be used to direct air flow and provide extensive air filtering exchanges of a minimum of four times per hour.

All workers shall wear complete protective clothing and O.S.H.A. Approved respirators.

Actual removal shall be done only after the material is sufficiently wetted by spraying the outer surface and injecting the inner core with amended water.

All asbestos debris shall be placed in double six mil plastic bags with EPA and NIOSH approved warning labels and removed from the premises.

Surfaces from where asbestos was removed shall be wiped down and two coats of sealant applied in order to lock down any possible remaining fibers.

Contained Glove-Bag Method, Tent Containment Method, or a combination of the two, may be used under certain circumstances where applicable and feasible.

DECONTAMINATION

Decontamination consists of, but is not limited to, HEPA vacuuming the work area, wet-wiping the surfaces from where asbestos was removed, mopping the floors and applying sealant where feasible and necessary.

DISPOSAL OF WASTE

All asbestos waste is placed in double six mil labeled plastic bags which are securely sealed with duct tape. This waste shall be consigned to a carrier company which is licensed to handle asbestos and transported to the proper landfills. Copies of Waste Manifest documenting proper disposal are provided after disposal.

AIR MONITORING

Air sample monitoring tests of personnel are performed by contractor in compliance with OSHA Standard 1910.1001. Environmental air samples are taken and then analyzed by an outside, independent laboratory. Final "Clean Air Test" shall not exceed 0.01 PCC Fibers per Cubic Centimeter of Air, as measured by Phase Contrast Microscopy, Analytical Procedure NIOSH 7400 or 239.

SPECIFIC PROJECT CONDITIONS

Removal shall be performed via full containment Isolation Bag Method under excessive negative pressure and should take one day to complete. Full [illegible] documentation including Company License, Worker(s) License, Transfer Insurance, Visual Inspection, and Waste Manifest shall be forwarded after completion of the project.

COST ESTIMATE

Removal and proper disposal of visible and accessible suspect ACM as specified in this proposal is:

Estimated Cost	$24,000.00
3rd party air sampling and report	$880.00

Price does not include New York State Sales Tax, which is exemptible if project qualifies as a capital improvement (i.e. project is part of a renovation). A room to specify can be provided.

Price does not include fee for NYS Department of Labor, which is $1,000.00 and will be paid by the owner.

The above cost estimate may be withdrawn and/or altered by us if it is not accepted within 30 calendar days from the date of this proposal.

STANDARD TERMS OF PAYMENT

Payment is due upon completion of project

SUBMISSION OF DOCUMENTS

A short time after the job is completed, you shall be provided with a report containing the following: OSHA personal and environmental air sample results, copy of the waste manifest documenting proper disposal of asbestos waste, and any other job specific information.

INSURANCE

North Shore Energy Saver, Inc. certifies to carry Workers Compensation Insurance, Comprehensive General Liability Insurance, and Asbestos Liability Insurance in the Occurrence form.

Insurance for each project involving asbestos abatement work is reported separately as coverage is issued only for reported projects. The premium for this coverage has been included in the estimate.

Please do not hesitate to call if you have any questions or wish to discuss this further. We are looking forward to hearing from you and hope we will have the opportunity to serve you.

Respectfully Submitted,
North Shore Energy Saver, Inc.

Jaro Zitnansky,
Project Manager

Accepted By:

Authorized Signature

TRADE-WINDS

Proposal No. 9700119A

To: Mr. Michael S. Lydon
Sulzer Metco
1101 Prospect Avenue
Westbury, NY 11590-0201

Date: August 13, 1997

Re: Asbestos Abatement Services
1101 Prospect Avenue Facility

Trade-Winds Environmental Restoration, Inc. is pleased to provide you with a proposal for services. The following is a detailed description of any specific work conditions, requirements, schedule of work and fees. If you should have any questions regarding this proposal, please contact this office.

To perform asbestos abatement services at the above-referenced location:

Scope: Trade-Winds shall supply all labor, materials, equipment and insurance required to remove and dispose of approximately 135 linear feet of pipe insulation from the shipping department and MIS Hallway, and 265 linear feet of pipe insulation and 200 sq. ft. of boiler and tank insulation from the boiler room as per Industrial Code Rule 56. All work to be done on weekends. Boiler room work to require extended weekend to complete.

Price: $24,880.00

Total Proposal: $24,880.00 plus applicable sales tax
(Twenty four thousand eight hundred eighty dollars plus applicable sales tax)

*Sales tax will be charged unless a certificate of capital improvement or tax exemption is forwarded to our office.

Insurance:
Our proposed price includes $10 million CGL insurance through an A+ rated carrier. Additional insurance available on request.

We hope this proposal meets with your approval. Should you have any questions or concerns, please contact me at (516) 755 - 4000.

Very Truly Yours,

Jeffrey Micheli
Project Manager
Trade-Winds Environmental
Restoration, Inc.

Accepted:

Name (Print)	Title	Date
Name (Sign)	Address	

JM/kf

REQUISITION NUMBER 26461

-/20/97

SULZER METCO

To be used for Asbestos Abatement Project

Date required URGENT

REQUEST FOR PURCHASE

Dur-All Environmental Inc.
30-51 14th Street
L.I.C., NY 11102

PURCHASE ORDER NO 209999

CONTACT

TEL. NO 718 278-8945

SHIP VIA	F.O.B.	TERMS	PROMISED DELIVERY DATE
			9/13 & 9/14

GRAY AREAS FOR PURCHASING USE ONLY

ITEM	QUANTITY	DESCRIPTION	TAX	PRICE
1		Dur-All Environmental, Inc. will provide the necessary supervision, labor, equipment, licenses, and insurances to remove the specified Asbestos Containing Materials from 1101 Prospect Avenue, Westbury, New York to remove and dispose of the specified asbestos containing pipe insulation from the following areas: Computer Room Hall (15 LF), Shipping Department (120 LF), Field Service Area (130 LF). Remove and dispose of all the asbestos containing, boiler, tank, transite stack, and pipe insulation from the entire boiler room. Filing project with NYS and furnishing the filing fee. Provide third party air monitoring as required by code. All work to be performed over a weekend period. The following documents shall be submitted at the completion of the project: NYS Contractor's License, NYS Notification, Air Monitoring Report, OSHA Air Monitoring Report, Waste Manifest, Haulers Permit, Landfill's Permit, Insurance Certificate.		$13,400.00 Lot Charge
			TOTAL	

SUGGESTED SOURCE OF SUPPLY:

WORK ORDER NUMBER	CHARGE NUMBER	REQUESTED BY	APPROVED BY	APPROVED BY
RCAA 50680 75134	80119	M.S. Lydon EMP #200010	L.F. Miles 9/4/97 EMP #114288	

100 75,134

PLANT 1101 Prospect Avenue

BUYER

DELIVER TO: DEPT. Environment, Health & Safety

ATTN. M.S. Lydon

wait for package to arrive before paying invoice 9-15-97

RETAIN BY REQUISITIONER

P2SUL000738

DUR-ALL ENVIRONMENTAL INC.
30-51 14th Street
L.I.C., N.Y. 11102
(718) 278-8945
Fax (718) 545-3440

REQUISITION

To: Sulzer Metco
1101 Prospect Ave.
Westbury, NY 11!

Date: 9/16/97
Req.# 1
Asbestos Removal
P.O. # 209999

For your info

Amount Original Contract	$	13,400.00
Extras	$	0
Net Amount of Contract	$	13,400.00
Previous Requisitions	$	0
Amount This Requisition	$	10,000.00
TOTAL BILLING	$	10,000.00
Less Amount Received To Date	$	0
Net Amount Due	$	10,000.00

OK TO PAY
9/16/97

Remarks:

Project completed on 9/14/97.
Balance to be billed upon submission of final documents.

File Copy - Do Not Submit

EPA United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Aluminum (fume or dust)

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? ☐ Yes (Answer question 2.2; Attach substantiation forms) ☒ NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy ☐ Sanitized ☐ Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. ☒ An entire facility	b. ☐ Part of a facility	c. ☐ A Federal facility	d. ☐ GOCO
4.3	Technical Contact Name: Alfonso Rolli	Telephone Number (include area code): (516) 338-2337			
	Email Address: Alfonso.Rolli@SULZER.COM				
4.4	Public Contact Name: Alfonso Rolli	Telephone Number (include area code): (516) 338-2337			

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.
4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398	b.				

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA ☐	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA ☐	001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
1 [illegible] KIL 1101 [illegible]
Toxic Chemical, Category or Generic Name
Aluminum (fume or dust)

SECTION 1. TOXIC CHEMICAL IDENTITY
(Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7429-90-5
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Aluminum (fume or dust)
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY
(Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	05	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

				A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	X			
5.2	Stack or point air emissions	NA	X			
5.3	Discharges to receiving streams or water bodies (enter one name per box)					
	Stream or Water Body Name					
5.3.1	NA					
5.3.2						
5.3.3						

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 5.3 page number in this box. [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11530 PRCTL 101F
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NJD 980 536								
Off-Site Location Name	VEOLIA (FLANDERS NJ)								
Off-site Address	1 Eden Lane								
City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	
Is location under control of reporting facility or parent company?							Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy Do Not Remove

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRCIL101F
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 16896	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. Off-Site EPA Identification Number (RCRA ID No.)

Off-Site location Name

Off-site Address

City		State		County		Zip		Country (Non-US)	

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

X	Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3		4		5		
	6		7		8		
7A.2a	7A.2b	1		2			7A.2d
	3		4		5		
	6		7		8		
7A.3a	7A.3b	1		2			7A.3d
	3		4		5		
	6		7		8		
7A.4a	7A.4b	1		2			7A.4d
	3		4		5		
	6		7		8		
7A.5a	7A.5b	1		2			7A.5d
	3		4		5		
	6		7		8		

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box ☐
and indicate the Part II, Section 6.2/7A page number in this box: ☐ **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Send

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11[illegible]K[illegible]101[illegible]
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	NA	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	16418	5000	5000	5000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	312	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)			0	
8.9	Production ratio or activity index			1.10	

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

Please Do Not Submit to EPA

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

Copy -- Do Not Submit

EPA United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number 11590PRKNL1101P

Toxic Chemical, Category or Generic Name Chromium

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center P.O.Box 1513 Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

File Copy Do Not Submit to EPA

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
1 9[illegible]KIL 101[illegible]
Toxic Chemical, Category or Generic Name
Chromium

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-47-3
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Chromium
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1 [05] (Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	0	O	
5.2	Stack or point air emissions	NA	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590RGLL101F
Toxic Chemical, Category, or Generic Name
Chromium

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1	Off-Site EPA Identification Number (RCRA ID No.)	OHD000816629							
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY								
Off-site Address	4879 SPRING GROVE AVENUE								
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)	
Is location under control of reporting facility or parent company?							Yes [ ]	No [X]	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number: 11590PRCIIL101F
Toxic Chemical, Category, or Generic Name: Chromium

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1721	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.): NJD 980 536

Off-Site location Name: VEOLIA (FLANDERS NJ)

Off-site Address: 1 Eden Lane

City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 2100	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]							d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b		1		2			7A.1d
	3		4		5			
	6		7		8			
7A.2a	7A.2b		1		2			7A.2d
	3		4		5			
	6		7		8			
7A.3a	7A.3b		1		2			7A.3d
	3		4		5			
	6		7		8			
7A.4a	7A.4b		1		2			7A.4d
	3		4		5			
	6		7		8			
7A.5a	7A.5b		1		2			7A.5d
	3		4		5			
	6		7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.2/7A page number in this box: [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Not Sub

EPA FORM R
PART II. CHEMICAL SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11[illegible]PRKN[illegible]101
Toxic Chemical, Category, or Generic Name
Chromium

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3 |

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3 |

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	NA	0	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	2000	2000	2000	2000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	2000	NA	2000	2000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNE1101P
Toxic Chemical, Category, or Generic Name
Chromium

Copy - Do Not Submit to

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

Form Approved OMB Number:2070-0093
Approval Expires: 1/31/2008

(IMPORTANT: Type or print; read instructions before completing form)

EPA
United States Environmental Protection Agency

FORM R

EPA Copy -- Do Not Submit to EPA

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Chromium Compounds (except for chromite ore mined in the Transvaal Reg

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code / Country (Non-US)	

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	

4.5 NAICS Code (s) (6 digits)	Primary a. 332117	b. 333298	c.	d.	e.	f.

4.7 Dun & Bradstreet Number(s) (9 digits)	
a.	152084398
b.	

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

File Copy - Do Not Submit to EPA

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number	1[illegible]KIL1101[illegible]
Toxic Chemical, Category or Generic Name	Chromium Compounds (except for chromite ore mi

SECTION 1. TOXIC CHEMICAL IDENTITY
(Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) N090
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Chromium Compounds (except for chromite ore mined in the Transvaal Reg
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY
(Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	0	O	
5.2	Stack or point air emissions	NA [ ]	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRSNL101F
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore mi

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)					OHD000816629				
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY								
Off-site Address	4879 SPRING GROVE AVENUE								
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number	11190PRCIL101F
Toxic Chemical, Category, or Generic Name	Chromium Compounds (except for chromite ore mi

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 200	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NJD 980 536

Off-Site location Name: VEOLIA (FLANDERS NJ)

Off-site Address: 1 Eden Lane

City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 3500	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3	4		5			
	6	7		8			
7A.2a	7A.2b	1		2			7A.2d
	3	4		5			
	6	7		8			
7A.3a	7A.3b	1		2			7A.3d
	3	4		5			
	6	7		8			
7A.4a	7A.4b	1		2			7A.4d
	3	4		5			
	6	7		8			
7A.5a	7A.5b	1		2			7A.5d
	3	4		5			
	6	7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number	
11 [illegible]	
Toxic Chemical, Category, or Generic Name	
Chromium Compounds (except for chromite ore mi	

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	1	1	1
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	3000	3000	3000	3000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."	Yes ☐

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNLTT91P
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore

Copy - Do Not Submit to E

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA Copy -- Do Not Submit

EPA United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number 11590PRKNL1101P

Toxic Chemical, Category or Generic Name Cobalt

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center P.O.Box 1513 Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	Alfonso Rolli		Telephone Number (include area code)	(516) 338-2337
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli		Telephone Number (include area code)	(516) 338-2337

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

File Copy Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
1[illegible]KIL1101[illegible]
Toxic Chemical, Category or Generic Name
Cobalt

SECTION 1. TOXIC CHEMICAL IDENTITY
(Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Cobalt
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY
(Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	0	O	
5.2	Stack or point air emissions	NA [ ]	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRCNL101F
Toxic Chemical, Category, or Generic Name
Cobalt

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)					OHD000816629			
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY							
Off-site Address	4879 SPRING GROVE AVENUE							
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)
Is location under control of reporting facility or parent company?						Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRCHIL101R
Toxic Chemical, Category, or Generic Name
Cobalt

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 350	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NJD980536593

Off-Site location Name: ONYX ENVIRONMENTAL SERVICES

Off-site Address: 1 EDEN LANE

City	FLANDERS	State	NJ	County	MORRIS	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 5100	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3		4		5		
	6		7		8		
7A.2a	7A.2b	1		2			7A.2d
	3		4		5		
	6		7		8		
7A.3a	7A.3b	1		2			7A.3d
	3		4		5		
	6		7		8		
7A.4a	7A.4b	1		2			7A.4d
	3		4		5		
	6		7		8		
7A.5a	7A.5b	1		2			7A.5d
	3		4		5		
	6		7		8		

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number: 11360PRKIN1101

Toxic Chemical, Category, or Generic Name: Cobalt

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	1	1	1
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	5000	5000	5000	5000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."	Yes [ ]

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKMLTD1P
Toxic Chemical, Category or Generic Name
Cobalt

Copy - Do Not Submit

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

File Copy -- Do Not Submit

EPA United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Copper

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number	1[illegible]KIL(101)
Toxic Chemical, Category or Generic Name	Copper

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-50-8
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Copper
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1 [04] (Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	0	O	
5.2	Stack or point air emissions	NA	0	O	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number	
11590RCNL101F	
Toxic Chemical, Category, or Generic Name	
Copper	

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NA								
Off-Site Location Name	GERSHOW RECYCLING								
Off-site Address	71 PECONIC AVENUE								
City	MEDFORD	State	NY	County	SUFFOLK	Zip	11763	Country (Non-US)	
Is location under control of reporting facility or parent company?						Yes	X	No	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number	11590PRKIIL101F
Toxic Chemical, Category, or Generic Name	Copper

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 27769	1. M	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NA

Off-Site location Name: LoniJo Scrap Metals

Off-site Address: 7 Kinkle Street

City	Westbury	State	NY	County	Nassau	Zip	11590	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 36146	1. M	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3	4		5			
	6	7		8			
7A.2a	7A.2b	1		2			7A.2d
	3	4		5			
	6	7		8			
7A.3a	7A.3b	1		2			7A.3d
	3	4		5			
	6	7		8			
7A.4a	7A.4b	1		2			7A.4d
	3	4		5			
	6	7		8			
7A.5a	7A.5b	1		2			7A.5d
	3	4		5			
	6	7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11[illegible]K JL1101
Toxic Chemical, Category, or Generic Name
Copper

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	0	0	0	0
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	50	NA	50	50
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	73551	62915	85000	85000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	0			
8.9	Production ratio or activity index	1.10			
8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.				

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes [ ]

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNLT1101P
Toxic Chemical, Category, or Generic Name
Copper

Copy - Do Not Submit to F

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA Copy - Do Not Submit

EPA United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number 11590PRKNL1101P

Toxic Chemical, Category or Generic Name Nickel

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center P.O.Box 1513 Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? ☐ Yes (Answer question 2.2; Attach substantiation forms) ☒ NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy ☐ Sanitized ☐ Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. ☒ An entire facility	b. ☐ Part of a facility	c. ☐ A Federal facility	d. ☐ GOCO
4.3	Technical Contact Name	Alfonso Rolli		Telephone Number (include area code)	(516) 338-2337
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli		Telephone Number (include area code)	(516) 338-2337

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398	
		b.	

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA ☐	SULZER US INDUSTRIES HOLDING INC.	
5.2	Parent Company's Dun & Bradstreet Number	NA ☐	001826957	

File Copy Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
1[illegible]KIL[illegible]101[illegible]
Toxic Chemical, Category or Generic Name
Nickel

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-02-0
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Nickel
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1 [05] (Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [X]			
5.2	Stack or point air emissions	NA [X]			
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Send

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL101F
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NA								
Off-Site Location Name	PM RECOVERY								
Off-site Address	420 S. CASCADE STREET								
City	NEW CASTLE	State	PA	County	LAWRENCE	Zip	16101	Country (Non-US)	
Is location under control of reporting facility or parent company?						Yes	X	No	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

File Copy - Do Not Submit

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number: 11590PRCIIL1011

Toxic Chemical, Category, or Generic Name: Nickel

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 101776	1. C	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.): NA

Off-Site location Name: DOMINION NICKEL ALLOYS

Off-site Address: 834 APPLEBY LINE

City	BURLINGTON	State		County	ONTARIO	Zip	L7L 2Y7	Country (Non-US)	CA

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 201344	1. C	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]							d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2				7A.1d
	3		4		5			
	6		7		8			
7A.2a	7A.2b	1		2				7A.2d
	3		4		5			
	6		7		8			
7A.3a	7A.3b	1		2				7A.3d
	3		4		5			
	6		7		8			
7A.4a	7A.4b	1		2				7A.4d
	3		4		5			
	6		7		8			
7A.5a	7A.5b	1		2				7A.5d
	3		4		5			
	6		7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11[illegible]K[illegible]1101
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	NA	NA	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	18806	NA	NA	NA
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	131925	303110	300000	300000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	0			
8.9	Production ratio or activity index	1.30			
8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.				

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNET01P
Toxic Chemical, Category or Generic Name
Nickel

Copy - Do Not Submit

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

SULZER

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590-0201
United States of America

2 July 2007

Ms. Susanne Wither
New York State Department of Environmental Conservation
Department of Environmental Remediation
625 Broadway; 11th Floor
Albany, NY 12233 – 8010

Dear Ms. Wither:

In accordance with § 313 of the Emergency Planning and Community Right-to-Know Act (EPCRA), enclosed please find the completed Sulzer Metco (US) Inc., Form R with Certification Statements for Reporting Year 2006.

Sulzer Metco (US) Inc. is committed to excellence in environment, health and safety (EHS) through continual improvement of our awareness, understanding and performance. Our goal is to protect and promote the environment and the health and safety of our employees, the communities where we reside, customers, suppliers and shareholders.

If further information or assistance is needed regarding the enclosed documents, please do not hesitate to contact me at alfonso.rolli@sulzer.com or call me at 516-338-2337 (office) or 914-393-2564 (cell phone).

Sincerely,

Alfonso Rolli – Manager
Environmental and Safety Engineering

State Paper

Submission Checklist

Please Note! After validating and submitting your data, please remember to access and review your Facility Data Profile (FDP) at http://www.triefdp.org/. When your FDP is posted for review, the Technical Contact that is listed in the Form R or Form A Certification Statement will be notified by an email message. Therefore, please make sure the Technical Contact email address is correct.

The FDP serves two purposes:

First, EPA wants to give the reporting facility the opportunity to confirm that the TRI Data Processing Center has entered its data correctly into EPA's TRIS database.

Second, if the TRI Data Processing Center identifies potential errors in the forms a facility has submitted, the FDP indicates what these errors are and requests that the facility provide EPA with corrections.

	PLEASE CHECK AND COMPLETE EACH STEP BELOW:	Complete?
1.	**The certification statement on page 1 of each Form R report (and/or the Form A certification statement) is signed by a senior management official per EPCRA section 313(g)(1)(B).**	✓
2.	Use the correct address: Susanne Wither NY State Department of Environmental Conservation Division of Environmental Remediation 625 Broadway, 11th Floor Albany, NY 12233-8010 (518) 402-9553; Fax: (518) 402-9020	✓
3.	**The envelope contains all pages of all forms including continuation pages if any. Do not send diskettes with a paper submission.**	✓
* 4.	**The signed forms must be postmarked and mailed on or before July 1, 2007.**	✓

2 JUL 07

* CALLED MS WITHER AT DEC ON 2 JUL 07 TO INQUIRE ABOUT 2-JUL-07 POSTMARK. MS. WITHER STATED THAT USEPA GUIDANCE WAS DUE TO THE FACT THAT 1-JUL-07 WAS A SUNDAY, 2-JUL-07 POSTMARK WAS ACCEPTABLE FOR RY06.

2-JUL-07

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Copper

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)

2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1 TRI Facility ID Number: 11590PRKNL1101P

Facility or Establishment Name: SULZER METCO (US), INC.

Facility or Establishment Name or Mailing Address (if different from street address):

Street: 1101 PROSPECT AVENUE

Mailing Address: NA

City/County/State/Zip Code: WESTBURY NASSAU NY 11590

City/State/Zip Code:

Country (Non-US):

4.2 This report contains information for: (Important: check a or b; check c or d if applicable) a. [X] An entire facility b. [ ] Part of a facility c. [ ] A Federal facility d. [ ] GOCO

4.3 Technical Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

Email Address: Alfonso.Rolli@SULZER.COM

4.4 Public Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

4.5 NAICS Code (s) (6 digits): Primary a. 332117 b. 333298 c. d. e. f.

4.7 Dun & Bradstreet Number(s) (9 digits): a. 152084398 b.

SECTION 5. PARENT COMPANY INFORMATION

5.1 Name of Parent Company: NA [ ] SULZER US INDUSTRIES HOLDING INC.

5.2 Parent Company's Dun & Bradstreet Number: NA [ ] 001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

State Copy

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Copper

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-50-8
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Copper
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA ☐																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. ☐ Produce b. ☐ Import		
If produce or import:	a. ☐ As a reactant	a. ☐ As a chemical processing aid
c. ☐ For on-site use/processing	b. X As a formulation component	b. ☐ As a manufacturing aid
d. ☐ For sale/distribution	c. ☐ As an article component	c. ☐ Ancillary or other use
e. ☐ As a byproduct	d. X Repackaging	
f. ☐ As an impurity	e. ☐ As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA ☐	0	O	
5.2	Stack or point air emissions	NA ☐	0	O	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box ☐ and indicate the Part II, Section 5.3 page number in this box. ☐ (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R	TRI Facility ID Number
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	11590PRKNL1101P
	Toxic Chemical, Category, or Generic Name
	Copper

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NA								
Off-Site Location Name	GERSHOW RECYCLING								
Off-site Address	71 PECONIC AVENUE								
City	MEDFORD	State	NY	County	SUFFOLK	Zip	11763	Country (Non-US)	
Is location under control of reporting facility or parent company?						Yes	X	No	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 27769	1. M	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NA

Off-Site location Name: LoniJo Scrap Metals

Off-site Address: 7 Kinkle Street

City	Westbury	State	NY	County	Nassau	Zip	11590	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 36146	1. M	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3		4		5		
	6		7		8		
7A.2a	7A.2b	1		2			7A.2d
	3		4		5		
	6		7		8		
7A.3a	7A.3b	1		2			7A.3d
	3		4		5		
	6		7		8		
7A.4a	7A.4b	1		2			7A.4d
	3		4		5		
	6		7		8		
7A.5a	7A.5b	1		2			7A.5d
	3		4		5		
	6		7		8		

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	0	0	0	0
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	50	NA	50	50
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	73551	62915	85000	85000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	0			
8.9	Production ratio or activity index	1.10			
8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.				

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes [ ]

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Copper

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Aluminum (fume or dust)

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO
4.3	Technical Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	
	Email Address	Alfonso.Rolli@SULZER.COM			
4.4	Public Contact Name	Alfonso Rolli	Telephone Number (include area code)	(516) 338-2337	

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.
4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398	b.				

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM P
PART II. CHEMICAL - SPECIFIC INFORMATION

State Copy

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Aluminum (fume or dust)

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7429-90-5
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Aluminum (fume or dust)
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	05 (Enter two-digit code from instruction package.)	

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

				A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	X			
5.2	Stack or point air emissions	NA	X			
5.3	Discharges to receiving streams or water bodies (enter one name per box)					
	Stream or Water Body Name					
5.3.1	NA					
5.3.2						
5.3.3						

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R State Only PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)	TRI Facility ID Number 11590PRKNL1101P Toxic Chemical, Category, or Generic Name Aluminum (fume or dust)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NJD 980 536								
Off-Site Location Name	VEOLIA (FLANDERS NJ)								
Off-site Address	1 Eden Lane								
City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	
Is location under control of reporting facility or parent company?							Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 16896	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. Off-Site EPA Identification Number (RCRA ID No.)

Off-Site location Name

Off-site Address

City		State		County		Zip		Country (Non-US)	

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3	4		5			
	6	7		8			
7A.2a	7A.2b	1		2			7A.2d
	3	4		5			
	6	7		8			
7A.3a	7A.3b	1		2			7A.3d
	3	4		5			
	6	7		8			
7A.4a	7A.4b	1		2			7A.4d
	3	4		5			
	6	7		8			
7A.5a	7A.5b	1		2			7A.5d
	3	4		5			
	6	7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box ☐
and indicate the Part II, Section 6.2/7A page number in this box: ☐ **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	NA	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	16418	5000	5000	5000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	312	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	0			
8.9	Production ratio or activity index	1.10			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."	Yes [ ]

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum (fume or dust)

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Chromium

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11590PRKNL1101P
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	
Street	1101 PROSPECT AVENUE	Mailing Address	NA
City/County/State/Zip Code	WESTBURY NASSAU NY 11590	City/State/Zip Code	Country (Non-US)

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. [X] An entire facility	b. [ ] Part of a facility	c. [ ] A Federal facility	d. [ ] GOCO	
4.3	Technical Contact Name	Alfonso Rolli			Telephone Number (include area code)	(516) 338-2337
	Email Address	Alfonso.Rolli@SULZER.COM				
4.4	Public Contact Name	Alfonso Rolli			Telephone Number (include area code)	(516) 338-2337

		Primary					
4.5	NAICS Code (s) (6 digits)	a. 332117	b. 333298	c.	d.	e.	f.

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA [ ]	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA [ ]	001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Chromium

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-47-3
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Chromium
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	05	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	0	O	
5.2	Stack or point air emissions	NA	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	OHD000816629							
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY							
Off-site Address	4879 SPRING GROVE AVENUE							
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)
Is location under control of reporting facility or parent company?						Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1721	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NJD 980 536

Off-Site location Name: VEOLIA (FLANDERS NJ)

Off-site Address: 1 Eden Lane

City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 2100	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]							d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2				7A.1d
	3		4		5			
	6		7		8			
7A.2a	7A.2b	1		2				7A.2d
	3		4		5			
	6		7		8			
7A.3a	7A.3b	1		2				7A.3d
	3		4		5			
	6		7		8			
7A.4a	7A.4b	1		2				7A.4d
	3		4		5			
	6		7		8			
7A.5a	7A.5b	1		2				7A.5d
	3		4		5			
	6		7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	NA	0	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	2000	2000	2000	2000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	2000	NA	2000	2000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."	Yes [ ]

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Chromium Compounds (except for chromite ore mined in the Transvaal Reg

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)

2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1 TRI Facility ID Number: 11590PRKNL1101P

Facility or Establishment Name: SULZER METCO (US), INC.

Facility or Establishment Name or Mailing Address (if different from street address):

Street: 1101 PROSPECT AVENUE

Mailing Address: NA

City/County/State/Zip Code: WESTBURY NASSAU NY 11590

City/State/Zip Code:

Country (Non-US):

4.2 This report contains information for: (Important: check a or b; check c or d if applicable) a. [X] An entire facility b. [ ] Part of a facility c. [ ] A Federal facility d. [ ] GOCO

4.3 Technical Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

Email Address: Alfonso.Rolli@SULZER.COM

4.4 Public Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

4.5 NAICS Code (s) (6 digits): Primary a. 332117 b. 333298 c. d. e. f.

4.7 Dun & Bradstreet Number(s) (9 digits): a. 152084398 b.

SECTION 5. PARENT COMPANY INFORMATION

5.1 Name of Parent Company: NA [ ] SULZER US INDUSTRIES HOLDING INC.

5.2 Parent Company's Dun & Bradstreet Number: NA [ ] 001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Chromium Compounds (except for chromite ore mi

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	N090
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Chromium Compounds (except for chromite ore mined in the Transvaal Reg
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.)
	NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	0	O	
5.2	Stack or point air emissions	NA [ ]	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 5.3 page number in this box. [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore mi

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)					OHD000816629				
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY								
Off-site Address	4879 SPRING GROVE AVENUE								
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)	
Is location under control of reporting facility or parent company?							Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Copy

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore mi

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 200	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NJD 980 536

Off-Site location Name: VEOLIA (FLANDERS NJ)

Off-site Address: 1 Eden Lane

City	Flanders	State	NJ	County	Morris	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 3500	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3		4		5		
	6		7		8		
7A.2a	7A.2b	1		2			7A.2d
	3		4		5		
	6		7		8		
7A.3a	7A.3b	1		2			7A.3d
	3		4		5		
	6		7		8		
7A.4a	7A.4b	1		2			7A.4d
	3		4		5		
	6		7		8		
7A.5a	7A.5b	1		2			7A.5d
	3		4		5		
	6		7		8		

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore mi

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 | 2 | 3

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	1	1	1
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	3000	3000	3000	3000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Compounds (except for chromite ore

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P

Toxic Chemical, Category or Generic Name: Cobalt

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)

2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1 TRI Facility ID Number: 11590PRKNL1101P

Facility or Establishment Name: SULZER METCO (US), INC.

Facility or Establishment Name or Mailing Address (if different from street address):

Street: 1101 PROSPECT AVENUE

Mailing Address: NA

City/County/State/Zip Code: WESTBURY NASSAU NY 11590

City/State/Zip Code:

Country (Non-US):

4.2 This report contains information for: (Important: check a or b; check c or d if applicable) a. [X] An entire facility b. [ ] Part of a facility c. [ ] A Federal facility d. [ ] GOCO

4.3 Technical Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

Email Address: Alfonso.Rolli@SULZER.COM

4.4 Public Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

4.5 NAICS Code (s) (6 digits): Primary a. 332117 b. 333298 c. d. e. f.

4.7 Dun & Bradstreet Number(s) (9 digits): a. 152084398 b.

SECTION 5. PARENT COMPANY INFORMATION

5.1 Name of Parent Company: NA [ ] SULZER US INDUSTRIES HOLDING INC.

5.2 Parent Company's Dun & Bradstreet Number: NA [ ] 001826957

EPA FORM P
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Cobalt

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Cobalt
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
NA																	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1 [04] (Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [ ]	0	O	
5.2	Stack or point air emissions	NA [ ]	1	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Cobalt

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)					OHD000816629				
Off-Site Location Name	CLEAN HARBORS SPRING GROVE RESOURCE RECOVERY								
Off-site Address	4879 SPRING GROVE AVENUE								
City	CINCINNATI	State	OH	County	HAMILTON	Zip	45232	Country (Non-US)	
Is location under control of reporting facility or parent company?							Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Cobalt

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 350	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) NJD980536593

Off-Site location Name: ONYX ENVIRONMENTAL SERVICES

Off-site Address: 1 EDEN LANE

City	FLANDERS	State	NJ	County	MORRIS	Zip	07836	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 5100	1. C	1. M94
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3	4		5			
	6	7		8			
7A.2a	7A.2b	1		2			7A.2d
	3	4		5			
	6	7		8			
7A.3a	7A.3b	1		2			7A.3d
	3	4		5			
	6	7		8			
7A.4a	7A.4b	1		2			7A.4d
	3	4		5			
	6	7		8			
7A.5a	7A.5b	1		2			7A.5d
	3	4		5			
	6	7		8			

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

State only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Cobalt

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	1	1	1	1
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	5000	5000	5000	5000
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	NA	NA	NA	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	NA			
8.9	Production ratio or activity index	1.05			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."	Yes [ ]

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Cobalt

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

EPA
United States Environmental Protection Agency

FORM R

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI Facility ID Number: 11590PRKNL1101P
Toxic Chemical, Category or Generic Name: Nickel

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center, P.O.Box 1513, Lanham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]
For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2006

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] NO (Do not answer 2.2; Go to Section 3)

2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
W. GREGORY WUEST DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY		07/02/2007

SECTION 4. FACILITY IDENTIFICATION

4.1 TRI Facility ID Number: 11590PRKNL1101P

Facility or Establishment Name: SULZER METCO (US), INC.

Facility or Establishment Name or Mailing Address (if different from street address):

Street: 1101 PROSPECT AVENUE

Mailing Address: NA

City/County/State/Zip Code: WESTBURY NASSAU NY 11590

City/State/Zip Code:

Country (Non-US):

4.2 This report contains information for: (Important: check a or b; check c or d if applicable) a. [X] An entire facility b. [ ] Part of a facility c. [ ] A Federal facility d. [ ] GOCO

4.3 Technical Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337
Email Address: Alfonso.Rolli@SULZER.COM

4.4 Public Contact Name: Alfonso Rolli — Telephone Number (include area code): (516) 338-2337

4.5 NAICS Code (s) (6 digits): Primary a. 332117 b. 333298 c. d. e. f.

4.7 Dun & Bradstreet Number(s) (9 digits): a. 152084398 b.

SECTION 5. PARENT COMPANY INFORMATION

5.1 Name of Parent Company: NA [ ] SULZER US INDUSTRIES HOLDING INC.

5.2 Parent Company's Dun & Bradstreet Number: NA [ ] 001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category or Generic Name
Nickel

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-02-0
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Nickel
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	05	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA [X]			
5.2	Stack or point air emissions	NA [X]			
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 5.3 page number in this box. [ ] (example: 1,2,3, etc.)

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

State Only

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3A	RCRA Subtitle C Surface Impoundments	X		
5.5.3B	Other surface impoundments	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1 Off-Site EPA Identification Number (RCRA ID No.)	NA							
Off-Site Location Name	PM RECOVERY							
Off-site Address	420 S. CASCADE STREET							
City	NEW CASTLE	State	PA	County	LAWRENCE	Zip	16101	Country (Non-US)
Is location under control of reporting facility or parent company?						Yes	X	No

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 101776	1. C	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.)	NA
Off-Site location Name	DOMINION NICKEL ALLOYS
Off-site Address	834 APPLEBY LINE

City	BURLINGTON	State		County	ONTARIO	Zip	L7L 2Y7	Country (Non-US)	CA

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 201344	1. C	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						d. Waste Treatment Efficiency Estimate [enter 2 character code]
7A.1a	7A.1b	1		2			7A.1d
	3		4		5		
	6		7		8		
7A.2a	7A.2b	1		2			7A.2d
	3		4		5		
	6		7		8		
7A.3a	7A.3b	1		2			7A.3d
	3		4		5		
	6		7		8		
7A.4a	7A.4b	1		2			7A.4d
	3		4		5		
	6		7		8		
7A.5a	7A.5b	1		2			7A.5d
	3		4		5		
	6		7		8		

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [ ]
and indicate the Part II, Section 6.2/7A page number in this box: [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

State Only

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ]

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1					
8.1a	Total on-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1b	Total other on-site disposal or other releases	NA	NA	NA	NA
8.1c	Total off-site disposal to Class I Underground Injection Wells, RCRA Subtitle C landfills, and other landfills	NA	NA	NA	NA
8.1d	Total other off-site disposal or other releases	18806	NA	NA	NA
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	131925	303110	300000	300000
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	0			
8.9	Production ratio or activity index	1.30			

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	If you wish to submit additional optional information on source reduction, recycling, or pollution control activities with this report, check "Yes."			Yes [ ]

EPA Form 9350-1 (Rev. 8/2006) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

TRI Facility ID Number
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Nickel

State Only

SECTION 8.11. Submit additional optional information on source reduction, recycling, or pollution control activities.

Form R Equipment
2006

Brass	Aluminum	Stainless Steel	Copper	Bronze/ Copper	Leaded Bronze/ Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu
3,688.4	263.00	5,160.50	255,458.00	2 add to:	64,876.00		89,180.00	48,187	5160.5	34,058.00
3.7% Pb				1.7% PB	1.6% Pb		99% Cu	0.9% Pb		0.05% Pb
0.074				**#VALUE!**	**1038.016**		**88288.2**	**433.683**		**17.029**
63% Cu				89% Cu	89% Cu			99% Cu		90% Cu
3251.115				**#VALUE!**	**57,740**			**47705.13**		**30652.2**
SMUS reported Pb above de minimus level of 0.1 for all metal alloys above										

Form R Materials
2006

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3
4221	**8,869.00**	10.0%	887	16.0%	1,419	0.0%	0	72.0%	6,386	0.0%	0	0.0%
1058273 MATRIX		0.0%	0	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
1824 RZR BRAZE POWDER		18.0%	887	60.0%	0	3.0%	0	11.0%	0	0.0%	0	0.0%
34FP/15F BLEND		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 100 POWDER 5#		0.0%	0	70.0%	0	0.1%	0	19.0%	0	0.0%	0	0.0%
AMDRY 100C POWDER 5#		0.0%	0	70.0%	0	0.1%	0	19.0%	0	0.0%	0	0.0%
Amdry 103 powder 5#		0.0%	0	70.0%	0	0.1%	0	19.0%	0	0.0%	0	0.0%
AMDRY 1371 POWDER 10#		25.0%	0	19.0%	0	0.0%	0	3.5%	0	0.0%	0	0.0%
AMDRY 1718 POWDER 5#		1.0%	0	53.0%	0	0.0%	0	19.0%	0	0.0%	0	0.0%
AMDRY 187 POWDER	**0.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 2000 POWDER 5#	**1,433.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 2010 POWDER 5#	**15,425.00**	0.0%	0	0.0%	0	53.0%	8,175	0.0%	0	0.0%	0	0.0%
AMDRY 204NS-1 POWDER 12.5#	**66,250.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 301 POWDER (3010) 5#	**940.00**	11.0%	103	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 302 POWDER 5#		11.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 303	**450.00**	0.0%	0	0.0%	0	99.0%	446	0.0%	0	0.0%	0	0.0%
AMDRY 313X POWDER 5#	**7,510.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 333 POWDER (3330) 5#	**375.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 345		65.0%	0	0.0%	0	10.0%	0	25.0%	0	0.0%	0	0.0%
AMDRY 353 POWDER (3330) 5#		46.0%	0	50.0%	0	53.5%	0	0.0%	0	0.0%	0	0.0%
AMDRY 355 POWDER 5#	**9,900.00**	0.0%	0	0.0%	0	55.0%	5,445	0.0%	0	0.0%	0	0.0%
AMDRY 356 ALUM OXIDE PWA 1356 / 5#	**285.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 365-1		24.0%	0	45.0%	0	12.0%	0	17.0%	0	0.0%	0	0.0%
AMDRY 365-2 POWDER (3330) 5#		24.0%	0	45.0%	0	12.0%	0	17.0%	0	0.0%	0	0.0%
AMDRY 367 POWDER / 5#	**3,250.00**	0.0%	0	10.5%	341	0.0%	0	78.5%	2,551	0.0%	0	0.0%
AMDRY 386 POWDER 5#		22.0%	0	48.0%	0	13.0%	0	17.0%	0	0.0%	0	0.0%
AMDRY 387 POWDER 5#		0.0%	0	86.0%	0	6.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 400 POWDER 5#		51.0%	0	17.0%	0	0.0%	0	19.0%	0	0.0%	0	0.0%
AMDRY 482 POWDER		8.0%	0	73.0%	0	2.0%	0	9.0%	0	0.0%	0	0.0%
AMDRY 485 PWA 1185-1		33.0%	0	40.0%	0	0.0%	0	24.0%	0	0.0%	0	0.0%
AMDRY 500C POWDER 5#		0.0%	0	36.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 500F POWDER 5#		0.0%	0	36.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 5260 POWDER 5#	**2,860.00**	20.0%	572	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 5670 POWDER 5#	**3,185.00**	20.0%	637	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 5843 POWDER 10#	**25,440.00**	10.0%	2,544	0.0%	0	0.0%	0	4.0%	1,018	0.0%	0	0.0%
AMDRY 625 POWDER 5#		50.0%	0	63.0%	0	0.0%	0	21.5%	0	0.0%	0	0.0%

Form R Materials
2006

AMDRY 6415	**5,250.00**	0.0%	0	0.0%	0	0.0%	0	10.0%	525	0.0%	0	98.8%
AMDRY 6417 POWDER / 10#		0.0%	0	0.0%	0	0.2%	0	0.1%	0	0.0%	0	99.0%
AMDRY 6420 POWDER 10#	**11,760.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 6505	**2,430.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 713C		1.0%	0	70.0%	0	6.0%	0	16.0%	0	0.0%	0	0.0%
AMDRY 718 CLASS B POWDER 5#		1.0%	0	53.0%	0	0.0%	0	19.0%	0	0.0%	0	0.0%
AMDRY 718 POWDER 5#		1.0%	0	53.0%	0	0.0%	0	19.0%	0	0.0%	0	0.0%
AMDRY 718B POWDER 5#		1.0%	0	53.0%	0	0.0%	0	19.0%	0	0.0%	0	0.0%
AMDRY 738		8.5%	0	62.0%	0	3.5%	0	16.0%	0	0.0%	0	0.0%
AMDRY 770 POWDER (7701) 5#		0.1%	0	80.0%	0	0.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY 770 POWDER (7703)		0.1%	0	80.0%	0	0.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY 770 POWDER 5#	**0.00**	0.1%	0	80.0%	0	0.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY 770 POWDER/XPT 711		0.0%	0	83.0%	0	0.0%	0	7.0%	0	0.0%	0	0.0%
AMDRY 775 POWDER		0.1%	0	80.0%	0	0.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY 780 POWDER (7801)		0.1%	0	92.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 780 POWDER 5#		0.1%	0	92.0%	0	0.0%	0	15.0%	0	0.0%	0	0.0%
AMDRY 788		39.0%	0	21.0%	0	0.0%	0	22.0%	0	0.0%	0	0.0%
Amdry 790.0 powder 5#		0.1%	0	92.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 790.1 POWDER 5#		0.1%	0	92.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 8670 / PWA 36117-2 / 5#		10.0%	0	14.0%	0	5.5%	0	8.0%	0	0.0%	0	0.0%
AMDRY 914 / NICOSI (9143)		20.0%	0	72.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 915 POWDER		1.0%	0	75.0%	0	0.0%	0	13.0%	0	0.0%	0	0.0%
AMDRY 9150		1.0%	0	75.5%	0	0.0%	0	13.0%	0	0.0%	0	0.0%
AMDRY 917F		0.0%	0	100.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 920		64.0%	0	0.5%	0	6.0%	0	29.0%	0	0.0%	0	0.0%
AMDRY 930		0.0%	0	65.5%	0	0.0%	0	0.1%	0	0.0%	0	0.0%
AMDRY 9300B		0.0%	0	65.5%	0	0.0%	0	0.1%	0	0.0%	0	0.0%
AMDRY 936		0.0%	0	68.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 942-3 POWDER		0.0%	0	38.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 949 POWDER	**2,975.00**	0.0%	0	0.0%	0	55.0%	1,636	0.0%	0	0.0%	0	0.0%
AMDRY 9500	**95.00**	0.0%	0	0.0%	0	53.0%	50	0.0%	0	0.0%	0	0.0%
AMDRY 955	**590.00**	0.5%	3	83.0%	490	0.0%	0	10.0%	59	0.0%	0	0.0%
AMDRY 951 (Ni-50 Gr)	0.00	0.5%	0	60.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 956 POWDER (9560) 5#	**39,125.00**	0.0%	0	93.5%	36,582	5.0%	1,956	0.0%	0	0.0%	0	0.0%
AMDRY 959 POWDER 5#	**2,590.00**	0.0%	0	38.0%	984	7.0%	181	0.0%	0	0.0%	0	0.0%
AMDRY 960 POWDER (9600) 5#	**16,650.00**	0.0%	0	73.0%	12,155	5.0%	833	18.0%	2,997	0.0%	0	0.0%
AMDRY 961		0.0%	0	77.0%	0	6.0%	0	17.0%	0	0.0%	0	0.0%

Form R Materials
2006

AMDRY 962 (9624)	**790.00**	0.0%	0	67.0%	529	10.0%	79	22.0%	174	0.0%	0	0.0%
AMDRY 962 POWDER (9620) 5#		0.0%	0	67.0%	0	10.0%	0	22.0%	0	0.0%	0	0.0%
AMDRY 962 POWDER (9625) 5#		0.0%	0	67.0%	0	10.0%	0	22.0%	0	0.0%	0	0.0%
AMDRY 9621 POWDER		0.0%	0	77.0%	0	6.0%	0	17.0%	0	0.0%	0	0.0%
AMDRY 963 POWDER 5#		0.0%	0	68.0%	0	6.0%	0	26.0%	0	0.0%	0	0.0%
AMDRY 964 (9640)		0.0%	0	57.0%	0	11.0%	0	31.0%	0	0.0%	0	0.0%
AMDRY 964 POWDER 5#		0.0%	0	57.0%	0	11.0%	0	31.0%	0	0.0%	0	0.0%
AMDRY 9830 POWDER 5#		17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 9831 POWDER 5#	**3,830.00**	17.0%	651	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY 993 POWDER (9930) 50#	**10,050.00**	0.0%	0	1.0%	101	35.0%	3,518	1.0%	101	0.0%	0	0.0%
AMDRY 9951 POWDER	**2,649.00**	35.0%	927	30.0%	795	8.0%	212	25.0%	662	0.0%	0	0.0%
AMDRY 9954 POWDER		35.0%	0	30.0%	0	8.0%	0	25.0%	0	0.0%	0	0.0%
AMDRY 995C POWDER 5#		35.0%	0	30.0%	0	8.0%	0	26.0%	0	0.0%	0	0.0%
AMDRY 997 POWDER 5#		23.0%	0	44.0%	0	8.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY AlCo		30.0%	0	50.0%	0	69.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY B-93		12.0%	0	55.0%	0	3.0%	0	14.0%	0	0.0%	0	0.0%
AMDRY BRB / XPT 612		9.0%	0	70.0%	0	3.5%	0	14.0%	0	0.0%	0	0.0%
AMDRY BRB POWDER (-325)		9.5%	0	68.5%	0	6.0%	0	13.5%	0	0.0%	0	0.0%
AMDRY BRB POWDER 5#		9.5%	0	68.5%	0	6.0%	0	13.5%	0	0.0%	0	0.0%
AMDRY CHROME POWDER 30#	**1,080.00**	0.0%	0	0.0%	0	0.0%	0	99.5%	1,075	0.0%	0	0.0%
AMDRY CHROME POWDER 5#	**5,730.00**	0.0%	0	0.0%	0	0.0%	0	100.0%	5,730	0.0%	0	0.0%
AMDRY D-15 POWDER		10.0%	0	65.0%	0	3.5%	0	15.0%	0	0.0%	0	0.0%
AMDRY DF-3 POWDER		20.0%	0	54.0%	0	2.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY DF-3 POWDER		20.0%	0	54.0%	0	2.0%	0	20.0%	0	0.0%	0	0.0%
AMDRY DF-4B		10.0%	0	67.0%	0	3.5%	0	14.0%	0	0.0%	0	0.0%
AMDRY DF-5		0.0%	0	74.0%	0	2.0%	0	18.0%	0	0.0%	0	0.0%
AMDRY DF-6A POWDER		0.0%	0	74.0%	0	2.0%	0	18.0%	0	0.0%	0	0.0%
AMDRY MM509 POWDER 5#		54.0%	0	10.0%	0	0.0%	0	23.0%	0	0.0%	0	0.0%
AMDRY RENE 80 / 5 LBS		9.5%	0	54.0%	0	3.0%	0	14.0%	0	0.0%	0	0.0%
AMDRY S-57B		54.0%	0	10.0%	0	0.0%	0	23.5%	0	0.0%	0	0.0%
AMDRY SV 20 POWDER		0.0%	0	65.0%	0	5.5%	0	25.0%	0	0.0%	0	0.0%
AMDRY TD-55		2.0%	0	41.0%	0	0.0%	0	21.5%	0	0.0%	0	0.0%
AMDRY X-40 POWDER		54.0%	0	10.0%	0	0.0%	0	23.0%	0	0.0%	0	0.0%
AMDRY XPT 395 POWDER 5#		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
AMDRY XPT 434 BLEND		8.0%	0	68.0%	0	4.3%	0	15.0%	0	0.0%	0	0.0%
AMDRY XPT 449/SPM 4-2591		24.0%	0	48.0%	0	12.0%	0		0	0.0%	0	0.0%
BORON NITRIDE POWDER/0157		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Form R Materials
2006

DIAMALLOY 1003 POWDER 5#	**0.00**	0.0%	0	12.0%	0	0.0%	0	17.0%	0	0.0%	0	0.0%
DIAMALLOY 1004 POWDER 5#	**1,885.00**	0.0%	0	0.0%	0	10.0%	189	0.0%	0	0.0%	0	0.0%
DIAMALLOY 1005 POWDER 5#	**995.00**	0.5%	5	63.0%	627	0.0%	0	21.5%	214	0.0%	0	0.0%
DIAMALLOY 1006 POWDER 5#	**1,035.00**	1.0%	10	53.0%	549	0.0%	0	19.0%	197	0.0%	0	0.0%
DIAMALLOY 1007 POWDER 5#	**3,815.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 1008 POWDER 5#	**1,820.00**	0.0%	0	4.0%	73	0.0%	0	18.0%	328	0.0%	0	0.0%
DIAMALLOY 131PAB / 10#		0.0%	0	20.0%	0	0.0%	0	67.0%	0	0.0%	0	0.0%
DIAMALLOY 2001 POWDER 5#	**21,465.00**	1.0%	215	70.0%	15,026	0.0%	0	17.0%	3,649	0.0%	0	0.0%
DIAMALLOY 2002 POWDER 5#	**2,175.00**	6.0%	131	36.0%	783	0.0%	0	8.5%	185	0.0%	0	0.0%
DIAMALLOY 2003 POWDER 5#	**615.00**	11.5%	71	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 2004 POWDER 5#	**10,650.00**	12.0%	1,278	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 2005NS POWDER 5#	**20,750.00**	17.0%	3,528	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 2006 POWDER 5#		17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 3001 POWDER 5#	**1,900.00**	49.0%	931	1.0%	19	0.0%	0	17.5%	333	0.0%	0	0.0%
DIAMALLOY 3002NS POWDER 5#	**950.00**	59.5%	565	1.0%	10	0.0%	0	8.5%	81	0.0%	0	0.0%
DIAMALLOY 3002-1	**200.00**	59.5%	119	1.0%	2	0.0%	0	8.5%	17	0.0%	0	0.0%
DIAMALLOY 3004 POWDER 5#	**25,395.00**	0.0%	0	20.0%	5,079	0.0%	0	0.0%	0	80.0%	20,316	0.0%
DIAMALLOY 3005 POWDER 5#	**400.00**	0.0%	0	10.0%	40	0.0%	0	0.0%	0	90.0%	360	0.0%
DIAMALLOY 3006 POWDER 5#		0.0%	0	40.0%	0	0.0%	0	52.0%	0	0.0%	0	0.0%
DIAMALLOY 3007 - 12.5#		0.0%	0	16.0%	0	0.0%	0	73.0%	0	0.0%	0	0.0%
DIAMALLOY 3007 POWDER 5#	**19,280.00**	0.0%	0	10.0%	1,928	0.0%	0	0.0%	0	90.0%	17,352	0.0%
DIAMALLOY 4006 POWDER 5#	**3,210.00**	0.0%	0	55.0%	1,766	0.0%	0	20.5%	658	0.0%	0	0.0%
DIAMALLOY 4008NS POWDER 5#	**1,115.00**	0.0%	0	95.5%	1,065	4.5%	50	0.0%	0	0.0%	0	0.0%
DIAMALLOY 4010 POWDER 5#	**0.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 4454		35.0%	0	30.0%	0	8.0%	0	25.0%	0	0.0%	0	0.0%
DIAMALLOY 4700 POWDER 10#		38.0%	0	32.0%	0	8.0%	0	21.0%	0	0.0%	0	0.0%
DIAMALLOY 5815 PWDR 5#		12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 5826 PWDR 5#		17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY 5847-1 5#		10.0%	0	0.0%	0	0.0%	0	4.0%	0	0.0%	0	0.0%
DIAMALLOY 5848 PWDR 5#	**985.00**	10.0%	99	0.0%	0	0.0%	0	4.0%	39	0.0%	0	0.0%
DIAMALLOY 5849 POWDER 5#	**1,960.00**	10.0%	196	0.0%	0	0.0%	0	4.0%	78	0.0%	0	0.0%
DIAMALLOY 5872 NS 5# POWDER		12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
DIAMALLOY W914 - 10lb	**21,970.00**	0.0%	0	20.0%	4,394	0.0%	0	67.0%	14,720	0.0%	0	0.0%
DU2221	**3,312.00**	1.0%	33	74.0%	2,451	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2222	**13,570.00**	1.0%	136	75.0%	10,178	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2223	**2,775.00**	1.0%	28	75.0%	2,081	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2231	**736.00**	1.0%	7	80.0%	589	0.0%	0	0.0%	0	0.0%	0	0.0%

Form R Materials
2006

DU2241	**4,391.00**	1.0%	44	85.0%	3,732	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2242	**2,931.00**	1.0%	29	85.0%	2,491	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2244	**1,200.00**	0.0%	0	85.0%	1,020	0.0%	0	0.0%	0	0.0%	0	0.0%
DU2311PB	**2,360.00**	0.0%	0	68.0%	1,605	4.0%	94	4.0%	94	0.0%	0	0.0%
DU2313	**19,909.00**	0.0%	0	68.0%	13,538	4.0%	796	4.0%	796	0.0%	0	0.0%
FVA-5-B/XPT 271/SPM4-2623												
GT-50 GE Proprietary Material		25.0%	0	18.3%	0	0.0%	0	3.5%	0	0.0%	0	0.0%
GT54	**850.00**	26.0%	221	25.0%	213	6.0%	51	16.5%	140	0.0%	0	0.0%
GT56	**82.00**	0.0%	0	65.0%	53	3.5%	3	14.0%	11	0.0%	0	0.0%
METCO 101B-NS POWDER 12.5#	**540.00**	0.0%	0	80.0%	432	4.0%	22	0.0%	0	0.0%	0	0.0%
METCO 101NS POWDER 5#	**43,237.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 101SF POWDER 5#	**20,535.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 102 POWDER 12.5#	**1,955.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 102 POWDER 5#	**40,100.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 105NS POWDER 12.5#	**7,040.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 105NS POWDER 5#	**1,600.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 105SFP POWDER 5#	**20,750.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 106 POWDER 5#	**18,690.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 106F POWDER 5#	**2,280.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%
METCO1101	**7,689.00**	0.0%	0	82.0%	6,305	18.0%	1,384	0.0%	0	0.0%	0	0.0%
METCO 1102	**327.00**	0.0%	0	82.0%	268	18.0%	59	0.0%	0	0.0%	0	0.0%
METCO 111 POWDER 5#	**3,830.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%
METCO 1123 POWDER 5#	**495.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	45.0%
METCO 12C POWDER	**295.00**	9.0%	27	18.0%	53	0.0%	0	4.0%	12	0.0%	0	0.0%
METCO 130 POWDER 12.5#	**455.00**	0.5%	2	83.0%	378	0.0%	0	10.0%	46	0.0%	0	0.0%
METCO 130 POWDER 5#	**6,950.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 130SF POWDER 5#	**8,245.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 131VF POWDER 5#		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 136CP / 5 LBS	**2,735.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 136F POWDER 12.5#	**2,600.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%
METCO 136F POWDER 5#	**1,300.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%
METCO 143 POWDER 5#	**4,370.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%
METCO 15E (US) POWDER 5# -106+45µ / 5#		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 15E POWDER / 25#	**1,085.00**	1.0%	11	70.5%	765	0.0%	0	17.0%	184	0.0%	0	0.0%
METCO 15F PWDR 5#		1.0%	0	70.5%	0	0.0%	0	17.0%	0	0.0%	0	0.0%
METCO 16C POWDER 5#	0.00	1.0%	0	70.5%	0	0.0%	0	17.0%	0	0.0%	0	0.0%
METCO 18C POWDER 5#	**0.00**	0.5%	0	69.0%	0	0.0%	0	16.0%	0	0.0%	0	0.0%

Form R Materials
2006

METCO 19E POWDER 5#	**340.00**	40.0%	136	27.0%	92	0.0%	0	18.0%	61	0.0%	0	0.0%
METCO 201B-NS POWDER 12.5#		0.0%	0	64.0%	0	0.0%	0	16.0%	0	0.0%	0	0.0%
METCO 201B-NS POWDER 5#	**112.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 201NS POWDER 12.5#		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 202NS POWDER 12.5#	**1,112.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 202NS POWDER 5#	**14,612.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 203NS POWDER 12.5#	**21,900.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204BNS POWDER 12.5#	**2,437.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204B-NS POWDER 5#	**600.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204C-NS POWDER 12.5#	**76,540.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204F 12.5#	**44,662.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204AF 12.5#	**1,487.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204NS POWDER 12.5#	**537.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204NS POWDER 5#	**82,862.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204NS-AP POWDER 12.5#	**78,325.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 204NS-G POWDER 12.5#	**42,925.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 205NS POWDER 12.5#	**363,850.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 210 POWDER 5#	**2,300.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 210NS-1 POWDER 12.5#	**2,945.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 210NS-1 POWDER 5#	**4,100.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 210NS-1G POWDER 12.5#	**17,800.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 2602	**6,474.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 301C-NS POWDER 5#	**712.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 301NS POWDER 5#	**3,810.00**	0.0%	0	65.0%	2,477	3.5%	133	14.0%	533	0.0%	0	0.0%
METCO 303NS-1 POWDER 5#	**12,655.00**	0.0%	0	65.0%	8,226	3.5%	443	14.0%	1,772	0.0%	0	0.0%
METCO 307NS POWDER 5#	**310.00**	0.0%	0	27.0%	84	0.0%	0	7.0%	22	0.0%	0	0.0%
METCO 307NS-2 POWDER 5#	**29,565.00**	0.5%	148	74.5%	22,026	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 307NS-3 POWDER 5#	**6,040.00**	0.5%	30	74.5%	4,500	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 308NS POWDER 25#	**7,205.00**	0.5%	36	74.5%	5,368	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 308NS-1 POWDER 5#	**6,325.00**	5.0%	316	84.5%	5,345	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 308NS1 PWDR 25#	**2,550.00**	0.5%	13	84.5%	2,155	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 308NS-3 POWDER 5#		0.5%	0	84.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 309NS-3 POWDER 5#	**9,545.00**	0.5%	48	84.5%	8,066	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 310NS POWDER 5#	**1,605.00**	0.5%	8	79.5%	1,276	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 311NS POWDER 5#		0.0%	0	0.0%	0	61.0%	0	0.0%	0	0.0%	0	0.0%
METCO 312NS POWDER 12.5#		0.0%	0	0.0%	0	55.0%	0	0.0%	0	0.0%	0	0.0%
METCO 312NS PWDR 10#	**5,075.00**	0.0%	0	71.0%	3,603	4.0%	203	4.0%	203	0.0%	0	0.0%

Form R Materials
2006

METCO 313NS POWDER 5#	**90.00**	0.0%	0	71.0%	64	4.0%	4	4.0%	4	0.0%	0	0.0%
METCO 314NS POWDER 12.5#		0.0%	0	0.0%	0	40.0%	0	0.0%	0	0.0%	0	0.0%
METCO 31C-NS POWDER 5#	**41,300.00**	0.0%	0	71.0%	29,323	4.0%	1,652	4.0%	1,652	0.0%	0	0.0%
METCO 320NS POWDER 5#	**28,135.00**	4.0%	1,125	55.0%	15,474	0.0%	0	4.5%	1,266	0.0%	0	0.0%
METCO 32C POWDER 5#	**30,856.00**	0.0%	0	0.0%	0	62.0%	19,131	0.0%	0	0.0%	0	0.0%
METCO 34F POWDER 5#	**5,370.00**	10.0%	537	14.0%	752	0.0%	0	3.5%	188	0.0%	0	0.0%
METCO 34FP POWDER 5#	**6,620.00**	6.0%	397	36.0%	2,383	0.0%	0	8.5%	563	0.0%	0	0.0%
METCO 350NS POWDER 25#	**1,005.00**	6.0%	60	36.0%	362	0.0%	0	8.5%	85	0.0%	0	0.0%
METCO 36C POWDER 5#	**22,200.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 404NS POWDER 25#	**10,605.00**	0.0%	0	45.0%	4,772	0.0%	0	12.0%	1,273	0.0%	0	0.0%
METCO 404NS POWDER 5#	**400.00**	0.5%	2	83.0%	332	0.0%	0	10.0%	40	0.0%	0	0.0%
METCO 410NS POWDER 5#	**14,350.00**	0.0%	0	80.0%	11,480	20.0%	2,870	0.0%	0	0.0%	0	0.0%
METCO 412NS	**5,815.00**	0.0%	0	6.0%	349	24.0%	1,396	0.0%	0	0.0%	0	0.0%
METCO 41C POWDER 5#		0.0%	0	28.0%	0	17.0%	0	0.0%	0	0.0%	0	0.0%
METCO 41C PWDR 50# PAILS	**5,355.00**	0.0%	0	12.0%	643	0.0%	0	17.0%	910	0.0%	0	0.0%
METCO 421NS-2	**8,000.00**	0.0%	0	12.0%	960	0.0%	0	17.0%	1,360	0.0%	0	0.0%
METCO 42C POWDER 5#	**205.00**	0.0%	0	33.0%	68	2.0%	4	0.0%	0	0.0%	0	0.0%
METCO 42C PWDR 20#	**7,870.00**	0.0%	0	2.0%	157	0.0%	0	16.0%	1,259	0.0%	0	0.0%
METCO 42C PWDR 50# PAILS	**3,960.00**	0.0%	0	2.0%	79	0.0%	0	16.0%	634	0.0%	0	0.0%
METCO 430NS POWDER 5#		0.0%	0	2.0%	0	0.0%	0	16.0%	0	0.0%	0	0.0%
METCO 439NS POWDER 5#	**4,390.00**	12.5%	549	27.0%	1,185	2.0%	88	0.0%	0	55.0%	2,415	0.0%
METCO 439NS-2 POWDER 5#	**1,635.00**	12.5%	204	27.0%	441	2.0%	33	48.0%	785	0.0%	0	0.0%
METCO 43C-NS POWDER 5#	**4,195.00**	12.5%	524	27.0%	1,133	2.0%	84	48.0%	2,014	0.0%	0	0.0%
METCO 43F-NS POWDER 5#	**11,065.00**	0.0%	0	78.0%	8,631	0.0%	0	19.0%	2,102	0.0%	0	0.0%
METCO 43VF-NS POWDER 5#	**13,720.00**	0.0%	0	78.0%	10,702	0.0%	0	19.0%	2,607	0.0%	0	0.0%
METCO 44 POWDER 5#	**1,710.00**	0.0%	0	78.0%	1,334	0.0%	0	19.0%	325	0.0%	0	0.0%
METCO 441NS-1 POWDER 5#	**880.00**	0.0%	0	74.0%	651	0.0%	0	16.0%	141	0.0%	0	0.0%
METCO 442 POWDER 5#	**210.00**	0.0%	0	26.0%	55	2.0%	4	6.0%	13	0.0%	0	0.0%
METCO 443NS POWDER 25#	**3,705.00**	0.0%	0	68.0%	2,519	7.0%	259	8.5%	315	0.0%	0	0.0%
METCO 443NS POWDER 5#	**1,400.00**	0.0%	0	73.0%	1,022	5.0%	70	18.0%	252	0.0%	0	0.0%
METCO 443NS SPECIAL / XPT 585 / 5#	**52,655.00**	0.0%	0	73.0%	38,438	5.0%	2,633	18.0%	9,478	0.0%	0	0.0%
METCO 444 POWDER 5#	**10,355.00**	0.0%	0	70.0%	7,249	5.0%	518	18.5%	1,916	0.0%	0	0.0%
METCO 445 POWDER 5#	**18,705.00**	0.0%	0	72.0%	13,468	7.0%	1,309	9.0%	1,683	0.0%	0	0.0%
METCO 447NS POWDER 5#	**2,610.00**	0.0%	0	0.0%	0	10.0%	261	0.0%	0	0.0%	0	0.0%
METCO 449P POWDER 5#	**38,215.00**	0.0%	0	86.0%	32,865	6.0%	2,293	0.0%	0	0.0%	0	0.0%
METCO 450NS POWDER 25#	**820.00**	0.0%	0	0.0%	0	3.0%	25	0.0%	0	0.0%	0	0.0%
METCO 450NS POWDER 5#	**3,700.00**	0.0%	0	94.0%	3,478	5.0%	185	0.0%	0	0.0%	0	0.0%

Form R Materials
2006

METCO 450P POWDER 5#	**246,480.00**	0.0%	0	94.0%	231,691	5.0%	12,324	0.0%	0	0.0%	0	0.0%
METCO 451 POWDER 5#	**850.00**	0.0%	0	94.0%	799	4.0%	34	0.0%	0	0.0%	0	0.0%
METCO 452 POWDER 5#	**0.00**	0.0%	0	81.0%	0	1.0%	0	9.0%	0	0.0%	0	0.0%
METCO 453 POWDER 5#	**12,850.00**	0.0%	0	38.0%	4,883	7.0%	900	0.0%	0	0.0%	0	0.0%
METCO 45C-NS POWDER 5#	**10,811.00**	55.0%	5,946	31.0%	3,351	6.0%	649	0.0%	0	0.0%	0	0.0%
METCO 45VF-NS POWDER 5#	**16,005.00**	55.0%	8,803	10.0%	1,601	0.0%	0	24.0%	3,841	0.0%	0	0.0%
METCO 461NS POWDER 5#	**8,600.00**	55.0%	4,730	10.0%	860	0.0%	0	24.0%	2,064	0.0%	0	0.0%
METCO 480NS POWDER 5#	**2,130.00**	2.5%	53	67.0%	1,427	5.5%	117	17.5%	373	0.0%	0	0.0%
METCO 51F-NS POWDER 25#	**23,945.00**	0.0%	0	95.5%	22,867	4.5%	1,078	0.0%	0	0.0%	0	0.0%
METCO 51F-NS POWDER 5#	**300.00**	0.0%	0	0.0%	0	10.0%	30	0.0%	0	0.0%	0	0.0%
METCO 51NS POWDER 5#	**30,500.00**	0.0%	0	0.0%	0	10.0%	3,050	0.0%	0	0.0%	0	0.0%
METCO 52C-NS POWDER 5#	**9,865.00**	0.0%	0	0.0%	0	10.0%	987	0.0%	0	0.0%	0	0.0%
METCO 54NS POWDER 5#	**21,345.00**	0.0%	0	0.0%	0	88.0%	18,784	0.0%	0	0.0%	0	0.0%
METCO 54NS PWDR 10#	**10,395.00**	0.0%	0	0.0%	0	99.0%	10,291	0.0%	0	0.0%	0	0.0%
METCO 54NS-1 POWDER 5#	**4,050.00**	0.0%	0	0.0%	0	99.0%	4,010	0.0%	0	0.0%	0	0.0%
METCO 55 POWDER 5#	**13,620.00**	0.0%	0	0.0%	0	99.0%	13,484	0.0%	0	0.0%	0	0.0%
METCO 56C-NS POWDER 5#	**515.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 56F-NS POWDER 5#	**1,835.00**	0.0%	0	99.5%	1,826	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 57NS POWDER	**12,465.00**	0.0%	0	99.5%	12,403	0.0%	0	16.0%	1,994	0.0%	0	0.0%
METCO 57NS POWDER 5#		0.0%	0	38.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 58NS POWDER		0.0%	0	38.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 58NS POWDER 5#		0.0%	0	36.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 600NS POWDER 5#		0.0%	0	38.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 600NS-1 PWDR 5#	**745.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 601NS POWDER 5#	**7,765.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 605NS POWDER 5#	**171,470.00**	0.0%	0	0.0%	0	53.0%	90,879	0.0%	0	0.0%	0	0.0%
METCO 610NS POWDER 12.5#	**2,145.00**	0.0%	0	0.0%	0	9.0%	193	0.0%	0	0.0%	0	0.0%
METCO 63NS POWDER 5#	**3,450.00**	0.0%	0	0.0%	0	7.5%	259	0.0%	0	0.0%	0	0.0%
METCO 64 POWDER 5#	**9,050.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 66F-NS POWDER 5#	**640.00**	59.0%	378	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 68F-NS-1 POWDER 5#	**3,125.00**	59.5%	1,859	1.0%	31	0.0%	0	8.5%	266	0.0%	0	0.0%
METCO 700 POWDER 5#	**5,190.00**	49.0%	2,543	1.0%	52	0.0%	0	17.5%	908	0.0%	0	0.0%
METCO 70C-NS POWDER 12.5#	**930.00**	0.0%	0	55.0%	512	0.0%	0	20.0%	186	0.0%	0	0.0%
METCO 70F-NS POWDER 10#	**1,500.00**	0.0%	0	0.0%	0	0.0%	0	100.0%	1,500	0.0%	0	0.0%
METCO 71NS POWDER 5#	**10.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	10	0.0%
METCO 71VF-NS POWDER 5#	**5,410.00**	11.5%	622	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 71VF-NS-1 POWDER 5#	**11,740.00**	11.5%	1,350	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%

Form R Materials
2006

METCO 71VFNS-5 POWDER	**8,980.00**	11.5%	1,033	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 72F-NS POWDER 5#	**2,445.00**	11.5%	281	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 73F POWDER	**16,385.00**	12.0%	1,966	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 73F-NS-1 POWDER 5#		17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 73F-NS-2 POWDER 5#	**28,350.00**	17.0%	4,820	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 73SF-NS POWDER 5#	**17,055.00**	17.0%	2,899	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 76F-NS POWDER 5#	**3,985.00**	17.0%	677	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 81NS POWDER 5#	**930.00**	21.0%	195	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
METCO 81VF-NS POWDER 5#	**10,955.00**	0.0%	0	20.0%	2,191	0.0%	0	4.0%	438	76.0%	8,326	0.0%
METCO 82VF-NS POWDER 5#	**60,940.00**	0.0%	0	20.0%	12,188	0.0%	0	0.0%	0	76.0%	46,314	0.0%
RAW MATERIAL FOR XPT 395 / XPT 394	**900.00**	0.0%	0	12.0%	108	0.0%	0	0.0%	0	88.0%	792	0.0%
SP 86/70NS POWDER NIC ALUM 5#		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SP8847 Metco 604NS 5#	590.00	0.1%	0	84.0%	496	16.0%	94	0.0%	0	0.0%	0	0.0%
SPEC METCO 52C (DJ CUT) 5#	805.00	0.0%	0	0.0%	0	9.0%	72	0.0%	0	0.0%	0	0.0%
SPECIAL SIZE METCO 307NS / 5#	1,120.00	0.0%	0	0.0%	0	87.0%	974	0.0%	0	0.0%	0	0.0%
SPM 2-2590 POWDER		0.5%	0	74.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM 2-2644 (312NS-1)		0.0%	0	85.0%	0	15.0%	0	0.0%	0	0.0%	0	0.0%
SPM 4-2231 POWDER 10#		0.0%	0	71.0%	0	4.0%	0	4.0%	0	0.0%	0	0.0%
SPM 4-2443 POWDER 51F-NS-1 5 LBS	**9,999.00**	2.5%	250	67.0%	6,699	5.5%	550	17.5%	1,750	0.0%	0	0.0%
SPM 4-2507	**845.00**	0.0%	0	0.0%	0	10.0%	85	0.0%	0	0.0%	0	0.0%
SPM 5-2599		0.0%	0	0.0%	0	6.0%	0	0.0%	0	0.0%	0	0.0%
SPM 6-2255 POWDER 5#		11.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM 6-2309 AE7443 SPINEL POWDER 12.5#	**1,990.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM 6-2710	**737.50**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM2000 POWDER 12.5#	**0.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM2-2638 / GT56 (B50A978) #5	**12,075.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SPM4-2506 Ti 6Al 4Vanadium Metal Powder		0.0%	0	63.0%	0	3.5%	0	13.5%	0	0.0%	0	0.0%
SPM5-2219 (AE7609) 18.7#	**9,678.00**	0.0%	0	0.0%	0	6.0%	581	0.0%	0	0.0%	0	0.0%
SPM5-2657 POWDER 5#		0.0%	0	0.0%	0	0.0%	0	85.5%	0	0.0%	0	0.0%
SULZER METCO 2042 POWDER 5#	**3,174.00**	12.0%	381	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SULZER METCO 2043 POWDER 5#	**6,658.00**	26.0%	1,731	26.0%	1,731	6.0%	399	16.5%	1,099	0.0%	0	0.0%
SULZER METCO 2460NS POWDER 5#	**8,433.00**	26.0%	2,193	25.0%	2,108	6.0%	506	16.5%	1,391	0.0%	0	0.0%
SULZER METCO 4198	**9,138.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SULZER METCO 4451		36.0%	0	32.0%	0	10.0%	0	22.0%	0	0.0%	0	0.0%
SULZER METCO 5241 POWDER 10#			0		0		0		0		0	
SULZER METCO 5803 POWDER 5#	**34,436.00**	0.0%	0	31.0%	10,675	0.0%	0	60.0%	20,662	0.0%	0	0.0%
SULZER METCO 5803-1	**1,690.00**	8.0%	135	11.5%	194	0.0%	0	11.0%	186	0.0%	0	0.0%

Form R Materials
2006

SULZER METCO 5810 POWDER 5#	**3,726.00**	9.0%	335	13.0%	484	0.0%	0	5.0%	186	0.0%	0	0.0%
SULZER METCO 5812 POWDER 5#	**0.00**	12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SULZER METCO 5847 POWDER 5#	**515.00**	12.0%	62	0.0%	0	0.0%	0		0	0.0%	0	0.0%
SULZER METCO 5860 POWDER 5#	**18,845.00**	10.0%	1,885	0.0%	0	0.0%	0	4.0%	754	0.0%	0	0.0%
SULZER METCO 6600 POWDER		8.0%	0	6.0%	0	0.0%	0	0.0%	0	29.0%	0	0.0%
SULZER METCO 7372 POWDER #15	**0.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SULZER METCO SPM2000-1 12.5#		4.0%	0	50.0%	0	0.0%	0	8.0%	0	0.0%	0	0.0%
SUME 9013	**50,500.00**	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
SXH-70 / 10 LBS		10.0%	0	0.0%	0	0.0%	0	4.0%	0	0.0%	0	0.0%
UCP Riken -SPM-5-2702 10#	**16,030.00**	10.0%	1,603	0.0%	0	0.0%	0	4.0%	641	0.0%	0	0.0%
WOKA - RTP 2		0.0%	0	40.0%	0	0.0%	0	53.0%	0	0.0%	0	0.0%
WOKA - RTP 2	**13,650.00**	0.0%	0	5.0%	683	0.0%	0	0.0%	0	0.0%	0	0.0%
WOKA 3102		0.0%	0	5.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
WOKA 3105		12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
XPT 448 AMDRY DF4B POWDER		12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%
XPT 459		10.0%	0	67.0%	0	3.5%	0	14.0%	0	0.0%	0	0.0%
XPT 470 / SPM 7-2622		0.0%	0	94.0%	0	4.0%	0	0.0%	0	0.0%	0	0.0%
XPT 595		1.0%	0	75.0%	0	0.0%	0	15.0%	0	0.0%	0	0.0%
		50.0%	0	83.0%	0	0.0%	0	10.0%	0	0.0%	0	0.0%

	Co	Ni	Al	Cr	CrC
Totals	**65,761**	**704,349**	**219,103**	**114,752**	**95,885**

Cr2O3 (lb	% Cu	Cu (lb)
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	59.0%	0
0	59.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

5,184	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.1%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	4.5%	0
0	4.5%	0
0	5.0%	0
0	62.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

0	0.0%	0
0	89.0%	1,678
0	0.0%	0
0	0.0%	0
0	100.0%	3,815
0	2.0%	36
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	4.0%	128
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
2,212	0.0%	0
0	0.0%	0
0	0.0%	0
3,715	0.0%	0
223	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
2,366	0.0%	0
1,183	0.0%	0
3,977	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	2.0%	0

0	0.0%	0
0	2.4%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

Form R Materials
2006

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	89.0%	2,323
0	0.0%	0
0	0.0%	0
0	0.0%	0

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	89.0%	267
0	89.0%	27,145
0	89.0%	8,780
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	62.0%	0
0	62.0%	0
0	59.0%	0
0	62.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	80.0%	1,716
0	72.0%	2,484
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	4.0%	37
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	85.0%	684
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	89.0%	752
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0		0
0	0.0%	0
0	1.0%	17

0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
0	0.0%	0
Cr2O		**Cu**
18,860		**49,863**

VEOLIA ENVIRONMENTAL SERVICES

Shipment Activity Detail Report

Criteria:				
	Date Shipped:	01/01/2006 to 12/31/2006	EPA Waste Code:	All
	EPA ID:	All	Waste Area:	All
	Manifest No.:	All	WIP No.:	372925
	Work Order No.:	All	Waste Name:	All
	Treatment Facility:	All	Chemical Name:	All
	Generators:	523804		

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 41 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 42 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 43 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 44 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 45 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 46 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 47 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 48 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 49 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 50 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 51 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 52 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 53 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 54 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 55 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 56 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 57 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 58 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 59 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 60 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 61 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 62 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0674227000 001 63 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0674227000 001 64 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	04/13/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0674227000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156115 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	FIBER		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0680032000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0688403000 003 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0688403000 003 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 003 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27

NJ 0700292000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0700292000 002 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0700292000 002 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/11/2006	0	0	0	550
				0	0	0	0

Work Order No.: 0700292000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016210 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0705545000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27

NJ 0710250000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

P2SUL004189

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

P2SUL004190

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

P2SUL004191

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 41 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 42 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 43 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 44 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 45 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 46 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 47 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 48 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 49 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0710250000 001 50 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 001 51 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0712592000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0712592000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0712592000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0712592000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0712592000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0712592000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0712592000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/02/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0712592000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016565 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0714728000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

R2SUL004206

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0714728000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0721841000 001 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0721841000 001 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/05/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0721841000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013032 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0724159000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0724159000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0724159000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0724159000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0724159000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0724159000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/24/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0724159000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013047 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0744697000 001 41 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0744697000 001 42 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	11/08/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0744697000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013048 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	NONE ID27 L

NJ 0757527000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0757527000 002 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0757527000 002 41 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 13 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 14 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 15 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 16 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 17 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 18 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 19 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 20 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 21 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 22 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 23 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 24 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 25 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 26 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 27 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 28 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 29 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 30 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 31 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 32 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 33 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 34 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 35 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 36 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 37 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 38 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 39 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 40 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

NJ 0762536000 001 41 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	642
				0	0	0	0

Work Order No.: 0762536000 **WIP:** 372925 - GENERAL EXHAUST
Manifest No.: ZZ00013202 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0762536000 001 42 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/29/2006	0	0	0	678
				0	0	0	0

Work Order No.: 0762536000
Manifest No.: ZZ00013202
Generator: 523804
WIP: 372925 - GENERAL EXHAUST
Waste Area:
Pack Lab?: No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL			ALUMINUM OXIDE 20-25% YTTRIUM OXIDE 2-4% CHROMIUM	ID27 L

Grand Totals:	0	0	0	281,850
	0	0	0	0

VEOLIA ENVIRONMENTAL SERVICES

Shipment Activity Detail Report

Criteria:

Date Shipped:	01/01/2006 to 12/31/2006	**EPA Waste Code:**	All
EPA ID:	All	**Waste Area:**	All
Manifest No.:	All	**WIP No.:**	640428
Work Order No.:	All	**Waste Name:**	All
Treatment Facility:	All	**Chemical Name:**	All
Generators:	523804		

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
ND 0666512000 001 01 0	NYD131318651	(DUP) E.I. DUPONT DENEMOURS & COMP.	09/29/2006	0	1	0	0
				0	0	0	0

Work Order No.: 0666512000 **WIP:** 640428 - MANUFACTURING
Manifest No.: ZZ00016309 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	TANKTR			5-10% INERT SOLIDS CONTAINING ALUMINUM OXIDE 0-0.5%	ID72

NJ 0736590000 001 01 0	NYD131318651	(DUP) E.I. DUPONT DENEMOURS & COMP.	10/14/2006	0	1,500	0	0
				0	0	0	0

Work Order No.: 0736590000 **WIP:** 640428 - MANUFACTURING
Manifest No.: ZZ00016540 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	TANKTR			5-10% INERT SOLIDS CONTAINING ALUMINUM OXIDE 0-0.5%	ID72 T

Grand Totals:	0	1,501	0	0
	0	0	0	0

VEOLIA ENVIRONMENTAL SERVICES

Shipment Activity Detail Report

Criteria:				
	Date Shipped:	01/01/2006 to 12/31/2006	EPA Waste Code:	All
	EPA ID:	All	Waste Area:	All
	Manifest No.:	All	WIP No.:	660911
	Work Order No.:	All	Waste Name:	All
	Treatment Facility:	All	Chemical Name:	All
	Generators:	523804		

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 WIP: 660911 - WET CERAMIC
Manifest No.: Z156179 Waste Area:
Generator: 523804 Pack Lab?: No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 WIP: 660911 - WET CERAMIC
Manifest No.: Z156179 Waste Area:
Generator: 523804 Pack Lab?: No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 WIP: 660911 - WET CERAMIC
Manifest No.: Z156179 Waste Area:
Generator: 523804 Pack Lab?: No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 002 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 002 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 10 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0680032000 002 11 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0680032000 002 12 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/03/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0680032000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z156179 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0688403000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0688403000 001 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0688403000 001 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0688403000 001 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	05/23/2006	0	0	0	400
				0	0	0	0

Work Order No.: 0688403000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133121 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 002 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0705545000 002 08 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0705545000 002 09 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	07/17/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0705545000 **WIP:** 660911 - WET CERAMIC
Manifest No.: Z133206 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72

NJ 0710250000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0710250000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0710250000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	09/26/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0710250000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016582 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 02 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 03 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards / Cubic Meters	Gallons / Liters	Tons / Metric Tons	Pounds / Kilograms
NJ 0714728000 002 04 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 05 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 06 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

NJ 0714728000 002 07 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	10/06/2006	0	0	0	800
				0	0	0	0

Work Order No.: 0714728000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00016558 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

Packing Slip #	EPA ID	Treatment Facility	Shipped	Yards Cubic Meters	Gallons Liters	Tons Metric Tons	Pounds Kilograms
NJ 0757527000 001 01 0	NYD131318651	(VEX) VEXOR TECHNOLOGY INC	12/15/2006	0	0	0	600
				0	0	0	0

Work Order No.: 0757527000 **WIP:** 660911 - WET CERAMIC
Manifest No.: ZZ00013169 **Waste Area:**
Generator: 523804 **Pack Lab?:** No

Units	Size	Net Wt 1	Net Wt 2	Description	Waste Codes
1	55 GAL	METAL		CERAMIC MATERIAL CONTAINING YTTRIUM OXIDE 1-2%	ID72 L

Grand Totals:	0	0	0	19,800
	0	0	0	0

Article Exemption, Sheet Metal (Q&A#365)

Modified by 1998 Q and A Addendum

365. Does the article exemption apply to flat rolled sheet metals, if they are used in operations which typically produce scrap but no *release*?

Assuming the scrap metal pieces are recognizable as the original piece, the *article* exemption does apply to these metals if the forming process caused 0.5 pounds or less of *releases* of a listed *toxic chemical* from all like items or

the items retain the thickness of sheet metal in whole or in part. Once an operation is performed on a metal that causes a *release* which is not recycled and which exceeds 0.5 pounds for the reporting year (for example, from operations such as heating, grinding, or welding), the *article* exemption no longer applies and *releases* must be reported when listed chemicals in a sheet metal are *processed* in quantities greater than the *processing* threshold.

To see the original text, click here.

To see the Update Description, click here.

Materials In Inventory (Q&A#88)

88. Are materials in inventory (i.e., amounts on hand at year end) factored into threshold determinations?

No. Only quantities of a toxic chemical actually manufactured (including imported), processed, or otherwise used during the reporting year are to be counted toward a threshold.

Fax Transmittal

from...

METCO DIVISION
PERKIN-ELMER CORPORATION

1101 Prospect Avenue
Westbury, NY 11590

Telephone: (516) 334-1300
Telex: 229913 METCO UR
Fax: (516) 334-6692

Date: NOVEMBER 9, 1990

To:

COMPANY KEMRON

ATTENTION MARIANNE SANTARELLI

DEPT. OR MAIL STOP PHONE 427-0950
FAX 427-0989

From: MR. PATRICK TIGHE
334-1300 EXT. 495

16 **Pages to follow**

METCO
PERKIN ELMER

Material Safety Data Sheet

METCO DIVISION
1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590
516-334-1300
516-824-2315 (24 HR EMERGENCY #)

Product: METCO 450, 450NS

MSDS No: METCO / 50-180
Revision: 1
Date: August 15, 1989

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: METCO 450, 450NS

Description: Metal Powder

Other Designations: PREMIUM NICKEL ALUMINUM COMPOSITE POWDER

Date of Issue: September 7, 1987

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name:	CAS Number:	Percent:	Exposure Limits:
Nickel (Soluble as Ni)	7440-02-0		OSHA PEL: 1 mg/m^3 N/A(Soluble as Ni) ACGIH TLV: 1 mg/m^3 0.1 mg/m^3 (Soluble as Ni)
Aluminum	7429-90-5		OSHA PEL: 15 mg/m^3 (Total Dust) 5 mg/m^3 (Respirable) 5 mg/m^3 (Fume) ACGIH TLV: 10 mg/m^3 (Dust) 5 mg/m^3 (Fume)
Organic Binder	Not Available		OSHA PEL: 10 mg/m^3 ACGIH TLV: 10 mg/m^3

SECTION III. PHYSICAL DATA

Appearance & Odor: Powder; No Odor.

Boiling point: N/A
Vapor pressure: N/A
Water solubility (%): Neg.
Vapor density (air=1): N/A
pH: N/A

Evaporation rate: N/A
Specific gravity (H_2O=1): 3.7
Melting point: 1300-2800
% volatile by volume: N/A
Molecular weight: N/A

MSDS 50-180 continues on page 2

METCO
PERKIN ELMER

Material Safety Data Sheet

METCO DIVISION
1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590
516-334-1300
516-824-2315 (24 HR EMERGENCY #)

Product: METCO 450, 450NS

MSDS No: METCO / 50-180
Revision: 1
Date: August 15, 1989

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): None **Limits: LEL %:** N/A **UEL %:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Unusual fire or explosion hazards: Moderate fire hazard in the form of dust when exposed to flame. Aluminum powder is classified as a flammable solid.

Special fire-fighting procedures: Treat as a metallic fire.

SECTION V. REACTIVITY DATA

Material is stable Hazardous polymerization will not occur

Chemical incompatibilities: Oxidizers, acids, sulfur, $Ni(NO_3)_2$; wood, combustibles.

Hazardous decomposition Products: Ozone and nitric oxide are formed by plasma flame (independent of powder).

SECTION VI. HEALTH HAZARD INFORMATION

Summary of risks:
NICKEL: Sensitizing dermatitis, allergic asthma, nasal cavities, pnuemoconiosis, listed human carcinogen by NIOSH.

ALUMINUM: Possible contribution to Shavers disease. Little evidence of pnuemoconiosis. May be implicated by Alzheimers disease.

ORGANIC BINDER: No current guidelines/standards are available.

Medical conditions which may be aggravated by contact: Consult a physician.

Target organs: Respiratory System, Skin.

Primary entry route(s): Inhalation, Ingestion, Contact.

Signs & symptoms of overexposure:

Eye contact: Possible irritation.

Skin contact: Possible dermatitis.

Inhalation: Respiratory irritation.

Ingestion: Possible irritation.

 HEALTH HAZARD INFORMATION continues on page 3

METCO DIVISION
1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590
516-334-1300
516-824-2315 (24 HR EMERGENCY #)

Product: METCO 450, 450NS

MSDS No: METCO / 50-180
Revision: 1
Date: August 15, 1989

HEALTH HAZARD INFORMATION continued from page 2

First aid:

Eye contact: Flood eye with water. If irritation persists, consult a physician.

Skin contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak procedures: Material that is spilled onto the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste management / Disposal: Consult local, state and federal regulations.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 KW shade #9, 40 to 60 KW shade #10 and greater than 60 KW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other: Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements.) Aluminized apron is to be worn during plasma spray process.

Workplace considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety stations:
Eye Wash Station is recommended.

Other: N/A

MSDS 50-180 continues on page 4

METCO
PERKIN ELMER

Material Safety Data Sheet

METCO DIVISION
1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590
516-334-1300
516-824-2315 (24 HR EMERGENCY #)

Product: METCO 450, 450NS

MSDS No: METCO / 50-180
Revision: 1
Date: August 15, 1989

SECTION IX. SPECIAL PRECAUTIONS

Storage segregation: Store away from incompatibles.

Special handling / storage: Cool and dry area.

Other precautions: Avoid oral ingestion and excessive skin contact.

Prepared/revised by: METCO

August 15, 1989

THE INFORMATION CONTAINED HEREIN IS BASED ON AVAILABLE DATA AND TESTS AND IS BELIEVED TO BE ACCURATE. IT IS PREPARED SOLEY FOR YOUR CONSIDERATION AND VERIFICATION SINCE CONDITIONS OF USE, STORAGE AND HANDLING MAY VARY.

1101 Prospect Avenue
Westbury, NY 11590

METCO

a division of
PERKIN ELMER

Emergency Telephone Number
(516) 334-1300

MATERIAL SAFETY DATA SHEET

Product Name: METCO 204NS, 204B-NS MSDS# 50-149

SECTION I

Trade Name: YTTRIA STABILIZED ZIRCONIA POWDER

Date of Issue: September 7, 1987

Revision Date: January 18, 1988

SECTION II COMPOSITION AND TOXICITY DATA

Composition	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Zirconium Dioxide	7440-67-2	5 mg/m^3	5 mg/m^3	STEL 10 mg/m^3
Yttrium Oxide	7440-65-5	1 mg/m^3	1 mg/m^3	STEL 3 mg/m^3

SECTION III PHYSICAL DATA

Boiling Point:	N/A	Specific Gravity (H_2O=1):	2.1
Vapor Pressure (mmHg):	N/A	Melting Point:	4200-4600
Solubility in Water:	NEG.	Evaporation Rate:	N/A
Appearance and Odor:	Powder; No Odor.	Vapor Density (AIR = 1):	N/A

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Flammable Limits	LEL	UEL
None	N/A	N/A	N/A

Extinguishing Media: Use Class D fire extinguisher.

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: Moderate fire hazard in the form of dust when exposed to flame.

SECTION V	REACTIVITY DATA		50-149
Stability	Unstable		Chlorinated hydrocarbon vapors present near plasma flame may be decomposed to phosgene. An adequate exhaust system is required to avoid the effect of dust, fumes and mist which may be generated by thermal spraying. Do not permit spray dust to enter eyes, mouth, cuts, scratches or open wounds.
	Stable	X	

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (independen of powder; similar to welding fumes).

Hazardous Polymerization	May Occur	X	Avoid exceeding the TLV Limit of 30 mg/m^3 and .2 mg/m^3 for nitric oxide and ozone respectively.
	Will Not Occur		

SECTION VI HEALTH HAZARD DATA

Summary of Risks:

ZIRCONIUM: Zirconium is not an important industrial poison. Deaths in rabbits have been caused by intravenous injection of 150 mg/kg of body weight. Most zirconium compounds in common use are insoluble and considered inert. Avoid inhalation of zirconium containing aerosols which can cause lung granulomos.

YTTRIUM: Irritated eyes; in animals; lungs, possible liver damage.

Medical Conditions Which May be Aggravated by Contact: N/A

Primary Entry Route(s): Eyes, Lungs.

Signs and Symptoms of Overexposure:

Eye Contact: Possible irritation.

Skin Contact: Possible dermatitis.

Inhalation: Respiratory irritation.

Ingestion: N/A

First Aid:

Eye Contact: Flood eye with water. If irritation persists, consult a physician.

Skin Contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Material that is spilled onto the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste Management/Disposal: Consult local and federal regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION 50-149

Personal Protective Equipment:

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 KW shade #9, 40 to 60 KW shade #10 and greater than 60 KW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other Protective Clothing or Equipment: Aluminized apron is to be worn during plasma process. Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements).

Workplace Considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety Stations: Eye Wash Station is recommended.

Other: N/A

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Precautions to be Taken in Handling and Storage: Avoid excessive skin contact and oral ingestion.

Other Precautions: N/A

The information contained herein is based on available data and tests and is believed to be accurate. It is presented solely for your consideration and verification since conditions of use, storage and handling may vary.

1101 Prospect Avenue
Westbury, NY 11590

METCO
a division of
PERKIN ELMER

Emergency Telephone Number
(516) 334-1300

MATERIAL SAFETY DATA SHEET

Product Name: METCO 310-NS, 311-NS, 313-NS MSDS# 50-157

SECTION I

Trade Name: ALUMINUM GRAPHITE COMPOSITE POWDER

Date of Issue: September 7, 1987
Revision Date: January 18, 1988

SECTION II — COMPOSITION AND TOXICITY DATA

Composition	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Aluminum (Metal & Oxide)	7429-90-5	N/A	10 mg/m^3	
Silicon	7440-21-3	10 mg/m^3	10 mg/m^3	(Nuisance)
Graphitic Carbon	7440-44-0	15 mppcf	2.5 mg/m^3	(Resp.)
		N/A	5 mg/m^3	(Total Dust)
Organic Binder		10 mg/m^3	10 mg/m^3	

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	Specific Gravity (H_2O=1):	3
Vapor Pressure (mmHg):	N/A	Melting Point:	Unknown
Solubility in Water:	Dangerous when wet, could release hydrogen.	Evaporation Rate:	N/A
Appearance and Odor:	Powder; no odor.	Vapor Density (AIR = 1):	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	None	Flammable Limits	LEL	UEL
		N/A	N/A	N/A

Extinguishing Media: Carbon dioxide, foam.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosion Hazards: Moderate fire hazard in the form of dust when exposed to flame.

SECTION V			REACTIVITY DATA	50-157
Stability	Unstable		Chlorinated hydrocarbon vapors present near plasma flame may be decomposed to phosgene. An adequate exhaust system is required to avoid the effect of dust, fumes and mist which may	
	Stable	X	be generated by thermal spraying. Do not permit spray dust to enter eyes, mouth, cuts, scratches or open wounds.	

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (independent of powder; similar to welding fumes).

Hazardous Polymerization	May Occur	X	Avoid exceeding the TLV Limit of 30 mg/m^3 and .2 mg/m^3 for nitric oxide and ozone respectively.
	Will Not Occur		

SECTION VI HEALTH HAZARD DATA

Summary of Risks:

ALUMINUM: Inhalation of finely divided powder has been reported as a cause of pulmonary fibrosis. May be implicated in Alzheimers disease. There has been some record of lung damage due to the inhalation of finely divided aluminum oxide particles. However, this effect (known as Shavers disease) is complicated by the presence in the inhaled air of silica and oxides of iron; a nuisance particulate. Aluminum alone is not generally regarded as an industrial poison.

SILICON: Does not occur free in nature, but is found as silicon dioxide (silica), and as various silicates. See also silica and silicates.

GRAPHITIC CARBON: Moderately toxic by intravenous route. It can cause a dust irritation, particularly to the eyes and mucous membranes. See also carbon black, soot. It can cause conjunctivitis epithelia hyperplasia of cornea as well as eczematous inflammation of eyelids.

ORGANIC BINDER: Not available.

Medical Conditions Which May be Aggravated by Contact: N/A

Primary Entry Route(s): Eyes, skin, respiratory system, ingestion

Signs and Symptoms of Overexposure:

Eye Contact: Possible irritation.

Skin Contact: Possible dermatitis.

Inhalation: Respiratory irritation.

Ingestion: N/A

First Aid:

Eye Contact: Flood eye with water. If irritation persists, consult a physician.

Skin Contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Material that is spilled onto the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste Management/Disposal: Consult local and federal regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION 50-157

Personal Protective Equipment:

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40 to 60 kW shade #10 and greater than 60 kW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other Protective Clothing or Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements). Aluminized apron is to be worn during plasma spray process.

Workplace Considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety Stations: Eye Wash Station is recommended.

Other: N/A

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Precautions to be Taken in Handling and Storage: Avoid excessive skin contact and oral ingestion.

Other Precautions: N/A

The information contained herein is based on available data and tests and is believed to be accurate. It is presented solely for your consideration and verification since conditions of use, storage and handling may vary.

1101 Prospect Avenue
Westbury, NY 11590

METCO
a division of
PERKIN ELMER

Emergency Telephone Number
(516) 334-1300

MATERIAL SAFETY DATA SHEET

Product Name: METCO 130, 130SF MSDS# 50-142

SECTION I

Trade Name: ALUMINA-TITANIA COMPOSITE POWDER

Date of Issue: September 7, 1987
Revision Date: January 18, 1988

SECTION II COMPOSITION AND TOXICITY DATA

Composition	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Titanium Dioxide	13463-67-7	15 mg/m^3	10 mg/m^3	
Silicon Dioxide	15468-21-2	5 mg/m^3	N/A	
Aluminum Oxide (Metal & Oxide)	1344-28-1	N/A	10 mg/m^3	
Organic Binder		10 mg/m^3	10 mg/m^3	

SECTION III PHYSICAL DATA

Boiling Point:	N/A	Specific Gravity (H_2O=1):	1.6
Vapor Pressure (mmHg):	N/A	Melting Point:	3000-3500
Solubility in Water:	Neg.	Evaporation Rate:	N/A
Appearance and Odor:	Powder; No Odor.	Vapor Density (AIR = 1):	N/A

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Flammable Limits	LEL	UEL
None	N/A	N/A	N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards:

Moderate fire hazard in the form of dust when exposed to flame.

SECTION V	REACTIVITY DATA		50-142
Stability	Unstable		Chlorinated hydrocarbon vapors present near plasma flame may be decomposed to phosgene. An adequate exhaust system is required to avoid the effect of dust, fumes and mist which may be generated by thermal spraying. Do not permit spray dust to enter eyes, mouth, cuts, scratches or open wounds.
	Stable	X	

Incompatibility (Materials to Avoid):

N/A

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (independent of powder; similar to welding fumes).

Hazardous Polymerization	May Occur	X	Avoid exceeding the TLV Limit of 30 mg/m^3 and .2 mg/m^3 nitric oxide and ozone respectively.
	Will Not Occur		

SECTION VI HEALTH HAZARD DATA

Summary of Risks:

ALUMINUM: There has been some record of lung damage due to the inhalation of finely divided aluminum oxide particles. However, this effect (known as Shavers disease) is complicated by the presence in the inhaled air of silica and oxides of iron; a nuisance particulate. Aluminum alone is not generally regarded as an industrial poison. Inhalation of finely divided aluminum powder has been reported as a cause of preliminary fibrosis. May be implicated by Alzheimers disease.

TITANIUM: Slight lung fibrosis.

SILICON: Does not occur free in nature, but is formed as silicon dioxide (silica) and as various silicates. See also silica and silicates.

ORGANIC BINDER: Not available.

Medical Conditions Which May be Aggravated by Contact: N/A

Primary Entry Route(s): Lungs.

Signs and Symptoms of Overexposure:

Eye Contact: Possible irritation.

Skin Contact: Possible dermatitis.

Inhalation: Respiratory irritation.

Ingestion: N/A

First Aid:

Eye Contact: Flood eye with water. If irritation persists, consult a physician.

Skin Contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Material that is spilled onto the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste Management/Disposal: Consult local and federal regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

Personal Protective Equipment:

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 KW shade #9, 40 to 60 KW shade #10 and greater than 60 KW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other Protective Clothing or Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements).

Workplace Considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety Stations: Eye Wash Station is recommended.

Other: N/A

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Precautions to be Taken in Handling and Storage: Avoid excessive skin contact and oral ingestion.

Other Precautions: N/A

The information contained herein is based on available data and tests and is believed to be accurate. It is presented solely for your consideration and verification since conditions of use, storage and handling may vary.

Special Features of a Hako Asbestos Vacuum

SELECTION

Back Pack Asbestos Vac- for hard to reach clean up jobs.

4/6 Gallon Asbestos Vac- portable with disposable paper collection bag. Wheel bracket optional.

15 Gallon Asbestos Vac- each unit includes front casters, 8″ rear wheels and carriage handle. All 15 gallon vacuum motor lid assemblies can be converted with adapter to a standard 30/55 gallon steel or fibre drum for wet or dry disposable recovery.

Wet/Dry Asbestos Vac- a versatile unit, all 15 gallon vacuums have wet/dry recovery capabilities with a 1 to 1 adapter and water shut-off.

30/55 Gallon Asbestos Vac- each unit is equipped with a painted tank, dolly cart and handle for easy maneuverability. Use a disposable 30 or 55 gallon drum and avoid rehandling toxic materials, resulting in labor savings.

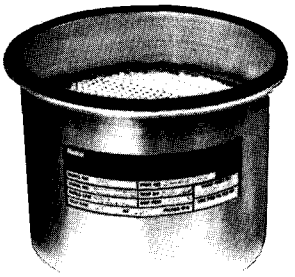
Twin-Powered Asbestos Vac- twin power vacuum on 55 gallon drum for bulk recovery with up to 3″ diameter hose.

Air-Powered Asbestos Vac- non-electric, no moving parts, for heavy commercial and industrial applications, may be used in potentially explosive conditions. Maintenance Free. Available in 15, 30 and 55 gallon sizes.

Asbestos Brake Drum Assembly- brake drum cleaner removes asbestos dust from brake assembly before mechanic changes brake shoes.

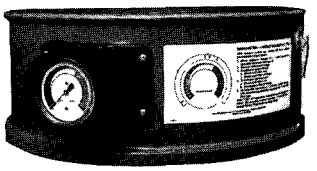
EXCLUSIVE H.E.P.A. FILTER

Hako Minuteman's H.E.P.A. filters feature an exclusive high tensile strength surface membrane laminated to the filter media for increased durability. A seamless lightweight aluminum filter housing eliminates potential leak areas. These Hako H.E.P.A. filters are now more resistant to punctures, tears, leaks, abrasions, and damage from moisture. Plus, H.E.P.A. filters are mounted internally, protecting both the operator and the motor from contamination, and preventing damage to the H.E.P.A. filter when transporting machine.



MANOMETER OPTION

Manometer adapter can be added to any Hako Minuteman H.E.P.A. operated vacuum with 15, 30, or 55 gallon drum capacities. A manometer measures the negative pressure within the vacuum tank unit and alerts the operator when the filters need service.



APPLICATIONS

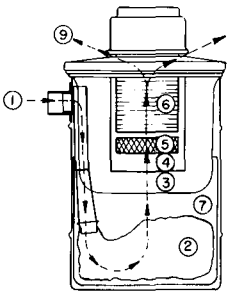
This vacuum is highly effective in filtering airborne pollutants such as:

—aluminum	—fullers earth	—nickel
—arsenic	—fumigants	—nicotine
—arsenite	—fungicides	—pesticides
—barium	—graphite	—silica
—cement	—herbicides	—talc
—chromium	—insecticides	—tin
—coal	—iron	—titanium
—fertilizer	—lead arsenate	—vinyl chloride
—foundry dust	—mica	—wood

OPERATION

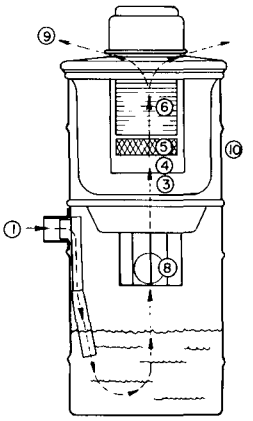
Asbestos vacuum is equipped with disposable collector bag, inside plastic bag liner, disposable filter protector, cloth filter bag, impact pre-filter and H.E.P.A. filter. A total of 5 filter media for dry recovery and 4 filter media when used for wet recovery.

Dry Recovery



1. **Intake**
2. **Disposable Bag**
3. **Filter Protector**
4. **Cloth Filter**
5. **Impact Filter**
6. **H.E.P.A. Filter**
7. **Plastic Bag**
8. **Water Shut-Off**
9. **Clean Exhaust**
10. **1 to 1 Adapter**

Wet Recovery



SPECIFICATIONS

SPECIFICATIONS	Asbestos Back Pack X380-1	Asbestos Vac 4/6	Asbestos Vac 15	Asbestos Vac 30/55	Asbestos Vac X250-TP (2 Motor)	Asbestos Air Vac X703-15	Asbestos Air Vac X703 30/55
Static Lift (inches water)	88	88	88	88	110	185	185
Air Flow (C.F.M.)	99	95	95	95	200	166	166
Power (watts)	930	930	930	930	2960	—	—
Cord & Type Length	16-3 / 50′	16-3 / 50′	16-3 / 50′	16-3 / 50′	16-3 / 50′	—	—
Wet Capacity (gallons)	NA	NA	6.3	20/40	NA	6.3	20/40
Dry Capacity (cu. ft.)	.15	.21/.62	.82	4.36/7.15	7.15	.82	4.36/7.15
Filter Area Total Sq. In.	900	1769	2226	4120	2175	4120	4120
Overall Height	24″	25″	36″	48″/54″	54″	33″	45″/51″
Width	10″	14″	21″	25″	25″	21″	25″
Volts Standard / Optional	115 / 220	115 / 220	115 / 220	115 / 220	115 / 220	—	—
Wheels	—	Opt.	Yes	Yes	Yes	Yes	Yes
Wheel Size Front / Rear	—	3″ / 6″	3″ / 8″	5″ / 5″	5″ / 5″	3″ / 8″	5″ / 5″
Wet/Dry	—	—	Opt.	Opt.	—	Opt.	Opt.
Dry Only	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Weight (pounds)	10	24	51	121/138	138	51	98/113
Air Line	—	—	—	—	—	½″	½″
Air Pressure (P.S.I.)	—	—	—	—	—	90	90
Compressed Air Flow S.C.F.M.	—	—	—	—	—	42	42

Meets Federal Asbestos Pick-Up and Removal Requirements CM.1-C.24593LSH H.E.P.A. (High Efficiency Particulate Air) Filters are 99.99% effective at 0.12 micrometers. H.E.P.A. Filter meets or exceeds the following military and government specifications:

Mil-F-51079A
Mil-F-510680 — U/L Std. 586 listed
U/L Class 1 listed — A.E.C.-Regulatory Guide #1.51

Hako

Minuteman, Inc.

111 South Route 53, Addison, Illinois 60101
Phone (312) 627-6900
Telefax (312) 627-1130

Hako Minuteman Canada, Inc.
84 E Brunswick Blvd.
Dollard des Ormeaux, Quebec H9B 2C5
Telephone: (514) 683-3880

#987821 5/86 VSM

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCOSEAL AP

MSDS No.: METCO / 50-261
Revision No.: 5
Revision Date: July 1, 1993
Original Date of Issue: September 7, 1987

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCOSEAL AP

Description: Mixed Solvents

Other Designation: SOLVENT CLEAR UNICHROME LACQUER

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Toluene *	8.12	108-88-3	100 ppm TWA 150 ppm STEL	50 ppm TWA skin	
Ethanol	13.50	64-17-5	1000 ppm TWA	1000 ppm TWA	
Isopropanol *	9.81	67-63-0	400 ppm TWA 500 ppm STEL	400 ppm TWA 500 ppm STEL	
N-Butanol *	6.08	71-36-3	50 ppm Ceil skin	50 ppm Ceil skin	
N-Butyl Acetate	37.66	123-86-4	150 ppm TWA 200 ppm STEL	150 ppm TWA 200 ppm STEL	
Methyl N-Amyl Ketone	4.37	110-43-0	100 ppm TWA	50 ppm TWA	
Xylene *	9.09	1330-20-7	100 ppm TWA 150 ppm STEL	100 ppm TWA 150 ppm STEL	
Phenol *	0.19	108-95-2	5 ppm TWA skin	5 ppm TWA skin	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	.96
Vapor Pressure (mmHg):	42	**Melting Point:**	N/A
Vapor Density (Air=1):	4	**Percentage Volatiles:**	N/A
Solubility in water (%):	N/A	**Evaporation Rate:**	2
Appearance and Odor:	Clear liquid.	**pH of Solution:**	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	40° F TCC	**Flammable Limits:**	**LEL %:**	1.0	**UEL%:** N/A

Extinguishing Media: Carbon Dioxide, Dry Chemical, Foam.

Special Fire Fighting Procedures: Water may not be effective in fighting liquid fires. Water may be used to cool containers when exposed to extreme heat to prevent explosion. Wear self contained breathing apparatus in a positive pressure mode.

Unusual Fire and Explosive Hazards: Isolate from heat, sparks, flame, electric motors, static discharge or other sources of ignition. Vapors are heavier than air. Ethanol is flammable. Keep away from sources of ignition. Vapor may travel considerable distances to source of ignition and flash back. N-butanol is flammable. Keep away from heat, sparks, flame. Vapors may travel considerable distances to ignition sources. Closed containers exposed to heat may explode. Contact with strong oxidizers may cause fire. Xylene is a flammable liquid.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Oxidizers, acids, alkali metals, nitrates. Ethanol is incompatible with oxidizing agents, peroxides, acids, acid chlorides, acid anhydrides, alkali metals, ammonia/moisture. N-butanol is incompatible with alkali metals, strong acids, halogen acids, aluminum.

Hazardous Decomposition Products: CO_2, CO. Hazardous decomposition products of ethanol and n-butanol are carbon dioxide, carbon monoxide.

SECTION VI HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
TOLUENE:	Hazard by inhalation, ingestion, skin absorption and eye contact. Inhalation, ingestion and skin absorption may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation, muscle fatigue, insomnia. Anemia leucopenia and enlarged liver may be found in rare cases. Target Organ(s): Central Nervous System, liver, skin, eyes.
ETHANOL:	Hazard by inhalation, skin contact, skin absorption, ingestion and eye contact. Acute and chronic inhalation may cause irritation of the upper respiratory tract and coughing; headache, stupor, fatigue, dizziness, drowsiness, nervousness, tremors. Skin contact may cause redness/burning/defatting. Allergic dermatitis can occur. Absorption through the skin may contribute to the overall exposure. Ingestion may result in disorientation, loss of motor control, respiratory depression and other symptoms of intoxication. Chronic ingestion may result in degenerative changes in the liver, kidneys, brain. Eye contact may cause burning and stinging. Target Organ(s): Central Nervous System, liver, kidneys, respiratory tract, skin, eyes.
ISOPROPANOL:	Hazard by inhalation, skin and eye contact. Inhalation may cause drowsiness, dizziness, headache. Skin contact may cause dermatitis. Eye contact may cause mild irritation of eyes and mucous membrane. Target Organ(s): Respiratory tract, skin, eyes.
N-BUTANOL:	Hazard by inhalation, skin and eye contact. Inhalation may cause headache, nausea, vomiting, dizziness, narcosis, lowered blood pressure, Central Nervous System depression. Chronic inhalation exposure may cause kidney and liver damage. Skin and eye contact may cause irritation. Prolonged skin contact may result in defatting and dermatitis. Eye contact may result in temporary corneal damage. Target Organ(s): Central Nervous System, respiratory tract, kidneys, liver, skin, eyes.
N-BUTYL ACETATE:	Hazard by inhalation, skin and eye contact. Inhalation may cause drowsiness, dizziness, and headache. Contact may cause skin and eye irritation, dermatitis. Target Organ(s): Respiratory tract, skin, eyes.
METHYL N-AMYL KETONE:	Hazard by inhalation, skin and eye contact. Inhalation may cause headache and narcosis. Skin and eye contact may cause skin, eye and mucous membrane irritation, dermatitis. Target Organ(s): Central Nervous System, Peripheral Nervous System, respiratory tract, skin, eyes.
XYLENE:	Hazard by inhalation, skin and eye contact. Inhalation may cause Central Nervous System disturbances such as dizziness, drowsiness, incoherence. Chronic inhalation exposure may cause liver/kidney dysfunction. Contact may cause eye and mucous membrane irritation, corneal damage, dermatitis. Target Organ(s): Central Nervous System, liver, kidney, skin, eyes.
PHENOL:	Hazard by inhalation, ingestion, skin absorption, skin and eye contact. Inhalation, ingestion and skin absorption may cause weakness, anorexia, muscle aches, pain, dark urine, cyanosis, liver and kidney damage, tremor, convulsions, twitch. Skin and eye contact may cause severe irritation of skin and eyes, skin burns, dermatitis. Target Organ(s): Kidneys, liver, skin, eyes.

SECTION VI HEALTH HAZARD DATA CONTINUED

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Respiratory system, skin absorption.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Possible irritation, corneal damage.

Skin Contact: Possible irritation, dermatitis, burns.

Inhalation: Central Nervous System disturbances: headache, dizziness, drowsiness, incoherence, excitement, insomnia, loss of appetite. Narcosis; mucous membrane irritation.

Ingestion: Consult a physician.

FIRST AID

Eye Contact: Flush eye with copious amounts of water for 15 minutes. If irritation persists, consult a physician.

Skin Contact: Wash affected area with soap and water. If irritation/dermatitis persists, consult a physician.

Inhalation: Expose to fresh air. Consult a physician.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Remove all sources of sparks, flames and hot surfaces. Maintain adequate ventilation. Avoid breathing vapor. Absorb liquid in sand, clay, earth, vermiculite or other non-reactive absorbent material; recover free liquid.

Waste Management and Disposal: Dispose of in accordance with local, state, and federal regulations.

SECTION VIII SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: Chemical splash goggles/face shield.

Gloves: Neoprene gloves.

Respirator: NIOSH approved respiratory protection, as appropriate for air concentrations.

Clothing/Equipment: Neoprene apron. Launder clothing before reuse.

SECTION VIII SPECIAL PROTECTION INFORMATION CONTINUED

WORKPLACE CONSIDERATIONS

Ventilation: Use only with adequate ventilation.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Flammable. Do not store with oxidizers: acids, alkali metals, nitrates. Do not store in high temperature areas. Keep containers closed.

Other Precautions: Do not ingest. Avoid inhalation, prolonged or repeated skin contact or contact with eyes.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Prevention & Response
50 Wolf Road
Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Local Emergency Planning Committee
c/o Civil Preparedness Office
140 15th Street
Mineola, NY 11501

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Hicksville Fire Department
E. Marie Street
Hicksville, NY 11801

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Syosset Fire Department
Cold Spring Road
Syosset, NY 11791

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

March 3, 1992

Fire Chief
Westbury Fire Department
Maple Avenue
Westbury, NY 11590

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:ecb
Enclosures
cc: A.B. Mazzone
C.L. Conroy

SARATII.pwp

Form Approved OMB No. 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY
Specific Information by Chemical

Facility Identification
Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 7440-02-0 Trade Secret ☐ Chem Name: Nickel Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type / Pressure / Temperature D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-47-3 Trade Secret ☐ Chem Name: Chromium Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 7440-48-4 Trade Secret ☐ Chem Name: Cobalt Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri Date Signed: 2/28/92

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7429090 Trade Secret ☐ Chem. Name: Aluminum Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type / Pressure / Temperature: D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 1344251 Trade Secret ☐ Chem. Name: Aluminum Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) X Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐
CAS 1314234 Trade Secret ☐ Chem. Name: Zirconium Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse N 1 4 Production Lines R 1 4 Production Lines - Hardened Steel Hoppers	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and Official Title (owner/operator or authorized representative)

Signature: Joseph Macri Date Signed: 2/28/92

Optional Attachments

☐ I have attached a site plan
I have attached a list of site coordinate abbreviations
I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: (516)334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800)424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440-50-8 Trade Secret ☐ Chem. Name: Copper Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐
CAS 7440-02-0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐
CAS 7440-48-4 Trade Secret ☐ Chem. Name: Cobalt Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type: N, Pressure: 1, Temperature: 4 Stock Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri Date signed: 2/28/92

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516)334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800)424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 7440473 Trade Secret ☐ Chem. Name: Chromium Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	Container Type: N Pressure: 1 Temperature: 4 Stock Warehouse	☐
CAS 7429905 Trade Secret ☐ Chem. Name: Aluminum Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type: N Pressure: 1 Temperature: 4 Stock Warehouse	☐
CAS 1344281 Trade Secret ☐ Chem. Name: Aluminum Oxide Powder Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	Container Type: N Pressure: 1 Temperature: 4 Stock Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3, and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — MANAGER FACILITIES — 2/28/92

Name and official title of owner/operator or authorized representative — Signature: Joseph Macri — Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516)334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC

Name: Title:
Phone: ( ) 24 Hr. Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 108952 Trade Secret ☐ Chem Name: Phenol Check all that apply: Pure [X] Mix [X] Solid [ ] Liquid [X] Gas [ ] EHS [X] EHS Name: Phenol	Fire [X] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [X] Delayed (chronic) [X]	Max. Daily Amount (code): 02 Avg. Daily Amount (code): 02 No. of Days On-site (days): 365	Container Type: F Pressure: 1 Temperature: 4 Stock Warehouse	☐
CAS ☐ Trade Secret ☐ Chem Name: Check all that apply: Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS [ ] EHS Name:	Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic) [ ]	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐
CAS ☐ Trade Secret ☐ Chem Name: Check all that apply: Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS [ ] EHS Name:	Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic) [ ]	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI — MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri

Date signed: 2/28/92

Optional Attachments

- ☐ I have attached a site plan
- ☐ I have attached a list of site coordinate abbreviations
- ☐ I have attached a description of dikes and other safeguard measures

use or distribution, including a contractor or subcontractor.

"Explosive" means a chemical that causes a sudden, almost instantaneous release of pressure, gas, and heat when subjected to sudden shock, pressure, or high temperature.

"Exposure" or "exposed" means that an employee is subjected to a hazardous chemical in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes potential (e.g. accidental or possible) exposure.

"Flammable" means a chemical that falls into one of the following categories:

(i) "Aerosol, flammable" means an aerosol that, when tested by the method described in 16 CFR 1500.45, yields a flame projection exceeding 18 inches at full valve opening, or a flashback (a flame extending back to the valve) at any degree of valve opening;

(ii) "Gas, flammable" means:

(A) A gas that, at ambient temperature and pressure, forms a flammable mixture with air at a concentration of thirteen (13) percent by volume or less; or

(B) A gas that, at ambient temperature and pressure, forms a range of flammable mixtures with air wider than twelve (12) percent by volume, regardless of the lower limit;

(iii) "Liquid, flammable" means any liquid having a flashpoint below 100 °F (37.8 °C), except any mixture having components with flashpoints of 100 °F (37.8 °C) or higher, the total of which make up 99 percent or more of the total volume of the mixture;

(iv) "Solid, flammable" means a solid, other than a blasting agent or explosive as defined in § 190.109(a), that is liable to cause fire through friction, absorption of moisture, spontaneous chemical change, or retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious hazard. A chemical shall be considered to be a flammable solid if, when tested by the method described in 16 CFR 1500.44, it ignites and burns with a self-sustained flame at a rate greater than one-tenth of an inch per second along its major axis.

"Flashpoint" means the minimum temperature at which a liquid gives off a vapor in sufficient concentration to ignite when tested as follows:

(i) Tagliabue Closed Tester (See American National Standard Method of Test for Flash Point by Tag Closed Tester, Z11.24–1979 (ASTM D 56–79)) for liquids with a viscosity of less than 45 Saybolt University Seconds (SUS) at 100 °F (37.8 °C), that do not contain suspended solids and do not have a tendency to form a surface film under test; or

(ii) Pensky-Martens Closed Tester (See American National Standard Method of Test for Flash Point by Pensky-Martens Closed Tester, Z11.7–1979 (ASTM D 93–79)) for liquids with a viscosity equal to or greater than 45 SUS at 100 °F (37.8 °C), or that contain suspended solids, or that have a tendency to form a surface film under test; or

(iii) Setaflash Closed Tester (see American National Standard Method of Test for Flash Point by Setaflash Closed Tester (ASTMD 3278–78))

Organic peroxides, which undergo autoaccelerating thermal decomposition, are excluded from any of the flashpoint determination methods specified above.

"Foreseeable emergency" means any potential occurrence such as, but not limited to, equipment failure, rupture of containers, or failure of control equipment which could result in an uncontrolled release of a hazardous chemical into the workplace.

"Hazardous chemical" means any chemical which is a physical hazard or a health hazard.

"Hazard warning" means any words, pictures, symbols, or combination thereof appearing on a label or other appropriate form of warning which convey the hazard(s) of the chemical(s) in the container(s).

"Health hazard" means a chemical for which there is statistically significant evidence based on at least one study conducted in accordance with established scientific principles that acute or chronic health effects may occur in exposed employees. The term "health hazard" includes chemicals which are carcinogens, toxic or highly toxic agents, reproductive toxins, irritants, corrosives, sensitizers, hepatotoxins, nephrotoxins, neurotoxins, agents which act on the hematopoietic system, and agents which damage the lungs, skin, eyes, or mucous membranes. Appendix A provides further definitions and explanations of the scope of health hazards covered by this section, and Appendix B describes the criteria to be used to determine whether or not a chemical is to be considered hazardous for purposes of this standard.

"Identity" means any chemical or common name which is indicated on the material safety data sheet (MSDS) for the chemical. The identity used shall permit cross-references to be made among the required list of hazardous chemicals, the label and the MSDS.

"Immediate use" means that the hazardous chemical will be under the control of and used only by the person who transfers it from a labeled container and only within the work shift in which it is transferred.

"Importer" means the first business with employees within the Customs Territory of the United States which receives hazardous chemicals produced in other countries for the purpose of supplying them to distributors or employers within the United States.

"Label" means any written, printed, or graphic material, displayed on or affixed to containers of hazardous chemicals.

"Material safety data sheet (MSDS)" means written or printed material concerning a hazardous chemical which is prepared in accordance with paragraph (g) of this section.

"Mixture" means any combination of two or more chemicals if the combination is not, in whole or in part, the result of a chemical reaction.

"Organic peroxide" means an organic compound that contains the bivalent -O-O-structure and which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.

"Oxidizer" means a chemical other than a blasting agent or explosive as defined in § 1910.109(a), that initiates or promotes combustion in other materials, thereby causing fire either of itself or through the release of oxygen or other gases.

"Physical hazard" means a chemical for which there is scientifically valid evidence that it is a combustible liquid, a compressed gas, explosive, flammable, an organic peroxide, an oxidizer,

HAZARD NOTICE: This material is for the thermal spraying process. Consult the METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

FOR EMERGENCY ASSISTANCE CALL
CHEMTREC – DAY OR NIGHT
1-800-424-9300

HARMFUL OR FATAL IF INHALED. HARMFUL OR FATAL IF SWALLOWED.
CONTAINS 1, 1, 1 - TRICHLOROETHANE.
USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
1, 1, 1 - Trichloroethane: Hazard by inhalation, ingestion, skin and eye contact. Inhalation may cause an anesthetic effect and has been shown to cause pathological changes in the liver and lungs of some animal species. Inhalation or ingestion may produce symptoms of dizziness, drowsiness, distorted perceptions, motor activity changes, irritability, aggression, diarrhea, nausea, vomiting or other gastrointestinal tract changes. Narcotic in high concentrations. Cardiac sensitization can occur in high exposures. Long term overexposure may cause liver/kidney damage. Skin contact may cause irritation, defatting of the skin causing redness and scaliness. Eye contact may produce severe irritation.
Target Organs: Cardiovascular system, Central nervous system, gastrointestinal tract, liver, kidney, skin, eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam).
Unusual Fire and Explosion Hazards: 1, 1, 1 - Trichloroethane is moderately flammable at higher temperatures; no flash point when tested in conventional closed tester at ordinary room temperatures.
Special Fire Fighting Procedures: Fire fighters should wear a NIOSH/MSHA approved pressure-demand, self-contained breathing apparatus for possible exposure to hydrogen chloride and possible traces of phosgene. When heated to decomposition can emit highly toxic phosgene, hydrogen chloride and chlorine. May also be decomposed slowly by contact with water to hydrogen chloride.

In Case of Spill or Leak:
Immediately evacuate the area. Unprotected personnel should move upwind of spill. Only personnel equipped with proper respirator and skin/eye protection should be permitted in area. Take precautions as necessary to prevent contamination of ground and surface waters.

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Store away from incompatibles. Keep containers closed when not in use. Do not store in open, unlabeled or mislabeled containers. Do not transfer contents to bottles or other unlabeled containers. Store in a cool and dry area. Do not use in poorly ventilated or confined areas.
Other Precautions: Avoid oral ingestion and excessive skin contact. Clean hands thoroughly after using especially before eating. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS.
KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of the chemical materials and/or their containers in accordance with federal, state or local laws/regulations regarding disposal.

USING THE NATIONAL FIRE PROTECTION ASSOCIATION (NFPA) HAZARD CLASSIFICATIONS. THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH	3
FLAMMABILITY	1
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: None at ordinary room temperatures.

UN2831, ORM-A

WARNING: Contains Methyl Chloroform, a substance that harms public health and environment by destroying ozone in the upper atmosphere.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risks in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 405, 405NS

MSDS No.: METCO/50-215
Revision No.: 4
Revision Date: May 15, 1992
Original Date of Issue: September 7, 1987

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 405, 405NS

Description: Thermal Spray Metallic Wire

Other Designation: NICKEL ALUMINIDE WIRE

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Aluminum *	22	7429-90-5	15 mg/m³ TWA total dust 5 mg/m³ TWA respirable 5 mg/m³ TWA fume	10 mg/m³ TWA metal dust 5 mg/m³ TWA fume	
Nickel *	88	7440-02-0	1 mg/m³ TWA	1 mg/m³ TWA	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	N/A
Vapor Pressure (mmHg):	N/A	**Melting Point:**	1300-2500° F
Vapor Density (Air=1):	N/A	**Percentage Volatiles:**	N/A
Solubility in water (%):	Nonsoluble	**Evaporation Rate:**	N/A
Appearance and Odor:	Wire, no odor.	**pH of Solution**	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): None

Flammable Limits: **LEL %:** N/A **UEL%:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Fine metal dusts found in use are flammable and may explode when exposed to heat, flame or oxidizers. Heated nickel and aluminum may react with water or steam to form flammable hydrogen gas.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Oxidizers, acids.

Hazardous Decomposition Products: Ozone and nitric acid are formed by plasma flame (similar to welding fumes). This action is independent of the metal wire.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS:	SUMMARY OF RISKS:
ALUMINUM:	Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action. Under normal use conditions, aluminum oxide may be formed. Inhalation may cause pneumoconiosis: Shavers Disease. Target Organ(s): Lungs, eyes, skin
NICKEL:	Hazard by inhalation and skin contact. Inhalation may cause cancers of the lung and nasal sinuses. Skin contact may cause dermatitis. Nickel is found to be a potential carcinogen in IARC Monographs. Nickel is listed in the NTP Annual Report on Carcinogens. Target Organ(s): Respiratory tract, skin

SECTION VI HEALTH HAZARD DATA CONTINUED

Medical Conditions Which May be Aggravated by Contact: Respiratory conditions, dermatitis

Primary Entry Route(s): Inhalation, ingestion, contact

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Irritation

Skin Contact: Dermatitis

Inhalation: Irritation, pneumoconiosis, cough, difficulty breathing.

Ingestion: Possible irritation

FIRST AID

Eye Contact: Flush eye with water. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Not applicable to wire.

Waste Management and Disposal: Empty product containers, product waste, and cleaning media should be stored and disposed of according to the appropriate Local, State, and Federal Regulatory Guidelines.

SECTION VIII SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10, and greater than 60 kW shade #11. Goggles may be appropriate to avoid eye irritation during other phases of product handling.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels (refer to the appropriate regulatory guidelines). An Aluminized apron is to be worn during the plasma spray process.

SECTION VIII SPECIAL PROTECTION INFORMATION CONTINUED

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers. Eye protection should be worn when handling wire.

Other Precautions: Avoid ingestion, inhalation, and excessive skin contact. Avoid contact of powder with water and oxidizers.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

EPHM-2 REV. 5/97

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

442

21

BK689156

PAW 11/19/2004 FOR STATE USE ONLY

Please type (or print) *(Form designed for use on elite (12-pitch) typewriter.)*

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CLW 72680 — Manifest Document No.
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury NY 11590

A. State Manifest Document Number
CT F 1172680

B. G.S.I. (Gen. Site Address)
SAME

4. Generator's Phone (516 338-2337)

5. Transporter 1 Company Name: Clean Harbors Env Services Inc
6. US EPA ID Number: MAD039422250

7. Transporter 2 Company Name
8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 104290 MA
D. Tran. Phone ( )
E. S.T.I. (Trans. Lic. Plate #) 781 849 1900
F. Tran. Phone ( )

9. Designated Facility Name and Site Address
Clean Harbors Of Conn Inc
51 Broderick Road
Bristol, CT 06010

10. US EPA ID Number: CTD000604488

G. State Facility's ID (Not Required)
H. Facility's Phone (860) 583 8917

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. NON DOT REGULATED MATERIAL (CERAMIC OXIDE), NON DOT HAZARDOUS, NONE	001	TT	EST 1000	G	EPA NONE STATE CR04
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
(1)
a.
b.
c.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.		D81	c.		
b.			d.		

15. Special Handling Instructions and Additional Information
EMERGENCY PHONE #: (800) 853-3718
Inv: ch82414bb

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

I certify that the materials described on this manifest are not subject to federal regulations for reporting proper shipping names, hazard classes, or identification numbers (UN/NA numbers).

Printed/Typed Name: x PETER DI PIETRANTONIO — Signature: x [signature] — Month Day Year: 01 12 005

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MICHAEL WIGGINS — Signature: [signature] — Month Day Year: 01 12 005

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: Christopher Berg — Signature: [signature] — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802. FOR SPILLS WITHIN CONNECTICUT, CONTACT DEP - OIL AND CHEMICAL SPILL RESPONSE AT (860) 424-3338

COPY 3: FACILITY TO GENERATOR

CT F 1172680

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No 2050-0039

EPHM-2 REV. 5/97

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

21

Please type (or print) *(Form designed for use on elite (12 pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. CEW — Manifest Document No. 7268

2. Page 1 of 1 — Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name — 6. US EPA ID Number

7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address — 10. US EPA ID Number

A. State Manifest Document Number: **CT F 1172680**

B. G.S.I. (Gen. Site Address)

C. S.T.I. (Trans. Lic. Plate #) 104590 NE

D. Tran. Phone ( )

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	001	TT	1000	G	EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above

a. c.

b. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information

Point of Departure

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name — Signature — Month Day Year 01 12 00

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michael McGrs — Signature — Month Day Year 01 12 00

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name — Signature — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

IN THE EVENT OF A SPILL CONTACT THE NATIONAL RESPONSE CENTER U.S. COAST GUARD 1-800-424-8802. FOR SPILLS WITHIN CONNECTICUT CONTACT DEP - OIL AND CHEM. SPILL RESPONSE AT (860) 424-3338

COPY 6: GENERATOR MAILS TO DESTINATION STATE

CT F 1172680

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039.

P2SUL007369

COPY 6: GENERATOR MAILS TO DESTINATION STATE

EPPM-2 REV. 5/97

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) *(Form designed for use on elite (12 pitch) typewriter.)*

FOR STATE USE ONLY

21

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No. | 2. Page 1 of 1 | Information in the shaded areas is not required by Federal law but may be required by State law.

A. State Manifest Document Number: **CT F 1172680**

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

B. G.S.I. (Gen. Site Address)

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #) 104570 MA

D. Tran. Phone ( )

9. Designated Facility Name and Site Address | 10. US EPA ID Number

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above

a. | c.

b. | d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year 01 6 2005

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michael Miles | Signature | Month Day Year 01 6 2005

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR — TRANSPORTER — FACILITY

IN THE EVENT OF A SPILL, CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802 FOR SPILLS WITHIN CONNECTICUT, CONTACT DEP OIL AND CHEMICAL SPILL RESPONSE AT (860) 424-3338

COPY 7: GENERATOR MAILS TO GENERATOR STATE

CT F 1172680

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039

P2SUL007370

COPY 7: GENERATOR MAILS TO GENERATOR STATE

LPHM-2 REV. 5/97

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) *(Form designed for use on elite (12 pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. | Manifest Document No.

2. Page 1 of

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )

5. Transporter 1 Company Name | 6. US EPA ID Number

7. Transporter 2 Company Name | 8. US EPA ID Number

9. Designated Facility Name and Site Address | 10. US EPA ID Number

A. State Manifest Document Number: CT F 1172680

B. G.S.I. (Gen. Site Address)

C. S.T.I. (Trans. Lic. Plate #)

D. Tran. Phone ( )

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above

a. | c.

b. | d.

K. Handling Codes for Wastes Listed Above

Interim	Final	Interim	Final
a.		c.	
b.		d.	

15. Special Handling Instructions and Additional Information

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Month Day Year

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed/Typed Name: Michael [illegible] | Signature | Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials

Printed/Typed Name | Signature | Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.

Printed/Typed Name | Signature | Month Day Year

GENERATOR

TRANSPORTER

FACILITY

COPY 8: GENERATOR RETAINS

CT F 1172680

IN THE EVENT OF A SPILL CONTACT THE NATIONAL RESPONSE CENTER, U.S. COAST GUARD 1-800-424-8802 FOR SPILLS WITHIN CONNECTICUT CONTACT DEP - OIL AND CHEMICAL SPILL RESPONSE AT (860) 424-3338

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No.2050-0039

COPY 8: GENERATOR RETAINS

INSTRUCTIONS
FOR COMPLETING THE CONNECTICUT UNIFORM HAZARDOUS WASTE MANIFEST

IMPORTANT: READ ALL INSTRUCTIONS BEFORE COMPLETING THIS FORM. ALL 8 COPIES MUST BE TOTALLY LEGIBLE.

GENERAL INFORMATION

The Hazardous Waste Manifest is designed to track waste from the point of generation to final disposal ("cradle to grave"). In order to accomplish this goal, it is essential that all items on the manifest be completed correctly.

Incomplete, incorrect or illegible manifests are violations of the law, and could subject you to civil or criminal liabilities as specified in Connecticut Hazardous Waste Regulations.

The Connecticut manifest contains 8 copies. ALL COPIES MUST BE LEGIBLE! (Illegible manifests submitted to the State will be returned to the Generator for proper completion). This form is designed for use on a 12 pitch (elite) typewriter. A ball point pen may also be used only if you press down **HARD.** The eight copies must be filed with the appropriate parties as they are completed.

* Be aware that hazardous wastes manifested into or out of Connecticut are subject to a hazardous waste assessment per C.G.S 22a-132. Please contact the Dept. of Revenue Services at (860) 541-3225 for more information.

USE OF THE MANIFEST

This manifest must be used for RCRA regulated hazardous wastes. It may also be used for state regulated hazardous wastes, or for other state regulated special wastes for which state regulations **Require** the use of this manifest.

Wastes which are not federally or state regulated may only appear on a manifest in a mixed shipment. RCRA regulated hazardous wastes should be listed first, then the state regulated wastes, then non-hazardous wastes. (Non-hazardous non-regulated wastes, like empty drums which are regulated by DOT, may also be listed under Item 15).

Copy Distribution Instructions are found on the back of the form along with tables and instructions for the transporter and facility.

GENERATOR SECTION

Item 1: GENERATOR'S US EPA ID NO-MANIFEST DOCUMENT NO. - Enter U.S. EPA 12 digit identification number (CT Conditionally Exempt Small Quantity Generators who have not obtained an EPA ID number should enter the letters "CESQG" here). Then enter a UNIQUE 5 digit number you assign to this manifest. Use of serially increasing numbers (eg. 00001, 00002, etc.) is recommended.

Item 2: PAGE 1 of - Enter the total number of pages used to complete this manifest. If you use more than one manifest for a shipment make sure to cross-reference each of the manifests in Item 15, by state manifest document numbers.

Item A: STATE MANIFEST DOCUMENT NUMBER - Number preprinted by CT.

Item 3: GENERATOR'S NAME & MAILING ADDRESS - Enter the name (as notified to EPA) & mailing address of the Generator. This address should be the location that will manage the returned manifest forms. (However, a manifest copy must be kept at the actual site).

Item 4: GENERATOR'S PHONE NUMBER - Enter the phone number of someone who is knowledgeable about this shipment, and who can respond to questions regarding the information on this manifest, or in case of an emergency (24 hrs).

Item B: G.S.I. (Gen. Site Address) - Enter the location address of the Generator - street, city (and state if different) where the waste is being picked up. Enter "same" if the mailing address and location address are identical.

Item 5: TRANSPORTER 1 COMPANY NAME - Enter the company name (as notified to EPA) of the first transporter who will transport the waste.

Item 6: US EPA ID NUMBER - Enter the US EPA 12 digit identification number of the first transporter identified in Item 5.

Item C: S.T.I. (Tran. Lic. Plate #) - Enter the state of registration and then the license plate number of the waste carrying portion of the vehicle. (e.g., NY 14235). NOTE: ALL HAZARDOUS WASTE TRANSPORTERS OPERATING IN CONNECTICUT MUST HAVE A VALID CONNECTICUT TRANSPORTERS PERMIT.

Item D: TRANSPORTER'S PHONE - Enter a telephone number with area code where an authorized agent of the transporter can be reached.

Item 7: TRANSPORTER 2 COMPANY NAME - If applicable enter the company name (as notified to EPA) of the 2nd transporter who will transport the waste. Whenever more than two transporters or four waste streams are involved in a shipment, the Generator shall fully complete additional manifests, listing the additional information.

Item 8: US EPA ID NUMBER - If applicable, enter the US EPA 12 digit identification number of the 2nd transporter identified in Item 7.

Item E: S.T.I. (Tran. Lic. Plate #) - If applicable, enter the 2nd transporter's state of registration & license plate number for the waste carrying portion of the vehicle being used to make the pick-up.

Item F: TRANSPORTER'S PHONE - If applicable, enter the 2nd transporter's telephone number with area code where an authorized agent of the transporter can be reached.

Item 9: DESIGNATED FACILITY NAME & SITE ADDRESS - Enter the company name (as notified to EPA) of the Treatment, Storage, or Disposal Facility designated to receive the waste listed on the manifest. The address must be the site address, which may differ from the mailing address.

Item 10: US EPA ID NUMBER - Enter the U.S. EPA 12 digit identification number of the designated Facility identified in Item 9.

Item G: STATE FACILITY ID - No entry required by Connecticut.

Item H: FACILITY PHONE - Enter the telephone number with area code for the Facility designated to receive the waste on the manifest.

Item 11: US DOT DESCRIPTION - All the following information must be entered: The correct US DOT (Dept. of Transportation) name for the waste as identified in 49 CFR Parts 171-177 (usually found in Column 2 of Section 172.101), the assigned DOT Hazard Class (usually found in Column 3) & the 4 digit UN/NA ID number (Column 3A). (Example: Waste acetone, flammable liquid, UN 1090 (F003) RQ.) US DOT requires the word "waste" before or in the shipping name of all hazardous waste.

Item 12: CONTAINERS (NO. & TYPE) - Enter the number of containers for each waste and the appropriate abbreviation from TABLE I (below) for the type of container used.

TABLE I - CONTAINER TYPE

DM = Metal drums, barrels, kegs	TP = Tanks, Portable	CM = Metal boxes, cartons, cases (incl. roll-offs)
DW = Wooden drums, barrels, kegs	TT = Cargo Tanks (tank trucks)	CW = Wooden boxes, cartons, cases
DF = Fiberboard or plastic drums, barrels, kegs	TC = Tank Cars	CP = Fiber or plastic boxes, cartons, cases
CY = Cylinders	DT = Dump Trucks	

SHIFT TIME 0630

DAY & DATE Thursday 1/20/05

JOB # BK889156

QUOTE / TASK #

CLIENT Sulzer Metco US INC

BILLING ADDRESS
1101 Prospect Av
Westbury NY 11590

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
(24 HOUR SERVICE)

P.O. #/COD AMOUNT

T&M ☐ CONTRACT ☐ CHANGE ORDER ☐

JOB LOCATION

CONTACT: Joe

JOB DESCRIPTION: Go to Sulzer. Pump out Drum & vac the tank to Can.

LABOR:

NAME	TITLE	PER DIEM	ST	OT	DT
	SUPERVISOR				
	FOREMAN				
M. Wiggins	EQ. OPERATOR				
	EQ. OPERATOR				
	FIELD TECH				
	FIELD TECH				
	FIELD TECH				

COMMENTS:

0900 Pre-Trip Safety Meeting Hazard Review, Sulzer Metco, 0930 Arrived on site, Sulzer Metco, 0930 Sets 1115

DISPOSAL: Bristol CT

DESTINATION	AMOUNT	MANIFEST #
LIQUID (BULK)	GALS.	C11172268
SOLID (BULK)	TONS/YDS.	
LIQUID (DRUMS)	# OF DRUMS AMT. GAL.	
	# OF DRUMS AMT.	

JOB COMPLETED ☐ YES ☐ NO

MATERIAL:

QTY.	DESCRIPTION
	SPEEDI DRI
	DRUM TYPE:
	DRUM TYPE:
	RAIN GEAR
	POLY SHEETING ROLL
	POLY BAG ROLL

NUMBER OF COMPLETE INITIAL PPE SETS	NUMBER OF EMPLOYEES IN PPE

PPE LEVEL (CIRCLE ONE)
A B C D

PPE TYPE (CIRCLE ONE)
1 2 3 4 5

SULZER

Sulzer Metco

Waste Disposal Form

Department: Materials Operations Date: 1/20/05

Name of Submitter: Mike Mueller

Waste Description:

Quantity of waste: 1000-2000 gallons

List all constituents known to be present and the approximate percent of each. If the waste is a mixture of Sulzer Metco products, list the approximate percent of each:

1.	Water	90 %	6.		%
2.	Ceramic (Zr)	7 %	7.		%
3.	Nickel/Tungsten	1 %	8.		%
4.	Other	2 %	9.		%
5.		%	10.		%

Properties:

Circle those that apply:

Powder	Liquid	Flammable	Combustible
Oxidizer	Corrosive	Highly Acidic	Highly Alkaline

Please submit this form to the Facilities Department. Do not take the material to anyone. Someone will be assigned to remove the material for storage prior to disposal.

Facilities Use Only:

Waste Profile Code: CH83772B Internal Tracking Number: N/a

Labels Required: N/a

WasteDisposalForm0303

1.20.05

tanker left before finance could witness the loading process. P.D. 1/20/05

REMIT TO:

CleanHarbors®

ENVIRONMENTAL SERVICES, INC.

P.O. Box 3440, Boston, MA 02241-3440

INVOICE

OFFICE

[illegible]

If you have any questions regarding this invoice, please contact your customer service representative at the telephone # listed above.

SOLD TO

Peter Cupiakantonio
Sulzer Metco US Inc
[illegible] Research Facility
1041 Prospect Avenue
Westbury, NY 11590

JOB SITE

Sulzer Metco US Inc
1101 [illegible] Avenue
Westbury, NY 11590

Job Description: Pump out 1 500 gal tank, 2-2000gal tanks [illegible]

CUSTOMER	JOB NO.	PURCHASE ORDER NO.	SALESMAN	TERMS	INVOICE DATE	INVOICE NO.
[illegible]	[illegible]	[illegible]	[illegible]	NET 45 DAYS	[illegible]	[illegible]

QUANTITY	ITEM I.D.	DESCRIPTION	PRICE	U/M		AMOUNT
		[illegible]				
[illegible]		Pumping Out of Liquids & Solids	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	Leading Demurrage	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible] PUMPING & DOT UNITS	[illegible]	[illegible]		[illegible]
		CTF1172669 / 1UN				
		[illegible]				
[illegible]		Pumping Out of Liquids & Solids	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	Leading Demurrage	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible] PUMPING & DOT UNITS	[illegible]	[illegible]		[illegible]
		CTF1172668 / 1UN				

SUBTOTAL	[illegible]
SALES TAX	[illegible]
INVOICE TOTAL	[illegible]

[illegible]

[illegible]

CHI-INV (6/03)

PLEASE RETURN COPY OF INVOICE WITH PAYMENT – THANK YOU

SHIFT TIME 0630
DAY & DATE Thursday 1/20/05
JOB # BK889156
QUOTE / TASK # 287391
CLIENT Sulzer Metco US INC

CleanHarbors
ENVIRONMENTAL SERVICES, INC.
(24 HOUR SERVICE)

P.O. #/COD AMOUNT 4530005071
T&M [ ] CONTRACT [ ] CHANGE ORDER [ ]
JOB LOCATION

BILLING ADDRESS
1101 Prospect AV
WestBury NY 11590

CONTACT: Joe
JOB DESCRIPTION: Go to Sulzer Pump out Drums & tank then trans to Conn.

LABOR:

NAME	TITLE	PER DIEM	ST	OT	DT
	SUPERVISOR				
	FOREMAN				
M. Wiggins	EQ. OPERATOR		8	6	
	EQ. OPERATOR				
	FIELD TECH				
	FIELD TECH				
	FIELD TECH				

COMMENTS:
0800 Pre-Trip End/loaded extra Hose for Job Delay 495 Arrived 0845 loading Ended 1100, off site 1115. Arrived At the Plant 1430 off loaded and exited Plant 1230 Arrived Back At the Shop 2000 Post trip End 2030

DISPOSAL: Bristol ct

DESTINATION	AMOUNT	MANIFEST #
LIQUID (BULK)	1000 GALS.	CTF/172680
SOLID (BULK)	TONS/YDS.	
LIQUID (DRUMS)	# OF DRUMS AMT. GAL.	
SOLID (DRUMS)	# OF DRUMS AMT. GAL.	
LOADING TIME	START 0800	END 1100

JOB COMPLETED [X] YES [ ] NO

MATERIAL:

QTY.	DESCRIPTION
	SPEEDI DRI
	DRUM TYPE:
	DRUM TYPE:
	RAIN GEAR
	POLY SHEETING ROLL
	POLY BAG ROLL
	SORBENT PADS BL
	SORBENT BOOM EA.
	SORBENT BOOM BL
	SORBENT SWEEP BL.
	SORBENT SNARE (ON ROPE) BL.
	ROPE TYPE:
	DEGREASER: WHAT TYPE?
	5 GAL BUCKET
	DUCT TAPE
	SSH&SP
	POLY LINER (ROLL OFF)

NUMBER OF COMPLETE INITIAL PPE SETS	NUMBER OF EMPLOYEES IN PPE

PPE LEVEL (CIRCLE ONE)
A B C D

PPE TYPE (CIRCLE ONE)
1 2 3 4 5

ADDITIONAL PPE ITEMS USED AFTER INITIAL SETS

QTY.	DESCRIPTION
	CARTRIDGE TYPE
	RESP. TYPE
	SUIT TYPE:
	INNER GLOVE TYPE:
	OUTER GLOVE TYPE:
	AIR BOTTLES

EQUIPMENT:

QTY.	TYPE	FLEET #	# OF HRS	DAILY RATE
	PICK-UP TRUCK			
	VACUUM TRAILER			
	TRACTOR			
1	VACUUM ST. TRUCK	442	16	
	BOX TRUCK			
	VACTOR			
	COMPRESSOR			
	BACKHOE			
	BOBCAT			
	RACK TRUCK			
	METER TYPE:			
	COMMS PACKAGE			

ANALYSIS:

QTY.	TYPE	DESTINATION

SUBCONTRACTORS:

NAME OF COMPANY	DESCRIPTION

SIGNATURE: (CLEAN HARBORS REPRESENTATIVE)
1/20/05

Customer:
By: (Company Name)
(Signature)
PETER DI PERKAMONO
(Print Name)
EH&S Specialist
(Title)
Date: 1/20/05

5 Rev. 9/01

IMPORTANT – PAYMENT TERMS ON BACK

(ORIGINAL / FOLDER)

STATE OF CONNECTICUT

442

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

BK889156
PPW 11/19/2004

Please type (or print)

FORM HAZARDOUS WASTE MANIFEST

Generator's US EPA ID No: CRW
Manifest Document No: 72680
Page 1 of 1

Mailing Address:
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590
516 338-2337

A. State Manifest Document Number: CT F 1172680

B. G.S.I. (Gen. Site Address): SAME

Generator's Name: 6 US EPA ID Number

Transporter's Company Name: Clean Harbors Env Services Inc — 8 US EPA ID Number: MAD039322250

C. S.T.I. (Trans. Lic. Plate #): 104290 MA

D. Tran. Phone (): 781-849-1800

Designated Facility Name and Site Address: 10 US EPA ID Number

Clean Harbors Of Conn Inc
51 Broderick Road
Bristol, CT, 06010
CTD000604488

E. S.T.I. (Trans. Lic. Plate #):

F. Tran. Phone ():

G. State Facility's ID (Not Required):

H. Facility's Phone: (860) 583-8917

(Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	Unit
NON DOT REGULATED MATERIAL, (CERAMIC OXIDE), NON DOT HAZARDOUS, NONE	001	TT	1000 EST G	NONE CR04

J. Additional Descriptions for Materials Listed Above
(L)

K. Handling Codes for Wastes Listed Above: Interim / Final
a. D81
b.

c.
d.

Special Handling Instructions and Additional Information: EMERGENCY PHONE #: (800) 483-3718

11a: ch82414bb

GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name, and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport according to applicable international and national government regulations and all applicable State laws and regulations.

I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Clean Harbors has the appropriate permits for and will accept the waste this generator is shipping.

Point of Departure

Printed/Typed Name: X PETER DI PIETRANTONIO — Signature: X — Month Day Year: 01 2005

Transporter 1 Acknowledgment of Receipt of Materials
Printed/Typed Name: Michael Wiggins — Signature: Michael Wiggins — Month Day Year: 01 2005

Transporter 2 Acknowledgment of Receipt of Materials
Printed/Typed Name: — Signature: — Month Day Year:

Discrepancy Indication Space

Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 23.
Printed/Typed Name: Christopher E Bonney — Signature:

COPY 1: FACILITY MAILS TO DESTINATION STATE

WEIGHT RECORDED BY

Number 8042

HOWESCALE

Date

IDENTIFICATION	WEIGHT	
#442 3K889156 CTF1172680		lbs. Gross
		lbs. Tare
Truck 442	30150 lb - 26800	lbs. Net
	3,350 lb	

Commodity _____ @ _____ per lb.

Remarks: _____ Driver: On ☐ Off ☐

Load No. _____

Weigher _____

Shipper _____

Seller
Buyer _____

Address _____

TR-200-2TM

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

BK889156
PPW 11/19/2004

FOR STATE USE

Please type (or print) (Form designed for use on elite (12 pitch) typewriter.)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD131318651 — Manifest Document No. 72667

2. Page 1 of 1 — Information in the shaded areas is required by Federal law. Required by State law

A. State Manifest Document Number: CT F 1172669

3. Generator's Name and Mailing Address:
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590

B. G.S.I. (Gen. Site Address): SAME

4. Generator's Phone (516 338-2337)

5. Transporter 1 Company Name: Clean Harbors Env Services Inc — 6. US EPA ID Number: MAD039322250

7. Transporter 2 Company Name — 8. US EPA ID Number

C. S.T.I. (Trans. Lic. Plate #): 109890 MA

D. Tran. Phone (781 849-1800)

9. Designated Facility Name and Site Address:
Clean Harbors Of Conn Inc
51 Broderick Road
Bristol, CT, 06010

10. US EPA ID Number: CTD000604488

E. S.T.I. (Trans. Lic. Plate #)

F. Tran. Phone ( )

G. State Facility's ID (Not Required)

H. Facility's Phone (860) 583-8917

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. NON DOT REGULATED MATERIAL, (CERAMIC OXIDE), NON DOT HAZARDOUS, NONE	001	TT	EST 01968	G	EPA NONE STATE CR04
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

CR	KEG
FS	
OFFC	

J. Additional Descriptions for Materials Listed Above
(L)
a. c.
b. d.

K. Handling Codes for Wastes Listed Above

	Interim	Final	Interim	Final
a.	S01	D81	c.	
b.			d.	

15. Special Handling Instructions and Additional Information: EMERGENCY PHONE #: (800) 483-3718
11a: ch82414bb

Point of Departure:

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I determine to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: JOE DIANA — Signature: [signature] — 010505

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: MICHAEL WIGGINS — Signature: [signature] — 010505

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name: KARLE STRONG — Signature: [signature] — 01 05 05

EPA Form 8700-22 (Rev. 9/01) Form Approved OMB No. 2050-0039

COPY 1: FACILITY MAILS TO DESTINATION STATE

COPY 1: FACILITY MAILS TO DESTINATION STATE

WEIGHT RECORDED BY

HOWESCALE

Number 7984

Date 1/5/08

IDENTIFICATION	WEIGHT	
Truck #442		lbs. Gross
Job # BK 889156		
CTFU172869	41580 lb G	lbs. Tare
	- 18496	
	23000	lbs. Net

Sulzer Metco

Commodity Michael Wiggins @ _____ per lb.

Remarks: _____ Driver: On ☐ Off ☐

Load No. _____

Weigher _____

Shipper _____

Seller / Buyer CTF 1172669

Address _____

TR-200-2TM

SRCOM

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-1043
Approval Expires: 9/30/96

EPA

United States
Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY CERTIFICATION STATEMENT

WHERE TO SEND THIS STATEMENT:	1. EPCRA Reporting Center P.O. Box 3348 Merrifield, VA 22116-3348 ATTN: TOXIC CHEMICAL RELEASE INVENTORY	2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)	Enter "X" here if this is a revision

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1.

REPORTING YEAR

1995

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?

[ ] Yes (Answer question 2.2; Attach substantiation forms) [ ] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [ ] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for the toxic chemical listed in this statement, the annual reportable amount, as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Name and official title of owner/operator or senior management official

LAURENCE F. MILES MANAGER FACILITIES

Signature Date Signed 10/07/96

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name	TRI Facility ID Number
SULZER METCO (US) INC.	11590-PRKNL-1101P

Street Address 1101 PROSPECT AVENUE

City WESTBURY County NASSAU

State NY Zip Code 11590-0020

Mailing Address (if different from street address)

NA

City

State Zip Code

PUT LABEL HERE

4.2 This report contains information for
Check c if applicable; a and b have been intentionally left blank c. [ ] Federal Facility

4.3 Technical Contact Name: CONSTANCE L. CONROY Telephone Number: (516)338 - 2337

EPA

United States
Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY
CERTIFICATION STATEMENT

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.4	Intentionally left blank						
4.5	SIC Code (4-digit)	a. 3542	b. NA	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude: Degrees 075	Minutes 09	Seconds 50	Longitude: Degrees 027	Minutes 53	Seconds 16
4.7	Dun & Bradstreet Number(s) (9 digits)				a. 152084398		
					b. NA		
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)				a. NYD131318651		
					b. NA		
4.9	Facility NPDES Permit Number(s) (9 characters)				a. NA		
					b.		
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)				a. NA		
					b.		

SECTION 5. PARENT COMPANY INFORMATION

	Name of Parent Company	
5.1	[ ] NA	SULZER INC.
	Parent Company's Dun & Bradstreet Number	
5.2	[ ] NA	(9 digits) 00-182-6957

PART II. CHEMICAL IDENTIFICATION

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you complete Section 2 below.)

	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
1.1	007429-90-5
	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as if appears on the Section 313 list.)
1.2	ALUMINUM (FUME OR DUST)
	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
1.3	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you complete Section 1 above.)

	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
2.1	NA

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-1043
Approval Expires: 9/30/96

EPA

United States
Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY CERTIFICATION STATEMENT

WHERE TO SEND THIS STATEMENT:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR: 1995

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret?

[ ] Yes (Answer question 2.2; Attach substantiation forms) [ ] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [ ] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for the toxic chemical listed in this statement, the annual reportable amount, as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Name and official title of owner/operator or senior management official

LAURENCE F. MILES MANAGER FACILITIES

Signature Date Signed 10/07/96

SECTION 4. FACILITY IDENTIFICATION

4.1
Facility or Establishment Name: SULZER METCO (US) INC.
TRI Facility ID Number: 11590-PRKNL-1101P
Street Address: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU
State: NY Zip Code: 11590-0020
Mailing Address (if different from street address): NA
City
State Zip Code

PUT LABEL HERE

4.2 This report contains information for
Check c if applicable; a and b have been intentionally left blank
c. [ ] Federal Facility

4.3 Technical Contact Name: CONSTANCE L. CONROY Telephone Number: (516)338 - 2337

EPA Form 9350-2 (11/94) Printed using U.S. EPA's Automated Form R

EPA

United States
Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY
CERTIFICATION STATEMENT

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.4	Intentionally left blank					
4.5	SIC Code (4-digit)	a. 3542	b. NA	c.	d.	e.	f.

		Latitude			Longitude		
	Latitude and Longitude	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
4.6		075	09	50	027	53	16

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 152084398 b. NA
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD131318651 b. NA
4.9	Facility NPDES Permit Number(s) (9 characters)	a. NA b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. NA b.

SECTION 5. PARENT COMPANY INFORMATION

	Name of Parent Company	
5.1	[ ] NA	SULZER INC.

	Parent Company's Dun & Bradstreet Number	
5.2	[ ] NA	(9 digits) 00-182-6957

PART II. CHEMICAL IDENTIFICATION

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you complete Section 2 below.)

	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
1.1	N495
	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as if appears on the Section 313 list.)
1.2	NICKEL COMPOUNDS
	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
1.3	

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you complete Section 1 above.)

	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
2.1	NA

WASTE CONTROL
SPECIALISTS LLC

Certificate of Disposal

Date of Certificate: 11/09/05

WCS
9998 W Hwy 176
Andrews, TX 79714
EPA ID No. TXD988088464

Reference
Sulzer-Metco (US), Inc.
1101 Prospect Ave
Westbury, NY 11590

WCS Profile #:	WP-019353
Manifest:	3216919
Received On:	11/04/05

This is to certify that the waste shipped to WCS on the above mentioned manifest was disposed of on 09-NOV-2005 in accordance with all applicable state, federal, and local regulations. The waste was disposed of in a WCS permitted chemical waste landfill

I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Sincerely,
WCS

for Technical Services Manager

Corporate
5430 LBJ Freeway, Ste. 1700
Three Lincoln Centre
Dallas, TX 75240
Ph. 972.715.9800
Fx. 972.448.1419

Facility
P.O. Box 1129
Andrews, TX 79714
Ph. 888.789.2783
Fx. 505.394.3427

WASTE CONTROL
SPECIALISTS LLC

November 11, 2005

Peter DiPietrantonio
Sulzer-Metco (US), Inc.
1101 Prospect Ave
Westbury, NY 11590

Dear Mr. DiPietrantonio:

Thank you for selecting Waste Control Specialists, LLC as your Treatment, Storage, and Disposal Facility. We value your business and hope to be of future service.

This letter serves as confirmation that we are in receipt of the waste described on the below referenced manifest. Enclosed, please find your signed original manifest indicating that the waste was received at the WCS Facility in Andrews Texas on 11/04/2005.

WCS is committed to providing a level of customer service unequaled in the industry today. If you have any questions regarding this manifest, please do not hesitate to contact me at (888) 789-2783.

Again thank you for selecting Waste Control Specialists, LLC.

Sincerely,

Victoria Gutierrez
Manifest Coordinator

Re: Manifest
3216919
N/A

Corporate
5430 LBJ Freeway, Ste. 1700
Three Lincoln Centre
Dallas, TX 75240
Ph. 972.715.9800
Fx. 972.448.1419

Facility
P.O. Box 1129
Andrews, TX 79714
Ph. 888.789.2783
Fx. 505.394.3427

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID No. N/A	Manifest Document No. 51 0 2	2. Page 1 of 1	Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: SULZER METCO (US), INC. 1101 PROSPECT AVE. WESTBURY, NY 11590	A. State Manifest Document Number: 3216919
4. Generator's Phone (516) 338-2337	B. State Generator's ID
5. Transporter 1 Company Name: TRI-STATE MOTOR TRANSIT, CO. — 6. US EPA ID Number: M.O.D.0.9.5.0.3.8.9.9.8	C. State Transporter's ID: 210255
	D. Transporter's Phone: 800 234 8760
7. Transporter 2 Company Name — 8. US EPA ID Number	E. State Transporter's ID
	F. Transporter's Phone
9. Designated Facility Name and Site Address: WASTE CONTROL SPECIALISTS, LLC. 999B W. HWY. 176 ANDREWS, TX 79714 — 10. US EPA ID Number: T.X.D.9.8.8.0.8.8.4.6.4	G. State Facility's ID
	H. Facility's Phone: (505) 394-4300

11A. HM	11. US DOT Description (Including Proper Shipping Name, Hazard Class, ID Number and Packing Group)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
X	a. RADIOACTIVE MATERIALS, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL, (7), UN2910	0 1 1	DM	0 1 5 6 3	K	OUTS 3191
	b.					
	c.					
	d.					

J. Additional Descriptions for Materials Listed Above: NA. NON-HAZ ZIRCONIUM OXIDE WASTE

K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: 24 HR EMERGENCY CONTACT # 410-377-3742

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR	Printed/Typed Name	Signature	Month	Day	Year
		Tim Zu	10	24	05

TRANSPORTER					
17. Transporter 1 Acknowledgement of Receipt of Materials			Date		
	Printed/Typed Name: ED YANKEY	Signature	Month: 10	Day: 24	Year: 05
18. Transporter 2 Acknowledgement of Receipt of Materials			Date		
	Printed/Typed Name	Signature	Month	Day	Year

FACILITY					
19. Discrepancy Indication Space					
20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.			Date		
	Printed/Typed Name: Erin Tippett	Signature	Month: 11	Day: 04	Year: 05

TCEQ-0311 (Rev. 09/01/02) White - original Pink-TSD Facility Yellow-Transporter Green-Generator's first copy

HAZARDOUS MATERIALS SHIPMENT DOCUMENT REVIEW
OP-1.1.2-2

Each of the items listed below must be deemed SATISFACTORY prior to the waste shipment being authorized for emplacement in a disposal unit. If an UNSATISFACTORY is checked, it must be documented and corrected prior to release.

GENERATOR NAME : Sulzer Metco Manifest #: 3216919

SHIPMENT RECEIVED DATE : 11/4/05 Time : 8:24

DOCUMENT REVIEW DATE: 11/4/05

INSPECTION RESULTS

ITEM	SATISFACTORY INITIALS	UNSATISFACTORY INITIALS	NONCONFORMANCE	N/A
Generator Information		E.J.		
Transporter information	E.J.			
EPA ID	N/A			
Designated facility information		E.J.		
Proper shipping name	E.J.			
Shipment total weight	E.J.			
Piece count	E.J.			
State waste codes	E.J.			
Generators signature	E.J.			
Transports signature	E.J.			
LDR (If Hazardous)	—			
PCB continuation sheet (if TSCA Regulated)	—			
Waste stream approval	E.J.			

Have nonconformance reports been issued? ☐ No ☐ Yes - NCR# _____

E. Jupett 11/4/05
Data Mgmt Team Member Date

Shipment documentation is acceptable.

[illegible] 11/8/05
Second Reviewer/ Title Date

WCS
Waste Control Specialists, LLC

Container Inventory Sheet

Manifest #	Order #	Customer #	Customer Name	Accept Date
3216919	7750	479	Sulzer-Metco (US), Inc.	11/04/2005

Line	Container ID	Cust ID #	Container Type	Waste Name	Profile #	Size/Type	Weight	Describe Waste	BTU Y/N	%LIQ	%SLU	%SOL	Sample
1A	05-88197	104	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353,	55gal	138	white Powder	NO	NO	NO	28" 100%	yes
1A	05-88198	105	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		136					20"	
1A	05-88199	106	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		228					8"	
	05-88200	107	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		74					4"	
1A	05-88201	108	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		181					16"	
1A	05-88202	109	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		253					16"	
1A	05-88203	110	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		495					22"	
1A	05-88204	111	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		492					24"	
1A	05-88205	112	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		538					12"	
1A	05-88206	113	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		1018					26"	
1A	05-88207	114	55 GALLON DRUM	Uranium bearing rare earth material	WP-019353		841					26"	

11-8-05

WCS
Waste Control Specialists, LLC

WCS WASTE LOAD TRACKING FORM

Form Signature: | Manifested Wt: lbs.

1. Load Data ☐ Radioactive/Mixed ☒ Exempt Rad / NORM ☐ RCRA Regulated Only ☐ Non-Haz / Non-Reg ☐ TSCA (PCB's)

Arrival Date	INBOUND Truck / Car ID #	OUTBOUND Truck/Car ID #	Container #'s	# of Units (#)	Waste Profile #	VAP #
11/4/05	43025/54874/W		05-88197 - 05-88207	11	19353	

Generator Name	Waste Stream	WRCC Manifest #
Sulzer Metco Inc.	Exempt Radioactive Material	3216919

Other Hazardous Waste Codes (s)	Underlying Hazardous Constituents	RAD Manifest #
NONE		

2. LDR Data (Generator Certifications): ☐ Waste Requires Treatment ☐ Waste Meets Treat. Stds ☐ Waste is CA Haz. (WTS) ☐ Waste is Debris (WTS)

3. Radiological Safety Surveys: *Must be completed only for Exempt Radioactive Materials and N.O.R.M.*

A. Gondola Loads Only:

RST = Avg. Contact exposure rate on Gondola is < 2 x Bkg
Yes = Acceptable for it's incoming Exempt/NORM content
RST Signature/Date _____

No = Contact RSS or RSO for Approval

RSS/RSO
Signature/Date _____

B. TRUCK LOADS, IMS & Bins from Rail Cars:

Gate Monitor Alarm
No = Accept for it's incoming Exempt/Norm Content
Lab Tech Signature/Date [signature] 4/4/05

Yes = Contact RST for Survey
RST Avg. Contact exposure rate on truck/bin/IM < 2 x Bkg
Yes = Acceptable for it's incoming Exempt/NORM Content
RST Signature/Date _____
No = Contact RSS or RSO for Approval
RSS/RSO
Signature/Date _____

4. Inspection, Sampling and Processing Data: ☒ Visual Inspection ☐ Odoring ☐ Free Liquids

CSA Laboratory			RCRA, Non-Haz, Non-Licensed Rad Waste		Licensed Rad Waste	
Cont. Type: CS-304 CS-308 CS-301 DA	Cyanide/Sulfide		☐ Direct Land Disposal HT	☐ Off-Site (see comments)	☐ Data Pkg Reason	Specify Other:
Visual	Hot Filter Test	Cyanide Screen	☐ Hot-Spot Suppression	☐ Micro-Encapsulation	☐ Stat. Rad to Gen.	
			☐ Solidification	☐ Micro-Encapsulation	☐ Stat. Rad to other	
			☐ Stabilization	☐ Macro-Encapsulation	☐ Sampling only	
% Sludge	pH (UHC) Only	Sulfide Screen	☐ Neutralization	☐ Storage Only	☐ Storage Only	
			☐ Deactivation	☐ Other	☐ Other	
% Solids	Ignitability Scn	H2O Reactivity	Lab Approval (Signature)	Date: 11/9/05	Lab Approval (Signature)	Date:
Oil (H2O) (Visual)		Date:	Supervisor Approval (Signature)	Date: 11/9/05	Binding Comments:	
Oil (Solvents)		Date:				

Treatment Batch ID #: ☐ N/A

Treatment Instructions (Rev'ipn)

Initial Storage Location	Placed by Initials	Date	Moved To	Moved By Initials	Date
			landfill	PM	11-9-05

Miscellaneous Comments	Laboratory	Is Container RCRA Empty?	Treatment / Disposal Operations	Is Container RCRA Empty?	Alpha	Numeric	Date	Time	Placed / RCRA Empty By (Signature)
		☑ Yes ☐ No HT		☑ Yes ☐ No HT	B	10	40-45	6838	
					Date: 11-9-05				Hector Talamantes

5. Applicable Surcharges-Use Form (Include cm's necessary to apply surcharges, i.e., manhours, size/type, weight/volumes, etc.):

6. Comments/Instructions:

Rev. 4/22/02

ESI Form 540 (6/99) — This form contains all of the information required in the NRC form 540 (3/95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER

5. Shipper - Name and Facility
Ecology Services, Inc. C/O
Sulzer-Metco (US), Inc.
1101 Prospect Ave.
Westbury, NY 11590

Shipper I.D. Number: N/A
Collector
Processor

7. NRC Form 540 and 540A — Page 1 of 2 Page(s)
NRC Form 541 and 541A — 2 Page(s)
NRC Form 542 and 542A — 0 Page(s)
Additional Information — 0 Page(s)

Emergency Telephone Number (include Area Code): (410) 377-3742

User Permit Number: N/A

Shipment Number: 51024

☒ Generator type (specify)
Other

9. Consignee - Name and Facility Address:
WasteControl Specialists, LLC.
9998 W. Hwy. 176
Andrews, TX 79714

Organization: ECOLOGY SERVICES, INC.

Contact: Peter DiPietrantonio

Telephone Number (include Area Code): (516) 338-2337

Signature - Authorized consignee acknowledging waste receipt

2. Is this an "Exclusive Use" shipment?
☐ YES
☒ NO

3. Total number of packages identified on this manifest ==> 11

Carrier - Name and Address
Tri State Motor Transit Co.
PO Box 113
Joplin, MO 64802

EPA ID Number: MOD095038998
Shipping Date: 10/24/05

10. Certification
This is to certify that the herein-named materials are propedy classified, described, packaged, ma transportation according to the applicable regulations of the Department of Transportation. This also marked, and labeled and are in proper condition for transportation and disposal as described in accordan or equivalent state regulations.

4. Does EPA regulated waste requiring a manifest accompany this shipment? ☐ YES ☒ NO
If "yes" provide manifest number ========>

EPA Manifest Number: TX3216919

Contact: Cassie Gardner

Signature - Authorized carrier acknowledging waste receipt

Telephone Number (Include Area Code): 800-234-8768

Date: 10-24-05

Authorized Signature

Title: PM

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAI OR VC (use apj un
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	83.18 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	61.81 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	103.63 k
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	33.63 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	82.27 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	114.54 k
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	224.09 k
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 µCi)	N/A	154.09 k

For Consignee Use Only

ESI Form 540A
(6/99)

This form contains all of the information required in the NRC form 540A

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER
Continuation Sheet

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPO RT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL W OR VOLU (use appro units)
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	296.36 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	272.72 kg
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	136.36 kg

ESI Form 541
(3/95)

This form contains all of the information required on the NRC form 541

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

Number of packages/ disposal containers	Net Waste Volume (m³)	Net Waste Weight (kg)	Special Nuclear Material (grams) U-233	U-235	Pu	Total
11	2.288	1562.68	None	None	None	None

Activity (MBq) All Nuclides	Tritium	C-14	Tc-99	I-129	Source (Kg)
6.227 MBq (0.168 mCi)	None	None	None	None	0.118

Disposal Container Description							Waste Description for Each Waste Type in Container: Physical Description			14. Chemical Description		15. Radiological Descriptio
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m³)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidification, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity Container Total, or Container Tota and Radionuclide Percen
104	4	0.208	83.18	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
105	4	0.208	61.81	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
106	4	0.208	103.63	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
107	4	0.208	33.63	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
108	4	0.208	82.27	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
109	4	0.208	114.54	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
110	4	0.208	224.09	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)

NOTE 1 Container Description Codes For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP"

1 Wooden Box or Crate
2 Metal Box
3 Plastic Drum or Pail
4 Metal Drum or Pail
5 Metal Tank or Liner
6 Concrete Tank or Liner
7 Polyethylene Tank or Liner
8 Fiberglass Tank or Liner
9 Demineralizer
10 Gas Cylinder
11 Bulk Unpackaged Waste
12 Unpackaged Components
13 High Integrity Container
14 Corrugated Box
19 Other Describe in item 19 or additional page
20 SeaLand Container

NOTE 2 Waste Description Codes (Choose up to three, which predominate by volume.)

20 Charcoal
21 Incinerator Ash
22 Soil
23 Gas
24 Oil
25 Aqueous Liquid
26 Filter Media
27 Mechanical Filter
28 EPA or State Hazardous
29 Demolition Rubble
30 Cation Ion-exchange Media
31 Anion Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33 Contaminated Equipment
34 Organic Liquid (except oil)
35 Glassware or Labware
36 Sealed Source Device
37 Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40 Noncompactible Trash
41 Animal Carcass
42 Biological Material (except animal carcass)
43 Activated Material
50 LS Vials
59 Other Describe in item 19 or additional page

NOTE 3 Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volu site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and bra item 13 Code 100 = NONE REQUIRED

Sorption

60 Speedi Dri
61 Celetom
62 Floor Dry Superfine
63 Hi Dri
64 Safe T Sorb
65 Safe N Dri
66 Floroc
67 Floroc X
68 Solid A Sorb
69 Chemsil 30
70 Chemsil 50
71 Chemsil 3030
72 Dicaperl HP200
73 Dicaperl HP500
74 Petroset
75 Petroset II
76 Aquaset
77 Aquaset II
78 Vermiculite
79 Other
79 Describe in item 13 or additional page

Solidifica
90 Ceme
91 Ceme encapsul
92 Bitum
93 Vinyl

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Manifest 51

Disposal Container Description							Waste Description for Each Waste Type in Container					
							Physical Description			14. Chemical Description		15. Radiological Descri
5. Container Identification Number/ Generator ID Number(s)	6. Container Descriptio n (See Note 1)	7. Volume (m³)	8. Waste And Container Weight (kg)	9 Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Acti Container Total; or Container T and Radionuclide Perc
11	4	0.208	154.09	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
112	4	0.208	296.36	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
113	4	0.208	272.72	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)
114	4	0.208	136.36	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)

NOTE 1 Container Description Codes For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP"

1 Wooden Box or Crate
2 Metal Box
3 Plastic Drum or Pail
4 Metal Drum or Pail
5 Metal Tank or Liner
6 Concrete Tank or Liner
7 Polyethylene Tank or Liner
8 Fiberglass Tank or Liner
9 Demineralizer
10 Gas Cylinder
11 Bulk Unpackaged Waste
12 Unpackaged Components
13 High Integrity Container
14 Corrugated Box
19 Other Describe in item 6 or Additional page
20 SeaLand Container

NOTE 2 Waste Description Codes (Choose up to three, which predominate by volume)

29 Charcoal
21 Incinerator Ash
22 Soil
23 Gas
24 Oil
25 Aqueous Liquid
26 Filter Media
27 Mechanical Filter
28 EPA or State Hazardous
29 Demolition Rubble
30 Cation Ion-exchange Media
31 Anion Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33 Contaminated Equipment
34 Organic Liquid (except oil)
35 Glassware or Labware
36 Sealed Source Device
37 Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40 Noncompactible Trash
41 Animal Carcass
42 Biological Material (except animal Carcass)
43 Activated Material
50 LS Vials
59 Other Describe in item 11 or additional page

NOTE 3 Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume) For media requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in t

Sorption

60 Speedi Dri
61 Celatom
62 Flow Dry Superfine
63 Hi Dri
64 Safe T Sorb
65 Safe N Dri
66 Floco
67 Floco X
68 Solid A Sorb
69 Chemisl 30
70 Chemisl 50
71 Chemisl 3030
72 Dracpal HP290
73 Dracpal HP590
74 Petroset
75 Petroset II
76 Aquaset
77 Aquaset II
78 Vermiculite
89 Other Describe in item 13 or additional page

Solidificati

90 Cement
91 Cement (encapsula
92 Bitumi
93 Vinyl E

WASTE CONTROL SPECIALISTS, LLC
ANDREWS, TEXAS (505 394-4300

MANIFEST#(S) 321A919

GENERATOR : BELTON METCO WP- [illegible]
TRANSPORTER : CONT# -
ID NOTES: ID# [illegible]

☐ R.OFF ☐ DT ☒ VAN ☐ FLAT ☐ RAIL

[illegible]
LOAD ID [illegible]

IN-DATE [illegible] TIME [illegible]
OUT-DATE [illegible] TIME [illegible]
SCHED.DATE _____ TIME _____

DESTINATION: ☐ DLF ☐ BSA ☒ CSA ☐ DROP
☐ W. PAN 1 ☐ E.PAN 2 ☐ OUT ☐ _____

[illegible]
[illegible] LB GROSS
[illegible] LB TARE
[illegible] LB NET

INITIALS: WEIGH-IN JS WEIGH OUT JS
COMMENTS: _____

ESI Form 540 (6/99) This form contains all of the information required in the NRC form 540 (3/95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER

5. Shipper - Name and Facility
Ecology Services, Inc. C/O
Sulzer-Metco (US), Inc.
1101 Prospect Ave.
Westbury, NY 11590

Shipper I.D. Number: N/A
Collector
Processor

7. NRC Form 540 and 540A — Page 1 of 2 Page(s)
NRC Form 541 and 541A — 2 Page(s)
NRC Form 542 and 542A — 0 Page(s)
Additional Information — 0 Page(s)

8. Manifest Number (Use this number on all continuation pages): 51024-10

Emergency Telephone Number (include Area Code): (410) 377-3742

User Permit Number: N/A

Shipment Number: 51024

☒ Generator type (specify) Other

9. Consignee - Name and Facility Address:
WasteControl Specialists, LLC.
9998 W. Hwy. 176
Andrews, TX 79714

Contact: Anne Dean
Telephone Number: (505) 394-4300

Organization: ECOLOGY SERVICES, INC.

Contact: Peter DiPietrantonio

Telephone Number (Include Area Code): (516) 338-2337

Signature - Authorized consignee acknowledging waste receipt

Date: 11/10/05

2. Is this an "Exclusive Use" shipment?
☐ YES
☒ NO

3. Total number of packages identified on this manifest ==> 11

Carrier - Name and Address
Tri State Motor Transit Co.
PO Box 113
Joplin, MO 64802

EPA ID Number: MOD095038998
Shipping Date: 10/24/05

10. Certification
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations

4. Does EPA regulated waste requiring a manifest accompany this shipment? ☐ YES ☒ NO
If "yes" provide manifest number ==========>

EPA Manifest Number: TX3216919

Contact: Cassie Gardner

Signature - Authorized carrier acknowledging waste receipt

Telephone Number (Include Area Code): 800-234-8768

Date: 10-24-05

Authorized Signature

Title: PM

Date: 10/24/05

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	83.18 kg	ES 104
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	61.81 kg	ES 105
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	103.63 kg	ES 106
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	33.63 kg	ES 107
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	82.27 kg	ES 108
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	114.54 kg	ES 109
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	224.09 kg	ES 110
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	154.09 kg	ES 111

For Consignee Use Only

ESI Form 540A
(6/99)

This form contains all of the information required in the NRC form 540A

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER
Continuation Sheet

8. Manifest Number
(Use this number on all continuation pages)
51024-10

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	296.36 kg	E3112
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	272.72 kg	E3113
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019353	U-nat + C			0.566 MBq (15.30 μCi)	N/A	136.36 kg	E3114

ESI Form 541 (3-95)

This form contains all of the information required on the NRC form 541

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

Number of packages/ disposal containers	Net Waste Volume (m^3)	Net Waste Weight (kg)	Special Nuclear Material (grams) U-233	U-235	Pu	Total
11	2.288	1562.68	None	None	None	None

Activity (MBq) All Nuclides	Tritium	C-14	Tc-99	I-129	Source (Kg)
6.227 MBq (0.168 mCi)	None	None	None	None	0.118

2. Manifest Number 51024-10

3. Page 1 of 2 Page(s)

4. Shipper Name Sulzer-Metco (US), Inc

Shipper ID Number N/A

Disposal Container Description							Waste Description for Each Waste Type in Container							16. Waste Classification
							Physical Description			14. Chemical Description		15. Radiological Description		
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (μSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidification, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total, or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
104	4	0.208	83.18	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
105	4	0.208	61.81	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
106	4	0.208	103.63	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
107	4	0.208	33.63	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
108	4	0.208	82.27	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
109	4	0.208	114.54	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU
110	4	0.208	224.09	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 μCi)	Total Activity: 0.566 MBq (15.30 μCi)	AU

NOTE 1 Container Description Codes: For containers waste requiring disposal in approved structural or stacks, the numerical code must be followed by "-S-P"

1 Wooden Box or Crate
2 Metal Box
3 Plastic Drum or Pail
4 Metal Drum or Pail
5 Metal Pail or Lined
6 Contact Tank or Liner
7 Polyethylene Tank or Liner
8 Fiberglass Tank or Liner
9 Demineralizer
10 Gas Cylinder
11 Bulk Unpackaged Waste
12 Unpackaged Components
13 High Integrity Container
14 Corrugated Box
19 Other Describe in item 14 or additional page
29 Sealand Container

NOTE 2 Waste Description Codes (Choose up to three, which predominate by volume)

20 Charcoal
21 Incinerator Ash
22 Soil
23 Gas
24 Oil
25 Aqueous Liquid
26 Filter Media
27 Mechanical Filter
28 EPA or State Hazardous
29 Demolition Rubble
30 Cation Ion-exchange Media
31 Anion Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33 Contaminated Equipment
34 Organic Liquid (except oil)
35 Glassware or Labware
36 Sealed Source Device
37 Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40 Noncompactible Trash
41 Animal Carcass
42 Biological Material (except animal carcass)
43 Activated Material
50 LS Vials
59 Other Describe in item 14 or additional page

NOTE 3 Sorption, Solidification, Stabilization Media Codes (Choose up to three which predominate by volume) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13 Code 100 = NONE REQUIRED

Sorption

60 Speedi Dri
61 Celetom
62 Floor Dry Superfine
63 Hi Dri
64 Safe T Sorb
65 Safe N Dri
66 Floroc
67 Floroc X
68 Solid A Sorb
69 Chemsil 30
70 Chemsil 50
71 Chemsil 3030
72 Dicapcel HP200
73 Dicapcel HP500
74 Petroset
75 Petroset II
76 Aquaset
77 Aquaset II
78 Vermiculite
89 Other Describe in item 13 or additional page

Solidification

90 Cement
91 Concrete (encapsulation)
92 Bitumen
94 Vinyl Chloride
94 Vinyl Ester Styrene
99 Other Describe in item 13 or additional page
100 None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container								
							Physical Description			14 Chemical Description		15 Radiological Description			16 Waste Classification
5 Container Identification Number/ Generator ID Number(s)	6 Container Description (See Note 1)	7. Volume (m³)	8 Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11 Waste Descriptor (See Note 2)	12 Approximate Waste Volume(s) in Container	13. Sorbent Solidification, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent			AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
111	4	0.208	154.09	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)		Total Activity: 0.566 MBq (15.30 µCi)	AU
112	4	0.208	296.36	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)		Total Activity: 0.566 MBq (15.30 µCi)	AU
113	4	0.208	272.72	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)		Total Activity: 0.566 MBq (15.30 µCi)	AU
114	4	0.208	136.36	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019353	N/A	Unat+C 0.566 MBq (15.30 µCi)		Total Activity: 0.566 MBq (15.30 µCi)	AU

NOTE 1 Container Description Codes For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP"

1 Wooden Box or Crate
2 Metal Box
3 Plastic Drum or Pail
4 Metal Drum or Pail
5 Metal Tank or Liner
6 Concrete Tank or Liner
7 Polyethylene Tank or Liner
8 Fiberglass Tank or Liner
9 Demineralizer
10 Gas Cylinder
11 Bulk, Unpackaged Waste
12 Unpackaged Components
13 High Integrity Container
14 Corrugated Box
19 Other Describe in item 6 or additional page
20 SeaLand Container

NOTE 2 Waste Description Codes (Choose up to three, which predominate by volume)

29 Charcoal
21 Incinerator Ash
22 Soil
23 Gas
24 Oil
25 Aqueous Liquid
26 Filter Media
27 Mechanical Filter
28 EPA or State Hazardous
29 Demolition Rubble
30 Cation Ion-exchange Media
31 Anion Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33 Contaminated Equipment
34 Organic Liquid (except oil)
35 Glassware or Labware
36 Sealed Source Device
37 Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40 Noncompactible Trash
41 Animal Carcass
42 Biological Material (except animal Carcass)
43 Activated Material
50 LS Vials
59 Other Describe in item 11 or additional page

NOTE 3 Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13 Code 100 = NONE REQUIRED

Sorption:
60 Speedi Dri
61 Celphalon
62 Floor Dry Superfine
63 Hi Dri
64 Safe T Sorb
65 Safe N Dri
66 Fleece
67 Floco X
68 Solid A Sorb
69 Chemisl 30
70 Chemisl 50
71 Chemisl 3030
72 Dualpel HP200
73 Dualpel HP500
74 Petrosat
75 Petrosat II
76 Aquasat
77 Aquasat II
78 Vermiculite
89 Other Describe in item 13 or additional page

Solidification:
90 Cement
91 Concrete (encapsulation)
92 Bitumen
93 Vinyl Chloride
94 Vinyl Ester Styrene
99 Other Describe in item 13 or additional page
100 None Required

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 3M11 ELECTRODE

MSDS No.: METCO / 50-441
Revision No.: 1
Revision Date: December 11, 1992
Original Date of Issue: December 1, 1992

EMERGENCY CONTACT: CHEMTREC800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 3M11 ELECTRODE

Description: Electrode

Other Designation: N/A

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Flange Diameter:					
Electrolytic Copper *	100	7440-50-8	0.1 mg/m³ TWA fume 1 mg/m³ TWA dusts and mists, as Cu	0.2 mg/m³ TWA fume 1 mg/m³ TWA dusts and mists, as Cu	
Tip of the Electrode:					
Tungsten	99	7440-33-7	1 mg/m³ TWA Soluble 3 mg/m³ STEL Soluble 5 mg/m³ TWA Insoluble 10 mg/m³ STEL Insoluble	1 mg/m³ TWA Soluble 3 mg/m³ STEL Soluble 5 mg/m³ TWA Insoluble 10 mg/m³ STEL Insoluble	
Thorium Oxide *	1	1314-20-1	N/A	N/A	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point: W: 5900° C (6173 K), Cu: 2563° C (2836 K), Tip of the electrode: 5900° C (6173 K).

Vapor Pressure (mmHg): Not Volatile

Vapor Density (Air=1): Not Volatile

Solubility in water (%): Insoluble

Appearance and Odor: Flange Diameter: Gray to reddish surface, no odor. Tip of the electrode: Steel-grey to black metal, no odor.

Specific Gravity (H_2O = 1): Flange diameter: 12 - 17.3 g/cm³, Tip of the electrode: 19.3 g/cm³.

Melting Point: N/A

Percentage Volatiles: 0

Evaporation Rate: Not Volatile

pH of Solution: N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable Limits: **LEL %:** N/A **UEL%:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Thoriated tungsten powder/grinding dust may be a weak fire and explosion hazard depending on particle size and dispersion in air. Wear self-contained breathing apparatus. After ignition source is removed, the metal may continue to glow until complete oxidation has occurred. Cover all exposed surfaces, do not disturb until completely extinguished and allowed to cool.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): None known.

Hazardous Decomposition Products: Flange Diameter: Chemical solutions (especially Cu solutions) and vapor dust (especially Cu).
Tip of the Electrode: WO_3 vapor at high temperatures (greater than or equal to 800° C, 1073 K), not toxic Thorium and Thorium Oxide fume weakly radioactive.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
ELECTROLYTIC COPPER:	Hazard by inhalation, skin and eye contact. Inhalation may cause irritation to the upper respiratory tract and the nasal mucous membranes. Contact may cause irritation to the eyes and discoloration of hair and skin. Target Organ(s): Respiratory tract, skin, eyes.
TUNGSTEN:	Hazard by inhalation and skin contact. Inhalation may cause respiratory abnormalities such as cough, dyspnea, wheezing, hypersensitivity, asthma and radiological changes. Skin contact may cause dermatitis, eczema. Target Organ(s): Lungs, skin.

SECTION VI HEALTH HAZARD DATA CONTINUED

THORIUM OXIDE: Hazard by inhalation, ingestion and contact. Thorium is a naturally occurring radioactive element. Thorium oxide has been proven to be a carcinogen due to its radioactive nature. Thorium emits alpha, beta and gamma radiation. Alpha and beta radioactive contamination of surfaces (skin, clothing, equipment, etc.) and the subsequent inhalation and/or ingestion of thorium may cause liver and kidney tumors, angiosarcoma, lymphoma, and other tumors of the blood forming organs. In thorium alloys and other materials containing a small proportion of thorium, external irradiation from gamma rays has no practical significance. Skin and eye contact may cause irritation. Skin contact may cause dermatitis. Thorium Oxide is found to be a carcinogen and is listed in the NTP Annual Report on Carcinogens. The NRC exposure limit for natural thorium in air is 2×10^{-12} microcuries per ml of air (9 micrograms per m^3). For further exposure limit and general information consult title 10 CFR, Parts 20 and 40.

Target Organ(s): Liver, kidney, blood forming organs, skin.

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Irritation.

Skin Contact: Possible dermatitis.

Inhalation: Irritation.

Ingestion: Possible irritation.

FIRST AID

Eye Contact: Flush eye with sufficient amounts of water. Consult a physician.

Skin Contact: Wash with soap and water. If person is contaminated with dust or dissolved products, remove from exposure and clean with water. Consult a physician.

Inhalation: Expose to fresh air. Consult a physician.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Avoid generating airborne dust. Do not sweep. Provide clean-up employees with respirators for dusty conditions (grinding dust). If possible avoid contact with grinding dust and smoke. Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with metallic dusts should be utilized. Wipe the area clean. Do not use water for clean up operations. Tungsten has a very high density and powder/dusts will settle quickly.

Waste Management and Disposal: Product waste and cleaning media should be stored and disposed of according to the appropriate local, state, and federal regulatory guidelines.

SECTION VIII SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: Goggles/safety glasses may be appropriate during phases of product handling.

Gloves: Protective gloves may be worn as necessary during phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the grinding process to protect the operator from exposure to dust/mists and fumes. Respirators may also be worn when product handling/cleaning operations generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin. Other protective equipment may be necessary depending upon local conditions.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash hands thoroughly after handling, before eating or smoking. Wash/shower at the end of the work shift. Do not shake clothing or other items to remove dust. Dust should be removed by a vacuum equipped with HEPA filtration prior to laundering. Vacuums appropriate for use with metallic dusts should be utilized. Store work clothes separate from other clothes. Generation of dust/mist during clean-up operations should be minimized by use of a vacuum equipped with HEPA filtration. Periodical medical examinations are recommended for individuals regularly exposed to dust and mist. Protect employees and the environment from contact with corrosion products, dust or gases and with chemical compounds of thorium.

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

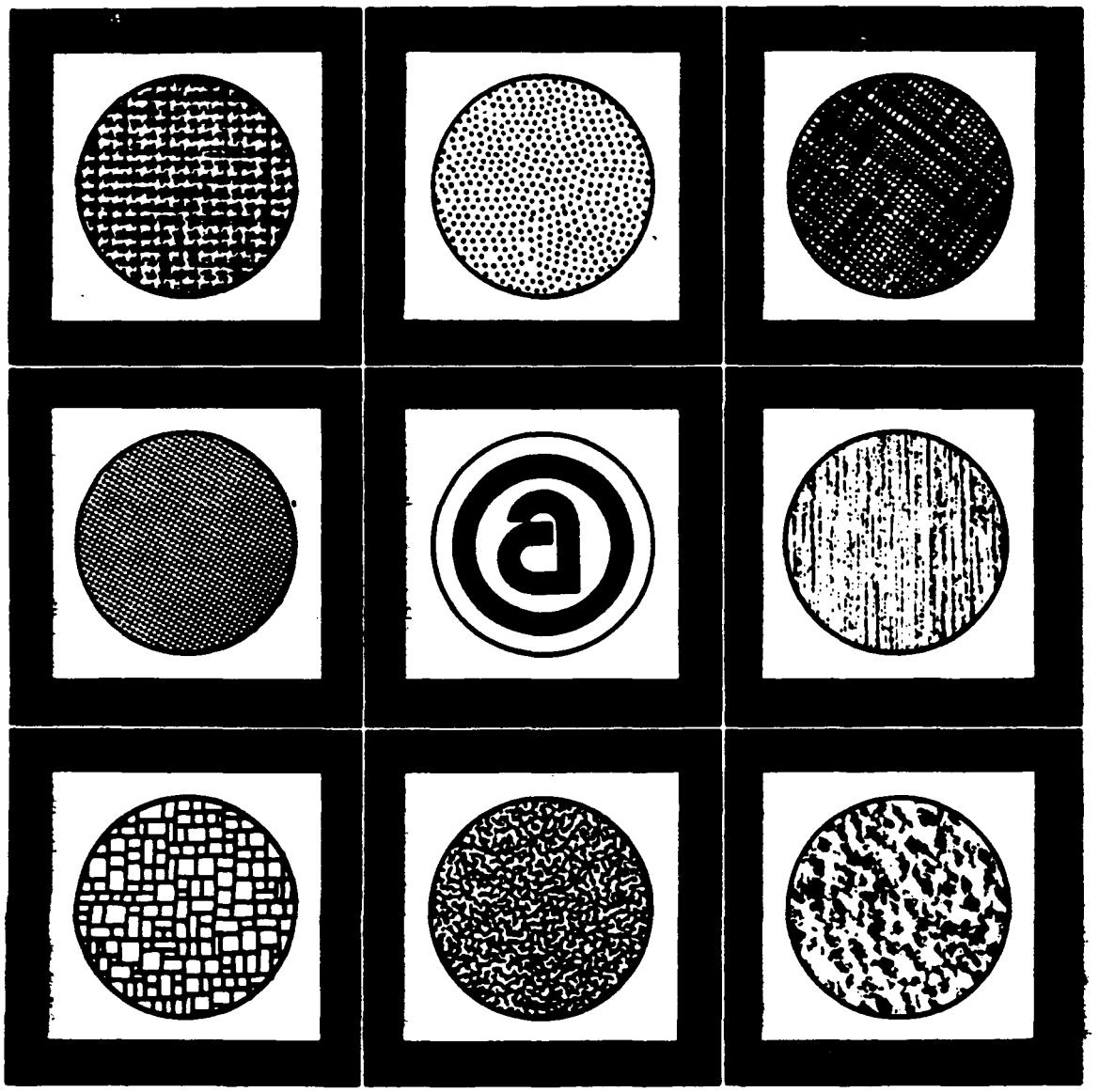
Other Precautions: Avoid ingestion, inhalation and excessive skin contact.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

Recommendations for storage and handling of aluminum powders and paste

TR-2

the Aluminum Association
Incorporated



Recommendations for storage and handling of aluminum powders and paste

General safety recommendations for storage of aluminum powder and paste

Aluminum powder and paste can be shipped, stored and used with safety if proper attention is given to the maintenance of scrupulous housekeeping and if the basic rules of safety contained in this brochure are carefully followed. However, under certain conditions, aluminum powder and paste can ignite or explode.

In order to provide a better understanding of the recommended safe procedures, the Safety and Property Protection Committee of the Aluminum Association's Pigments and Powder Division has prepared this brochure. These recommendations were compiled by the Committee from those sources listed in the Appendix, from the technical information presently available and from the members' experience in handling aluminum powder and paste. Two important source documents used in this brochure are National Fire Protection Association Standards Nos. 65 and 651. Readers of this publication are encouraged to refer to these NFPA standards.

The Committee believes that if these recommendations are followed the hazards mentioned in this brochure will be substantially reduced. It must be recognized, however, that under some conditions additional steps may be advisable. Likewise, technical advances may uncover better ways of dealing with these materials. If you have any questions concerning aluminum powder and paste, please contact the manufacturer.

The suggestions and information in this brochure concerning the storage and handling of aluminum powder and paste are general in nature. In this brochure a storage area is understood to be an area where powder and paste are kept in closed containers. Readers are advised to seek expert advice in connection with their individual handling and storage needs. The Aluminum Association and its member companies make no warranty and assume no responsibility or liability with respect to the suggestions and data contained herein.

Product definitions

Aluminum Powder: Aluminum powder can be divided into three broad classifications: atomized, flake, and granules. The length or width of a flake particle may be several hundred times its thickness. The length, width, and thickness of an atomized particle are all of approximately the same order, the length dimension probably not exceeding two or three times the thickness dimension. Granules are particles larger than 200 mesh.

Aluminum Paste: Aluminum paste is an aluminum flake pigment homogeneously incorporated in a solvent such as mineral spirits.

Background

Why powder burns:

Chemically, aluminum has an enormous affinity for oxygen. This results in a thin film of aluminum oxide being produced almost instantaneously on the surface of the aluminum when exposed to the atmosphere. The aluminum oxide film is inert and protects the underlying metal from further attack.

When an aluminum powder particle is heated to a certain temperature (known as the "ignition point"), the mass of the particle is so small that the entire particle may oxidize almost instantly. Thus a pile of such particles will "burn". Since flake particles are much smaller in mass and have much greater surface area per unit mass than atomized or granular particles, they will ignite more readily and burn faster than the coarser types of powder.

Why powder explodes:

Fine particles of aluminum powder, like some organic powders such as flour, starch and coal dust, are easily dispersed in air where their light mass allows them to remain suspended or "float" in the air. Like particles in a pile, they will burn when the ignition temperature is reached; but when dispersed in the air (mixed with oxygen) in a certain proportion, the burning extends from one particle to another with such rapidity (rate of pressure rise in excess of 20,000 psi/sec.) that a violent explosion results. Laboratory tests by the U.S. Bureau of Mines and others have established the proportions required for an explosion. They extend throughout a wide range, and very little aluminum powder is needed. Aluminum dust will ignite with as little as 9% oxygen present, the balance being nitrogen; or 10% oxygen with the balance helium; or 3% oxygen with the remainder carbon dioxide. Very small amounts of energy are required to ignite certain mixtures of aluminum powder and air. In some cases, energy as low as 25 millijoules may cause ignition.

Common sources of ignition:

The discharge of static electricity will produce an electric spark that raises the powder particles in its vicinity above the ignition point—resulting in an explosion. Electric switches, broken light bulbs, electric motor commutators, loose electric power connections—even a metal-to-metal impact—anything producing a spark can set off an explosion. Even continued metal-to-metal rubbing (as in a dry sleeve bearing) can generate enough heat to set off an explosion.

Health aspects:

Information on health aspects of aluminum powder and paste is provided in Material Safety Data Sheets supplied by the producer.

General

1. Storage should preferably be in rooms of fire resistive, noncombustible or limited combustible construction.
2. Aluminum powder and paste should not be stored in areas containing flammable liquids or other combustible materials because of differences in fire fighting methods.
3. Stack containers properly with ample aisle space. Keep stack height to a minimum.
4. All electrical wiring should be enclosed in conduit as specified by the latest version of National Electrical Code NFPA No. 70 or ANSI CI. All electrical equipment should be in accordance with the foregoing specifications. All lights should be in accordance with the NEC with adequate protective enclosures.

5 Leaks in steam lines, water lines, radiators or roofs should be promptly repaired to avoid exposure of the products to water.

6 Exercise good housekeeping. Guard against the accumulation of dust on floors, walls and other construction. Keep all rubbish, such as oily rags, paper, and other combustibles, out of the areas.

7 Post "No Smoking" signs and enforce the rule. Do not use open lights, blow torches, welding torches, or permit open fire in storage or handling areas.

8 Avoid frictional sparks. Do not permit careless metal-to-metal contact or metal against concrete. In handling aluminum powders and paste, use nonsparking metal scoops or shovels; plastic and ferrous metals should not be used.

9 Keep containers far enough away from steam pipes or radiators to prevent heating.

10 Keep all containers sealed except when opened for removal of material.

Aluminum powder storage

1 Aluminum powder stored in warehouses should be stored in original shipping containers and kept tightly sealed.

2 Avoid contacting the aluminum powder with water since this will eventually result in the reaction of the aluminum with the water causing heat and the formation of hydrogen gas and possible pressure build up.

3 Safety aspects of bulk storage should be discussed with the supplier.

Aluminum paste storage

1 Store sealed containers of paste in a dry room at a temperature preferably below the flash point of the product.

2 When a container must be opened in storage or on the job for removal of a portion of the paste, immediately replace the cover and reseal the container to guard against air oxidation, possible admission of injurious gases, vapors or other foreign material, or loss of solvent from the paste.

Basic safety principles to be followed when handling aluminum powder

Rule 1—Avoid any condition that will suspend or float powder particles in the air creating a dust cloud. The less dust suspended in the air, the better.

1 In transferring aluminum powder, dust clouds should be kept at an absolute minimum. Powder should be transferred from one container to another using a nonsparking, conductive metal scoop, with as little agitation as possible. Handling should be slow and deliberate to hold dusting to a minimum. Both containers should be bonded together and provided with a grounding strap.

2 In mixing aluminum powder with other dry ingredients, frictional heat should be avoided. The best type of mixer for a dry mixing operation is one that contains no moving parts, but rather affects a tumbling action such as a conical blender. Introduction of an inert atmosphere in the blender is highly recommended since dust clouds are generated. All equipment must be well-grounded.

Rule 2—When possible, avoid actions that generate static electricity, create a spark or otherwise result in reaching the ignition energy or temperature.

1 Locate electric motors and as much electrical equipment as possible outside processing rooms. Only lighting and control circuits should be in operating rooms. All electrical equipment must meet the National Electrical Codes for hazardous in-

stallations. This includes flashlights, hazardous portable power tools, and other devices.

2 Use only conductive material for handling or containing aluminum powders. Use only nonsparking conductive metal scoops for transferring powder. Note that both containers should be bonded together and provided with grounding straps

3 NO SMOKING, except in controlled designated areas well away from operating and storage areas.

4 No open flames, fires, or sparks should be allowed in operating and storage areas or dusty areas.

5 No matches, lighters, or any spark-producing equipment can be carried by an employee.

6 During transfer, powder should not be poured or slid on nonconductive surfaces. Such actions build up static electricity.

7 Powder should always be handled gently and never allowed to fall any distance. Remember, all movement of powder over powder tends to build up static charges.

8 Work clothing should be made of smooth, hard-finished, closely woven fire resistant/fire retardant fabrics which tend not to accumulate static electric charges. Trousers should have no cuffs where dust might accumulate.

Rule 3—Where generation of static electricity may occur, utilize every means to minimize it and dissipate it, such as bonding and grounding, to avoid a spark discharge.

1 Bonding and grounding machinery to remove static electricity produced in powder operations are vital for safety. Bonding and grounding should be done according to Recommended Practice on Static Electricity, NFPA No. 77, and Standard for the Manufacture of Aluminum and Magnesium Powders, NFPA No. 651.

2 All moveable equipment, such as drums, containers, and scoops, must be bonded and grounded during powder transfer by use of clips and flexible ground leads.

Rule 4—Take steps to limit the size of a fire or explosion and to hold any resulting damage to the very minimum.

1 Keep all containers sealed. Store these unopened in a separate area. If stored with such chemicals as sulphur, nitrates, or other strong oxidizing agents, a fire would present a serious problem.

2 When a drum of aluminum powder is opened for loading or inspection, it should be closed and resealed as quickly as possible. This not only assures greater safety against fire from external cause but prevents possible entrance of tramp metal or water from the air. In past instances, sealed drums of flake powder have withstood an explosion and subsequent fire without ignition of the contents of the drum.

3 Consider the use of an inert gas which can be valuable in minimizing the hazard of handling powder in air.

4 All containers in work areas should be closed and sealed. Only those in actual use should be open at any time.

Fire fighting methods

Aluminum Powder

Since it is almost impossible to extinguish a massive fire in dry light metal powder, the fire problem resolves itself into the control of fires in the incipient stage.

Metal dust fires on reasonably flat surfaces may be controlled by placing a ring dam of dry sand or Class D dry extinguishing material around the burning area. This should be done with great care to avoid any disturbance of the powder which could create a dust cloud. Even a minor dust cloud can explode violently.

Long handled shovels or scoops of nonsparking material should be provided for the application of dry extinguishing agents.

A properly ringed fire will develop a hard crust of metal oxide which will ultimately exclude enough oxygen to cause self-extinguishment. It is customary practice, after dispensing the extinguishing material, to leave the area, closing all doors leading to the area and sealing them with sand. The area should not be reentered until combustion has stopped and the material has cooled.

Water should not be used, since water reacts with hot aluminum powder to form hydrogen. The force of a water hose stream could sus-

pend the aluminum powder to form a dust cloud. All liquid, halogenated, carbon dioxide or foam type extinguishers should be rigidly excluded from the plant areas storing or processing dry powders to prevent their being used by excited and inexperienced persons during an emergency. All fans and machinery, including dust collection systems, should be shut down. Drafts should be avoided wherever possible.

Aluminum Paste

It is dangerous to use a hose stream to fight a paste fire. The force of the stream could spread the fire and even suspend dried out flake into the air causing a dust cloud.

Milling of aluminum with combustible solvents is practiced in the manufacture of aluminum paste. The solvents employed are generally moderately high flash point naphthas. A fire in an aluminum paste begins as a solvent fire and can be fought using Class B extinguishing agents. (Note: Do not use halogenated extinguishing agents.) It may at some point exhibit the characteristic of a powder fire at which time it must be treated as such. Obviously, judgment must be used in determining whether Class B extinguishing agents can be safely used. If the extinguishing agent is carefully applied, it will be very evident if it accelerates the fire. Then the fire should be considered a powder fire; the use of a Class B extinguisher should be discontinued and a Class D extinguishing agent or dry inert granular material used. If the aluminum metal has ignited, it may continue to burn under a crust without flames and should not be disturbed.

Suitable, commonly used Class B extinguishing agents are dry chemical, foam and carbon dioxide. Carbon dioxide may be used to extinguish fires involving solvent-wetted aluminum. However, reignition may occur due to high localized heat or spontaneous heating. To avoid reignition, the residual material must be immediately smothered.

Professional or volunteer fire fighters from outside the plant cannot be expected to be trained for the specific fire and life hazards associated with aluminum powder and paste fires. They should be directed by the plant's fire fighting officer in the interest of their own safety.

References

1 M. Jacobson, Austin R. Cooper, John Nagy, *Explosibility of Metal Powders*, in U.S. Bureau of Mines Report of Investigation No. 6516

2 National Fire Protection Association, No. 65, *Processing and Finishing of Aluminum* (ANSI Z12.19)

3 National Fire Protection Association, No. 651, *Dust Explosion Prevention—Aluminum Powder*

4 National Fire Protection Association, No. 77, *Recommended Practice on Static Electricity*

Sources for Obtaining These Documents:

U.S. Bureau of Mines
4800 Forbes Avenue
Pittsburgh, PA 15213

National Fire Protection Association
Batterymarch Park
Quincy, MA 02269

American National Standards Institute
1430 Broadway
New York, NY 10018

About the Aluminum Association

The Aluminum Association (founded November 1933) serves the public as a source of noncommercial, industry-wide information on aluminum and the aluminum industry. Its membership embraces all producers of primary ingot, most producers of sheet and plate, leading extruders, foundries, secondary smelters, forging firms, producers of aluminum electrical conductor, and producers of aluminum pigments and powder.

Its functions include developing technical standards and technical data, collecting and publishing industry statistics, speaking for the industry before government and quasi-governmental bodies where an industry-wide position is required, encouraging increased use of aluminum in specific markets through promotional and product-development programs, and conducting school programs and industry seminars.

Members of the Pigments and Powder Division of the Aluminum Association

Alcan-Toyo America, Inc.
1717 North Naper Blvd.
Suite 201
Naperville, IL 60563

Alcoa Powder Division
P.O. Box 472
Rockdale, TX 76567

AMPAL, Inc.
P.O. Box 2270
Flemington, NJ 08822

Ethyl Corporation
Houston Plant
Box 472
Pasadena, TX 77501

INCOMAP Light Alloys
INCO Alloys International, Inc.
P.O. Box 1958
Huntington, WV 25720

Reynolds Metals Company
Plant #3
4101 Camp Ground Road
Louisville, KY 40211

Silberline Manufacturing Company, Inc.
R.D. 2 Lincolnia Drive
Tamaqua, PA 18252

U.S. Aluminum, Inc.
P.O. Box 2190
Route 202
Flemington, NJ 08822

Valimet, Inc.
431 East Sperry Road
Stockton, CA 95206

TIER TWO INSTRUCTIONS

GENERAL INFORMATION

Submission of this Tier Two form is required when requested under Title III of the Superfund Amendments and Reauthorization Act of 1986, Section 312, Public Law 99–499, codified at 42 U.S.C. §11022. The purpose of this Tier Two form is to provide state and local officials and the public with specific information on hazardous chemicals present at your facility during the past year.

Certification

The owner or operator or the officially designated representative of the owner or operator must certify that all information included in the Tier Two submission is true, accurate, and complete. On the first page of the Tier Two report, enter your full name and official title. Sign your name and enter the current date. Also, enter the total number of pages included in the Confidential and Non-Confidential Information Sheets as well as all attachments. An original signature is required on at least the first page of the submission. Submissions to the SERC, LEPC, and fire department must each contain an original signature on at least the first page. Subsequent pages must contain either an original signature, a photocopy of the original signature, or a signature stamp. Each page must contain the date on which the original signature was affixed to the first page of the submission and the total number of pages in the submission.

You must provide all information requested on this form to fulfill Tier Two reporting requirements.

This form may also be used as a worksheet for completing the Tier One form or may be submitted in place of the Tier One form.

Who Must Submit This Form

Section 312 of Title III requires that the owner or operator of a facility submit this Tier Two form if so requested by a state emergency planning commission, a local emergency planning committee, or a fire department with jurisdiction over the facility.

This request may apply to the owner or operator of any facility that is required, under regulations implementing the Occupational Safety and Health Act of 1970, to prepare or have available a material safety data sheet (MSDS) for a hazardous chemical present at the facility. MSDS requirements are specified in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, found in Title 29 of the Code of Federal Regulations at §1910.1200.

This form does not have to be submitted if all of the chemicals located at your facility are excluded under Section 311(e) of Title III.

What Chemicals Are Included

If you are submitting Tier Two forms in lieu of Tier One, you must report the required information on the Tier Two form for each hazardous chemical present at your facility in quantities equal to or greater than established threshold amounts (discussed below), unless the chemicals are excluded under Section 311(e) of Title III. Hazardous chemicals are any substance for which your facility must maintain an MSDS under OSHA's Hazard Communication Standard.

If you elect to submit Tier One rather than Tier Two, you may still be required to submit Tier Two information upon request.

What Chemicals Are Excluded

Section 311(e) of Title III excludes the following substances:

(i) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration;

(ii) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under any normal conditions of use;

(iii) Any substance to the extent it is used for personal, family or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public;

(iv) Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual;

(v) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

OSHA regulations, Section 1910.1200(b), stipulate exemptions from the requirement to prepare or have available an MSDS.

Reporting Thresholds

Minimum thresholds have been established for Tier One/Tier Two reporting under Title III, Section 312. These thresholds are as follows:

For extremely hazardous substances (EHSs) designated under section 302 of Title III, the reporting threshold is 500 pounds (or 227 kg.) or the threshold planning quantity (TPQ), whichever is lower.

For all other hazardous chemicals for which facilities are required to have or prepare an MSDS, the minimum reporting threshold is 10,000 pounds (or 4,540 kg.).

You need to report hazardous chemicals that were present at your facility at any time during the previous calendar year at levels that equal or exceed these thresholds. For instructions on threshold determinations for components of mixtures, see "What About Mixtures?" on page 2 of these instructions.

A requesting official may limit the responses required under Tier Two by specifying particular chemicals or groups of chemicals. Such requests apply to hazardous chemicals regardless of established thresholds.

INSTRUCTIONS

Please read these instructions carefully. Print or type all responses.

When To Submit This Form

Owners or operators of facilities that have hazardous chemicals on hand in quantities equal to or greater than set threshold levels must submit either Tier One or Tier Two forms by March 1.

If you choose to submit Tier One, rather than Tier Two, be aware that you may have to submit Tier Two information later, upon request of an authorized official. You must submit the Tier Two form within 30 days of receipt of a written request.

Where To Submit This Form

Send either a completed Tier One form or Tier Two form(s) to each of the following organizations:

1. Your State Emergency Response Commission.
2. Your Local Emergency Planning Committee.
3. The fire department with jurisdiction over your facility.

If a Tier Two form is submitted in response to a request, send the completed form to the requesting agency.

Penalties

Any owner or operator who violates any Tier Two reporting requirements shall be liable to the United States for a civil penalty of up to $25,000 for each such violation. Each day a violation continues shall constitute a separate violation.

If your Tier Two responses require more than one page use additional forms and fill in the page number at the top of the form.

Reporting Period

Enter the appropriate calendar year, beginning January 1 and ending December 31.

Facility Identification

Enter the full name of your facility (and company identifier where appropriate).

Enter the full street address or state road. If a street address is not available, enter other appropriate identifiers that describe the physical location of your facility (e.g., longitude and latitude). Include city, state, and zip code.

Enter the primary Standard Industrial Classification (SIC) code and the Dun & Bradstreet number for your facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. If your firm does not have this information, contact the state or regional office of Dun & Bradstreet to obtain your facility number or have one assigned.

Owner/Operator

Enter the owner's or operator's full name, mailing address, and phone number.

Emergency Contact

Enter the name, title, and work phone number of at least one local person or office who can act as a referral if emergency responders need assistance in responding to a chemical accident at the facility.

Provide an emergency phone number where such emergency chemical information will be available 24 hours a day, every day.

The requirement is mandatory. The facility must make some arrangement to ensure a 24 hour contact is available.

Identical Information

Check the box indicating identical information, located below the emergency contacts on the Tier Two form, if the current chemical information being reported is identical to that submitted last year. Chemical descriptions, hazards, amounts, and locations must be provided in this year's form, even if the information is identical to that submitted last year.

Chemical Information: Description, Hazards, Amounts, and Locations

The main section of the Tier Two form requires specific information on amounts and locations of hazardous chemicals, as defined in the OSHA Hazard Communication Standard.

If you choose to indicate that all of the information on a specific hazardous chemical is identical to that submitted last year, check the appropriate optional box provided at the right side of the storage codes and locations on the Tier Two form. Chemical descriptions, hazards, amounts, and locations must be provided even if the information is identical to that submitted last year.

- What units should I use?

Calculate all amounts as weight in pounds. To convert gas or liquid volume to weight in pounds, multiply by an appropriate density factor.

- What about mixtures?

If a chemical is part of a mixture, you have the option of reporting either the weight of the entire mixture or only the portion of the mixture that is a particular hazardous chemical (e.g., if a hazardous solution weighs 100 lbs. but is composed of only 5% of a particular hazardous chemical, you can indicate either 100 lbs. of the mixture of 5 lbs. of the chemical).

The option used for each mixture should be consistent with your Section 311 reporting.

Because EHSs are important to Section 303 planning, EHSs have lower thresholds. The amount of an EHS at a facility (both pure EHS substances and EHSs in mixtures) must be aggregated for purposes of threshold determination. It is suggested that the aggregation calculation be done as a first step in making the threshold determination. Once you determine whether a threshold for an EHS has been reached, you should report either the total weight of the EHS at your facility, or the weight of each mixture containing the EHS.

Chemical Description

Enter the Chemical Abstract Service registry number (CAS#). For mixtures, enter the CAS number of the mixture as a whole if it has been assigned a number distinct from its components. For a mixture that has no CAS number, leave this item blank or report the CAS numbers of as many constituent chemicals as possible.

If you are withholding the name of a chemical in accordance with criteria specified in Title III, Section 322, enter the generic chemical class or category that is structurally descriptive of the chemical (e.g., list toluene disocynate as organic isocynate) and check the box marked Trade Secret. Trade secret information should be submitted to EPA and must include a substantiation. Please refer to EPA's final regulation on trade secrecy (53 FR 28772, July 29, 1988) for detailed information on how to submit trade secrecy claims.

2. Enter the chemical name or common name of each hazardous chemical.

3. Check box for ALL applicable descriptors: pure or mixture, and solid, liquid, or gas; and whether the chemical is or contains an EHS.

4. If the chemical is a mixture containing an EHS, enter the chemical name of each EHS in the mixture.

Example:

You have pure chlorine gas on hand, as well as two mixtures that contain liquid chlorine. You write "chlorine" and enter the CAS#. Then you circle "pure" and "mix" — as well as "liquid" and "gas".

Physical And Health Hazards

For each chemical you have listed, check all the physical and health hazard boxes that apply. These hazard categories are defined in 40 CFR 370.2. The two health hazard categories and three physical hazard categories are a consolidation of the 23 hazard categories defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

HAZARD CATEGORY COMPENSATION FOR REPORTING UNDER SECTIONS 311 AND 312

EPA's hazard categories	OSHA's hazard categories
Fire Hazard	Flammable Combustion Liquid Pyrophoric Oxidizer
Sudden Release of Pressure	Explosive Compressed Gas
Reactive	Unstable Reactive Organic Peroxide Water Reactive
Immediate (Acute) Health Hazards	Highly Toxic Toxic Irritant Sensitizer Corrosive Other hazardous chemicals with an adverse effect with short term exposure
Delayed (Chronic) Health Hazard	Carcinogens Other hazardous chemicals with an adverse effect with long term exposure

Maximum Amount

1. For each hazardous chemical, estimate the greatest amount present at your facility on any single day during the reporting period.

2. Find the appropriate range value code in Table I.

3. Enter this range value as the Maximum Amount.

Table I REPORTING RANGES

Range Value	Weight Range in Pounds From	To
01	0	99
02	100	999
03	1,000	9,999
04	10,000	99,999
05	100,000	999,999
06	1,000,000	9,999,999
07	10,000,000	49,999,999
08	50,000,000	99,999,999
09	100,000,000	499,999,999
10	500,000,000	999,999,999
11	1 billion	higher than 1 billion

If you are using this form as a worksheet for completing Tier One, enter the actual weight in pounds in the shaded space below the response blocks. Do this for both Maximum Amount and Average Daily Amount.

Example:

You received one large shipment of a solvent mixture last year. The shipment filled five 5,000-gallon storage tank. You know that the solvent contains 10% benzene, which is a hazardous chemical.

You figure that 10% of 25,000 gallons is 2,500 gallons. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 2,500 by 7.29 to get a weight of 18,225 pounds.

Then you look at Table I and find that the range value 04 corresponds to 18,225. You enter 04 as the Maximum Amount.

(If you are using the form as a worksheet for completing a Tier One form, you should write 18,225 in the shaded area.)

Average Daily Amount

1. For each hazardous chemical, estimate the average weight in pounds that was present at your facility during the year.

To do this, total all daily weights and divide by the number of days the chemical was present on the site.

2. Find the appropriate range value in Table I.

3. Enter this range value as the Average Daily Amount.

Example:

The 25,000-gallon shipment of solvent you received last year was gradually used up and completely gone in 315 days. The sum of the daily volume levels in the tank is 4,536,000 gallons. By dividing 4,536,000 gallons by 315 days on-site, you calculate an average daily amount of 14,400 gallons.

You already know that the solvent contains 10% benzene, which is a hazardous chemical. Since 10% of 14,400 is 1,440, you figure that you had an average of 1,440 gallons of benzene. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 1,440 by 7.29 to get a weight of 10,500 pounds.

Then you look at Table I and find that the range value 04 corresponds to 10,500. You enter 04 as the Average Daily Amount.

(If you are using the form as a worksheet for completing a Tier One form, you should write 10,500 in the shaded area.)

Number Of Days On-Site

Enter the number of days that the hazardous chemical was found on-site.

Example:

The solvent composed of 10% benzene was present for 315 days at your facility. Enter 315 in the space provided.

Storage Codes and Storage Locations

List all non-confidential chemical locations in this column, along with storage types/conditions associated with each location. Please note that a particular chemical may be located in several places around the facility. Each row of boxes followed by a line represents a unique location for the same chemical.

Storage Codes: Indicate the types and conditions of storage present.

a. Look at Table II. For each location, find the appropriate storage type and enter the corresponding code in the first box.

b. Look at Table III*. For each storage type, find the appropriate storage types for pressure and temperature conditions. Enter the applicable pressure code in the second box. Enter the applicable temperature code in the third box.

Table II — STORAGE TYPES

CODES	Types of Storage
A	Above ground tank
B	Below ground tank
C	Tank inside building
D	Steel drum
E	Plastic or non-metallic drum
F	Can
G	Carboy
H	Silo
I	Fiber drum
J	Bag
K	Box
L	Cylinder
M	Glass bottles or jugs
N	Plastic bottles or jugs
O	Tote bin
P	Tank wagon
Q	Rail car
R	Other

Table III — TEMPERATURE AND PRESSURE CONDITIONS

CODES	Storage Conditions
	(PRESSURE)
1	Ambient pressure
2	Greater than ambient pressure
3	Less than ambient pressure
	(TEMPERATURE)
4	Ambient temperature
5	Greater than ambient temperature
6	Less than ambient temperature but not cryogenic
7	Cryogenic conditions

Example:

The benzene in the main building is kept in a tank inside the building, at ambient pressure and less than ambient temperature.

Table II shows you that the code for a tank inside a building is C. Table III shows you that code for ambient pressure is 1, and the code for less than ambient temperature is 6.

You enter: C 1 6

Storage Locations: Provide a brief description of the precise location of the chemical, so that emergency responders can locate the area easily. You may find it advantageous to provide the optional site plan or site coordinates as explained below.

For each chemical, indicate at a minimum the building or lot. Additionally, where practical, the room or area may be indicated. You may respond in narrative form with appropriate site coordinates or abbreviations.

If the chemical is present in more than one building, lot, or area location, continue your responses down the page as needed. If the chemical exists everywhere at the plant site simultaneously, you may report that the chemical is ubiquitous at the site.

Optional Attachments: If you choose to attach one of the following, check the appropriate Attachments box at the bottom of the Tier Two form.

a. A site plan with site coordinates indicated for buildings, lots, areas, etc., throughout your facility.

b. A list of site coordinate abbreviations that correspond to buildings, lots, areas, etc., throughout your facility.

c. A description of dikes and other safeguard measures for storage locations throughout your facility.

Example:

You have benzene in the main room of the main building, and in tank 2 in tank field 10. You attach a site plan with coordinates as follows: main building = G-2, tank field 10 = B-6. Fill in the Storage Location as follows:

B-6 (Tank 2) G-2 (Main Room)

Confidential Information

Under Title III, Section 324, you may elect to withhold location information on a specific chemical from disclosure to the public. If you choose to do so:

- Enter the word "confidential" in the Non-Confidential Location section of the Tier Two form on the first line of the storage location.
- On a separate Tier Two Confidential Location information Sheet, enter the name and CAS# of each chemical for which you are keeping the location confidential.
- Enter the appropriate location and storage information, as desribed above for non-confidential locations.
- Attach the Tier Two Confidential Location information Sheet to the Tier Two form. This separates confidential locations from other information that will be disclosed to the public.

DUE DATE: MAY 26, 2006

OMB No. 0607-0176: Approval Expires 04/30/2008

FORM **MA-200**
(3-14-2006)

U.S. DEPARTMENT OF COMMERCE
Economics and Statistics Administration
U.S. CENSUS BUREAU

2005 SURVEY OF POLLUTION ABATEMENT COSTS AND EXPENDITURES (PACE)

Mail your completed form to:

U.S. CENSUS BUREAU
1201 East 10th Street
Jeffersonville, IN 47132-0001

Please read the accompanying instructions and definitions before completing the form.

Need help, a copy of the instructions, or have questions about filling out this form?

Visit our Web site at www.census.gov/econhelp/pace

In correspondence pertaining to this report refer to the ID number (ID) (11 digits)

ID 20089232990 310 00 0501 13 PACE
30 10 2005A1 MA200
331314 0001.1526 A 408021
SEQ0724-0003

SULZER METCO US INC

1101 PROSPECT AVENUE
WESTBURY NY 11590-2724

Please correct errors in name, address, and ZIP Code. ENTER street and number if not shown.

NOTICE – YOUR RESPONSE IS REQUIRED BY LAW (Title 13, United States Code). By section 9 of the same law, **YOUR REPORT IS CONFIDENTIAL.** It may be seen only by persons sworn to uphold the confidentiality of Census Bureau information and may be used only for statistical purposes. The law also provides that copies retained in your files are immune from legal process.

Item 1 FACILITY INFORMATION

A. Mark "X" the box that best describes the status as of December 31, 2005, of the facility identified in the address box above.

101 ☒ In operation as of December 31, 2005

102 ☐ Temporarily idle *(intend to resume operations)*
→ How long as of December 31, 2005? Months 103 [ ]

106 ☐ Permanently ceased operations
→ Date closed? Month Year 107 [ ] [ ]

104 ☐ Sold or leased to another company
→ Date sold or leased? Month Year 105 [ ] [ ] } SOLD OR LEASED TO

Name		
Street		
City	State	ZIP Code

B. Is the time period covered by this report a calendar year?

110 ☒ Yes

111 ☐ No – *Enter time period covered* →

From Month Year 112 [ ] [ ] To Month Year 113 [ ] [ ]

CONTINUE WITH Item 1 ON PAGE 2.

HOW TO REPORT DOLLAR FIGURES		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
	Dollar figures should be **rounded to thousands** of dollars.				
	If a figure is **$1,025,628.79**: . . . . . .***Report*** →	☐	1	0 2 6	
	If a value is "0" *(or less than $500.00)*. . . . . .***Report*** →	☒			

Item 1 **FACILITY INFORMATION – Continued**

C. Report the following information for this facility in 2005.

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
1. Capital expenditures, including all outlays during the year for buildings and other structures, machinery, and equipment that are chargeable to the fixed asset account and for which depreciation or amortization reserves are maintained	133	☐	1	636	000
2. Total value of products shipped, including interplant transfers, exports, and other receipts.	132	☐	**Not Applicable**		

		Mark "X" if Zero	Number
3. Total employment, including full- and part-time and leased employees	131	☐	**Not Applicable**

D. Mark "X" the box that best describes this facility's pollution abatement expenditures for 2005. *Include pollution abatement capital expenditures and operating costs for treatment, disposal, recycling and pollution prevention.*

120☐ These expenditures were $0 in 2005. *(There were NO pollution abatement expenditures for 2005.)*

121☐ These expenditures were included in rent, taxes, or lease agreements.

122☐ These expenditures were between $1 and $999.

} *Go to* **Item 8** *on page 7.*

123☒ These expenditures were more than $999. → *Go to* **Item 2** *on page 3.*

Item 2 **POLLUTION ABATEMENT ACTIVITIES**

A. In column (1), report the number of air pollution treatment control devices that were operating at the beginning of 2005. In column (2), report the number of newly installed devices during 2005. *(See page 7 in the guidelines for instructions.)*

Control Device	Mark "X" if Zero	(1) Total Number of Devices Operating Facility-Wide *(Beginning of 2005)*	Mark "X" if Zero	(2) Number of Devices Newly Installed *(During 2005)*
1. Electrostatic precipitators (ESP)	201 ☒		214 ☐	
2. Baghouses	202 ☐	2	215 ☒	
3. Fabric filters	226 ☐	12	227 ☒	
4. Venturi scrubbers	203 ☒		216 ☐	
5. Non-Venturi wet scrubbers	228 ☒		229 ☐	
6. Acid-gas scrubbers	204 ☒		217 ☐	
7. Carbon adsorbers	205 ☒		218 ☐	
8. Incinerator/thermal oxidizers/ catalytic oxidizers	206 ☒		219 ☐	
9. Low-NOx burners	239 ☒		240 ☐	
10. Flares	207 ☒		220 ☐	
11. Process incinerators/boilers	253 ☒		284 ☐	
12. Refrigerated condensers	208 ☒		221 ☐	
13. Biofilter/bioreactor	209 ☒		222 ☐	
14. Selective non-catalytic reduction (SNCR)	210 ☒		223 ☐	
15. Selective catalytic reduction (SCR)	211 ☒		224 ☐	
16. Continuous Emissions Monitoring Systems (CEMS)	286 ☒		288 ☐	
17. Other	212 ☒		225 ☐	

Describe – 213

B. Mark "X" the water pollution abatement techniques that were used at this facility in 2005. *(See page 7 in the guidelines for instructions.)*

230 ☐ Physical *(containing, screening, filtration, UV disinfection, underground injection, etc.)*
231 ☐ Biological *(activated sludge, aeration lagoon, biological filter, etc.)*
232 ☐ Chemical *(oxidation, reduction, neutralization, etc.)*
233 ☐ Thermal *(incineration, pyrolysis, etc.)*

		Gallons per year
1. What quantity of wastewater was treated **on-site**?	234	0
2. What quantity of wastewater was treated **off-site**?	235	31,216

C. Mark "X" the solid waste pollution abatement techniques that were used at this facility in 2005. *(See page 7 in the guidelines for instructions.)*

270 ☒ Physical *(containment, dewatering, landfilling, underground injection, etc.)*
271 ☐ Biological *(composing, landfarming, phytoremediation, etc.)*
272 ☐ Thermal *(incineration, pyrolysis, etc.)*

1. What quantity of solid waste was treated **on-site**?	273	0
2. What quantity of solid waste was disposed of **on-site**?	274	0
3. What quantity of solid waste was disposed of **off-site**?	278	175

Indicate units. *(Mark "X" only one box.)*

275 ☒ Short tons
276 ☐ Other – *Describe* 277

Item 3 POLLUTION ABATEMENT CAPITAL EXPENDITURES

Report the value of **TOTAL POLLUTION ABATEMENT CAPITAL EXPENDITURES** in **Item 3 B** below even if you are unable to provide separate values for each component of pollution abatement capital expenditures in **Item 3 A.**

- Report only the incremental capital expenditures for pollution abatement activities. *(See page 5 in the guidelines for a discussion of "incremental" costs and page 8 for an example.)*
- Include only the incremental cost of facility/process upgrades/modifications for which the primary purpose is pollution abatement. *(See page 5 in the guidelines for a discussion of "primary purpose.")*
- Include all installation and start-up costs for pollution abatement expenditures. Include labor only when contracted specifically for installation.
- Include capital expenditures related to monitoring and testing.
- Do NOT include pollution abatement capital expenditures from a previous year.
- Do NOT include depreciation. *(Depreciation expenses should be reported in* **Item 4 A5.)**
- Do NOT include capital expenditures related to site cleanup. *(Site cleanup costs should be reported in* **Item 5 B.)**
- Do NOT include capital expenditures related to product redesign or reformulation intended to reduce the pollution generated by consumers or users of products manufactured at this facility. *(Product redesign and/or reformulation costs should be reported in* **Item 5 C.)**

A. Report the value of pollution abatement capital expenditures by the following four activity categories for this facility in 2005. *(See page 3 in the guidelines for definitions and pages 8 and 13–14 for examples.)*

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
1. Treatment/capture	301	☒			
2. Recycling	302	☒			
3. Disposal	303	☒			
4. Pollution prevention	304	☒			

a. Indicate which components are included in the POLLUTION PREVENTION value you reported in **Item 3 A4** above. *(Mark "X" all that apply.) (See page 3 in the guidelines for definitions.)*

305 ☐ Raw materials substitution or modifications
306 ☐ Leak and spill prevention
307 ☐ Process/equipment modification/redesign
308 ☐ Other

B. Add **Item 3 A1–4** to calculate TOTAL POLLUTION ABATEMENT CAPITAL EXPENDITURES in 2005. Report the value of TOTAL POLLUTION ABATEMENT CAPITAL EXPENDITURES even if you are unable to provide separate values for **Item 3 A1–4.**

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
TOTAL POLLUTION ABATEMENT CAPITAL EXPENDITURES	310	☒			

C. What percentage of TOTAL POLLUTION ABATEMENT CAPITAL EXPENDITURES in **Item 3 B** was spent for each of the three types of media for this facility in 2005? *(See page 3 in the guidelines for definitions and page 9 for instructions.)*

		Mark "X" if Zero	Percent	
1. Air emissions	321	☒		%
2. Water discharges	322	☒		%
3. Solid waste	323	☒		%
4. Total			100	%

D. Report the gross book value *(acquisition costs)* of pollution abatement capital assets at your facility as of December 31, 2005 *(adjusted for assets sold, retired, scrapped, and destroyed; not adjusted for depreciation charges). (See page 9 in the guidelines for a definition.)*

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
GROSS BOOK VALUE OF POLLUTION ABATEMENT CAPITAL ASSETS	707	☐		705	102

Item 4 POLLUTION ABATEMENT OPERATING COSTS

Report the value of **TOTAL POLLUTION ABATEMENT OPERATING COSTS** in **Item 4 B** below even if you are unable to provide separate values for each component of pollution abatement operating costs in **Item 4 A.**

- Report only the incremental operating costs for pollution abatement activities. *(See page 5 in the guidelines for a discussion of "incremental" costs and page 9 for an example.)*
- Include operating costs related to monitoring, testing, and on-site administration costs associated with environmental protection.
- Do NOT include operating costs related to site cleanup. *(Site cleanup costs should be reported in* **Item 5 B**.*)*
- Do NOT include operating costs related to product redesign or reformulation intended to reduce the pollution generated by consumers or users from products manufactured at this facility. *(Product redesign and/or reformulation costs should be reported in* **Item 5 C**.*)*
- Cost offsets, such as revenue from recycling, should NOT be deducted from costs reported in this item. *(Cost offsets should be reported in* **Item 6 A**.*)*

A. Report the value of pollution abatement operating costs by the following five cost categories for this facility in 2005. *(See pages 9–12 in the guidelines for definitions and examples.)*

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
1. Salaries, wages, and benefits *(for all time spent by professional, administrative, operating, and maintenance employees on pollution abatement activities)*	401	☐		113	000
2. Energy costs *(electricity, fuels, and other energy costs)*	402	☐		142	500
3. Materials and supplies *(treatment chemicals, catalysts, replacement parts, etc.)*	403	☐		69	401
4. Contract work, leasing, and other purchased services *(including payments to government for industrial sewage services and solid waste disposal, and recycling)*	404	☐		328	267
5. Depreciation	428	☐		42	595

B. Add **Item 4 A1–5** to calculate TOTAL POLLUTION ABATEMENT OPERATING COSTS in 2005. Report the value of TOTAL POLLUTION ABATEMENT OPERATING COSTS even if you are unable to provide separate values for **Item 4 A1–5**.

		Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
TOTAL POLLUTION ABATEMENT OPERATING COSTS	410	☐		695	763

C. What percentage of TOTAL POLLUTION ABATEMENT OPERATING COSTS in **Item 4 B** was spent for each of the following four pollution abatement activity categories for this facility in 2005? *(See page 3 in the guidelines for definitions and pages 13–14 for examples.)*

		Mark "X" if Zero	Percent	
1. Treatment/capture	421	☐	47	%
2. Recycling	422	☐	3	%
3. Disposal	423	☐	50	%
4. Pollution prevention	424	☒		%
5. Total			100	%

a. Indicate which components are included in the POLLUTION PREVENTION value you reported in **Item 4 C4** above. *(Mark "X" all that apply.) (See page 3 in the guidelines for definitions.)*

425 ☐ Raw materials substitution or modifications
426 ☐ Leak and spill prevention
427 ☐ Process/equipment modification/redesign
428 ☐ Other

D. What percentage of TOTAL POLLUTION ABATEMENT OPERATING COSTS in **Item 4 B** was spent for each of the three types of media for this facility in 2005? *(See page 3 in the guidelines for definitions and page 12 for instructions.)*

		Mark "X" if Zero	Percent	
1. Air emissions	405	☐	47	%
2. Water discharges	406	☒		%
3. Solid waste	407	☐	53	%
4. Total			100	%

Item 5 COSTS NOT INCLUDED IN PREVIOUS ITEMS

A. What were the total payments to government entities for PERMITS AND FEES related to pollution abatement for this facility in 2005? *(See page 12 in the guidelines for instructions and page 14 for an example.).* . . . . . 501 ☐

Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
		2	500

B. What were the capital expenditures and operating costs for SITE CLEANUP for this facility in 2005? *(See page 12 in the guidelines for instructions and page 14 for an example.)*

	Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
1. Capital expenditures	503 ☒			
2. Operating costs	505 ☒			

C. What were the capital expenditures and operating costs related to PRODUCT REDESIGN or reformulation intended to reduce the pollution generated by consumers or users of products manufactured at this facility *(downstream pollutants)* in 2005? *(See page 12 in the guidelines for instructions and page 14 for examples.)*

	Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
1. Capital expenditures	507 ☒			
2. Operating costs	509 ☒			

Item 6 COST OFFSETS

Report the value of cost offsets for your facility in 2005. *(See page 12 in the guidelines for instructions and page 14 for examples.)*

- Include only cost offsets from activities whose primary purpose is pollution abatement.
- Include only cost offsets associated with the activities for the costs reported in **Item 4**.
- Do NOT include cost reductions from energy-efficiency improvements or revenue from recycling activities that are profitable in the absence of environmental concerns.

A. What was the total value of cost offsets for this facility in 2005?

	Mark "X" if less than $500.00	$Mil.	Thou.	Dol.
COST OFFSETS	601 ☒			

B. Which types of cost offsets were included in **Item 6 A** above? *(Mark "X" all that apply.)*

603 ☐ Revenue from recycling
604 ☐ Energy cost savings
605 ☐ Reduced material costs
606 ☐ Other – *Describe:* 607

20089232990

Item 7 **BURDEN**

Estimate the number of hours spent filling out this form. Include the time you and all other staff spent reviewing the instructions, preparing the estimates and completing the survey form.

Hours: 801 10

Item 8 **CERTIFICATION**

A. Provide the following information on the person to contact regarding this survey.

Name of person to contact regarding this report *(Please print)*	Telephone		
Peter DiPietrantonio	Area code 516	Number 338	Ext. 2337
E-mail address: peter.dipietrantonio@sulzer.com	Fax number		

B. Provide the name, title and signature of the person who verifies that the information reported in this survey is to the best of their knowledge accurate. The authorizing official may be a plant manager, vice president, or environmental health and safety official.

Name of authorized manager *(Please print)*	Title
W. Gregory Wuest	Director QESH
Signature of authorized manager: W Wuest	Date: 30-June-2006

Feel free to add any comments about the survey in the space provided below. Thank you for your participation.

Comments:

Littleford Day
Where Processing Ideas Become Reality

Littleford Day, Inc.
7451 Empire Drive (41042-2985), P.O. Box 128, Florence, KY 41022-0128
859-525-7600 • Fax: 859-525-1446 • 1-800-365-8555
Website: www.littleford.com • E-mail: sales@littleford.com

August 8, 2008

Mr. Omar Sabouni
Sulzer Metco
1101 Prospect Avenue
Westbury, NY 11590

Dear Mr. Sabouni:

At the request of our Regional Sales Manager, *Mr. Pete Schultz*, we are enclosing for your review and consideration our **Proposal Number 703083-C** covering one (1) **Littleford Model M/DVT-22 (1z) Laboratory Mixer** and one (1) **Littleford Solvent Recovery System.**

We are updating our July 28th proposal to the agreed upon price for the complete package.

We thank you for your continued interest in Littleford Day process equipment and look forward to working with you further on this project. Please contact *Mr. Schultz* or myself for assistance.

Very truly yours,

LITTLEFORD DAY, INC.

Ken Shank

Ken Shank
Inside Sales Manager

KS/drw
Enclosures

cc: Pete Schultz
439 Nester Drive
Pottstown, PA 19464
(610) 310-7466
pschultz@littleford.com

Littleford Day
Where Processing Ideas Become Reality

Littleford Day, Inc.
7451 Empire Drive (41042-2985), P.O. Box 128, Florence, KY 41022-0128
859-525-7600 • Fax: 859-525-1446 • 1-800-365-8555
Website: www.littleford.com • E-mail: sales@littleford.com

PROPOSAL

Mr. Omar Sabouni
Sulzer Metco
1101 Prospect Avenue
Westbury, NY 11590

Date: August 8, 2008
Proposal No.: 703083-C

We propose to furnish one (1) **Littleford Model M/DVT-22 (1z) Laboratory Mixer** for Batch Mixing, as follows:

Total Vessel Capacity: .79 cubic feet

Nominal Working Capacity: .47 cubic feet

Working Range: .23 – .55 cubic feet

Technical Construction: The mixer consists of a horizontal mixing drum. The complete mixing drum is equipped with three (3) safety limit switches (with a common, single key) to disable the motors when the charge port body is removed or hinged, stub end head is opened

Vacuum Construction: Vessel designed and constructed for full vacuum operation and ASME stamped for 100 PSIG internal pressure. Vessel is tested to a vacuum rating of 25" Hg with a leak rate of less than 2" Hg per minute. An overpressure relief valve is supplied.

Wear-Edged, Mixing Elements: Wear-edged, heat transfer shaped mixing tools are concentrically welded onto the main shaft. For cleaning, the complete mixing shaft and plow assembly can be removed. The face of each mixing tool is covered with an abrasion resistant coating.

Materials of Construction: Interior of mixer and all product contact surfaces constructed of Type 316L Stainless Steel polished to #120 grit cross pad finish. Exterior of mixer, not to include drive and motor, to be stainless steel except those purchased items, which are not readily available in stainless steel. Exterior stainless steel is to have a glass bead finish. Exterior non-stainless steel is painted "Steel-It."

Charging: Charging is through a 3" diameter flanged port in the top of the vessel. The standard cover for the port is a hinged lid with filter bag for atmospheric operation.

Vacuum Cover: A flanged vacuum cover that bolts to the charge port with a tri-clover fitting.

Vacuum Stack Filter: A vacuum stack is supplied which is fitted to the vacuum cover of the mixing drum in lieu of the standard cover. The stack contains a filter bag and has a 14.9 PSIG jacket. Filter must be isolated by a ball valve for pressure operation.

Liquid Injection: One (1) ¼" NPT liquid injection port located in Charge Port body, for liquid addition. Included is piping for a customer supplied hydraulic nozzle.

Seals: The main shaft is supported at one side by bearings and sealed by a lip seal arrangement.

Chopper System: One (1) high speed integral chopper assembly powered by a 2 HP, TEFC, 230 volts, 3 phase, 60 Hertz motor. Included is a contour plug for installation when the chopper assembly is removed.

Discharge: Discharge is through a 2" full port, manual ball valve located on bottom of mixing drum.

Jacket: A 150 PSIG @ 450°F, ASME code constructed 304 Stainless Steel jacket of labyrinth design to insure uniform flow around the mixing drum. An inlet and outlet are provided for the heating/cooling agent.

Thermocouple: A thermocouple is mounted on the mixing drum with digital temperature read out mounted in mixer base.

Drive: The mixing elements are driven by a 5 HP, 230 volts, 3 phase, 60 Hertz inverter duty motor. The variable frequency drive is integral to the motor. The keypad control is mounted in mixer base.

Electrical Controls: The equipment includes a control panel installed in the mixer base containing all necessary controls for operation. All controls are wired to the control panel. The following are included:

FOR THE MIXER DRIVE:

Variable Frequency Controller (230 volts, 3 phase, 60 Hertz)

Keypad control with following readouts:

Amps, Volts, Hertz, Speed

FOR "EMERGENCY-OFF"

One (1) socket head switch with catch

FOR SAFETY PRECAUTION:

Three (3) keyed safety interlock switches (One on charge port body, one on the mixer base and one on removable head)

One digital temperature indicator

FOR FUTURE CHOPPER DRIVE:

Chopper Start/Stop push buttons

Input power requirements 230 volts, 3 phase, 60 Hertz. Control voltage 115 volts, 3 phase, 60 Hertz.

Manuals: Two (2) copies of Service, Maintenance, and Parts Manuals.

We propose to furnish one (1) **Solvent Recovery System** for use with one (1) **Littleford Model M/DVT-22 Laboratory Mixer,** as follows:

Process Parameters:

Vapors Removed	10#/hour toluene, hexane or acetone
Air Leakage	7#/hour (10 ACFM is at 150 Torr, 150° F)
Operating Vacuum Level	150 TORR
Inlet Temperature (assumed)	150° F
Cooling Water Design Temperature	50° F or colder

Liquid Sealed Solvent Recovery Vacuum System: Features a 1-stage liquid ring vacuum pump with a nominal capacity of 27 ACFM @ 150 Torr, constructed in Cast Iron housing, stainless steel impeller and stainless steel shaft with mechanical seals with viton elastomers. The pump is coupling driven by a 3 HP, TEFC, C-face motor. Motor voltage is 460 volts, 3 phase, 60 Hertz.

Condenser/Receiver:

Precondenser – 15 ft.^{2} – Carbon Steel shell, Stainless Steel tubes (process side), requires 5 GPM of cooling water, condensate isolation valve and drip glass
Receiver Tank – 5 gallon, non code, Stainless Steel construction
Protected level gauge, Stainless Steel (with cleanouts), manual drain valve, manual vent valve and manual equalizer valve

Suction Line Components:

Inlet isolation valve
Inlet check valve, suitable for vacuum service
Vacuum gauge
Anti-cavitation line piped to the separator tank

Sealant Recirculation Components:

Separator tank – Carbon Steel construction, tangential Inlet, non-code, with manual drain valve, low level switch, make up solenoid, and protected liquid level gauge (with cleanouts).
Sealant heat exchanger, non code, Carbon Steel shell and Copper tubes, requires 10 GPM of cooling water.
Sealant stop valve, y-strainer with blow down valve
Flow switch
Regulating valve with compound gauge
Temperature gauge

Electrical Controls: A NEMA 4 starter panel with IEC motor starter, run light, stop/start button and relay logics. Excluded is disconnect.

Notes:

- Piping is threaded Carbon Steel. Materials of construction include carbon steel, stainless steel, cast iron, copper and viton.

PRICE **$70,000.00**

Terms of Sale: Ex-Works – Florence, Kentucky for M/DVT-22 & Michigan City, Indiana for the Solvent Recovery System.

Terms of Payment: 25% with receipt of formal Purchase Order.
Balance, Net, thirty (30) days from date of shipment
(Above terms subject to credit evaluation.)

Shipment: Six (6) to eight (8) weeks (M/DVT-22) and twelve (12) to fourteen (14) weeks (Solvent Recovery System) after receipt of formal purchase Order, down payment and finalization of all details. Subject to availability of Stock units. If a Stock unit is not available, shipment will be eighteen (18) to twenty (20) weeks.

The above quoted price is valid for a period of thirty (30) calendar days from quotation date, based on the estimated shipping schedule as stated herein. If customer's delivery requirements unreasonably exceed this schedule, then Item #1 on CONDITIONS OF SALE page will take precedence. This will be determined by Littleford Day, Inc. prior to or after receipt of formal Purchase Order, and up to date of shipment.

Littleford Day

Where Processing Ideas Become Reality

Proposal No.: 703083-C

CONDITIONS OF SALE

1. **Prices** - Any prices quoted or agreed upon are subject to adjustment to the Company's prices in effect at the time of shipment. Errors in typing are subject to correction.

2. **Delivery Schedules** - Stated delivery schedules are estimates only and not a commitment as to specific dates. In no event shall the Company be liable for delivery changes due to any cause or reasons whatsoever.

3. **Cancellation** - Orders once accepted are not subject to cancellation except upon written consent of the Company and the payment to the Company of proper cancellation charges.

4. **Taxes** - Unless otherwise indicated, the prices herein quoted do not include any sales, gross receipts, use, or occupation tax or any other tax levied upon this transaction or upon any sale, contract, shipment or delivery incident thereto, all of which applicable taxes the buyer assumes and agrees to pay.

5. **Littleford Day, Inc.** is not liable for consequential damages of any kind. Further, the customer accepts full and total responsibility for the process and the operation of all equipment provided hereunder.

6. **Warranty** - Littleford Day, Inc. warrants that equipment manufactured by it will meet those specifications set forth in this proposal. THERE ARE NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTIBILITY, FITNESS, OR OTHERWISE WHICH EXTEND BEYOND MEETING THOSE SPECIFICATIONS. For one year from the date of our invoice we will replace for the original purchaser, free of charge, any part manufactured by Littleford Day, Inc. found upon examination at its factory in Florence, Kentucky to be defective under normal use and service due to defects in material or workmanship. With respect to any part not of our manufacture, the same replacement policy will apply but only within those limits set by the manufacturer of the part. It is agreed that this remedy for damages is exclusive. This remedy shall not be effective if the part has been the subject of misuse, negligence or accident, nor if the part has been repaired or altered in any respect which, in our judgment, affects its condition or operation. All transportation charges on the parts submitted for replacement must be borne by the purchaser.

7. **Government Regulations** - This quotation and any confirmed order as a result thereof is at all times subject to Government proclamation, laws and regulations now or hereafter in effect, pertaining to priorities, allocations, prices and any other such act or acts affecting this transaction or the production and sales of the Company.

8. **Title** - Title to equipment delivered as a result of this quotation shall remain in the Company until fully paid for as provided in the "Terms" herein specified, with full right in Company to stop any equipment in transit and repossess same for security reasons.

9. **Conflict** - In the event of a conflict between the terms and conditions of the buyer's purchase order and these conditions of sale, the latter shall govern the contract of sale.

Proposed by	*Accepted by*
LITTLEFORD DAY, INC.	**SULZER METCO**
(authorized signature)	(authorized signature)
August 8, 2008	
(date)	(date)

Form Approved OMB No.: 2070-0093

Approval Expires: 01/94

(Important: Type or print; read instructions before completing form.)

EPA U.S. Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

Public reporting burden for this collection of information is estimated to vary from 30 to 34 hours per response, with an average of 32 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (PM-223), US EPA, 401 M St., SW, Washington, D.C. 20460 Attn: TRI Burden and to the Office of Information and Regulatory Affairs, Office of Management and Budget Paperwork Reduction Project (2070-0093), Washington, D.C. 20603.

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for your optional use.)

1.	1.1 Are you claiming the chemical identity on page 3 trade secret? [ ] Yes (Answer question 1.2; Attach substantiation forms.) [ ] No (Do not answer 1.2; Go to question 1.3.)	1.2 If "Yes" in 1.1, is this copy: [ ] Sanitized [ ] Unsanitized	1.3 Reporting Year 19 ____

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official

Signature | Date signed

3. FACILITY IDENTIFICATION

3.1	Facility or Establishment Name	
	Street Address	
	City	County
	State	Zip Code
	TRI Facility Identification Number	

WHERE TO SEND COMPLETED FORMS:

1. EPCRA REPORTING CENTER
   P.O. BOX 23779
   WASHINGTON, DC 20026-3779
   ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix G)

3.2	This report contains information for (Check only one): a. [ ] An entire facility b. [ ] Part of a facility.	
3.3	Technical Contact	Telephone Number (include area code)
3.4	Public Contact	Telephone Number (include area code)

3.5	SIC Code (4 digit) a.	b.	c.	d.	e.	f.

	Latitude			Longitude		
3.6	Degrees	Minutes	Seconds	Degrees	Minutes	Seconds

3.7	Dun & Bradstreet Number(s) a.	b.
3.8	EPA Identification Number(s) (RCRA I.D. No.) a.	b.
3.9	NPDES Permit Number(s) a.	b.
3.10	Receiving Streams or Water Bodies (enter one name per box) a.	b.
	c.	d.
	e.	f.
3.11	Underground Injection Well Code (UIC) Identification Number(s) a.	b.

4. PARENT COMPANY INFORMATION

4.1	Name of Parent Company	4.2	Parent Company's Dun & Bradstreet Number

SULZER

Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590-0201
United States of America

9 July 2007

Chief Perrin
Westbury Fire Department
355 Maple Avenue
Westbury, NY 11590

Dear Chief Perrin:

In accordance with General Municipal Law § 209-u, enclosed please find the completed calendar year 2007 Hazardous Materials Report Form for Sulzer Metco US Inc.

Sulzer Metco uses the Hazardous Materials Report Form to report the presence of hazardous materials to provide you with accurate information to meet the contingencies of a fire or other emergencies involving the Westbury Fire Department and other emergency responders at our facility.

It is the purpose of this reporting to secure the health, safety and welfare of the public, protect those called upon to respond to the emergency, encourage preparedness to meet any danger, and promote planning for future demands for emergency services.

If further information is needed, please feel free to email me at alfonso.rolli@sulzer.com or call me at my office or cell phone number listed on the attached business card.

Sincerely,
Sulzer Metco (US) Inc.

Alfonso Rolli – Manager
Environmental and Safety Engineering

SENT: USPS
9 JUL 07

OFFICE OF FIRE PREVENTION AND CONTROL

HAZARDOUS MATERIALS REPORT FORM
(General Municipal Law, § 209-u)

The information entered herein is essential to your local fire chief for the protection of your employees, the firefighters and citizens in the immediate area, and to reduce damage to your property in the event of a fire or an emergency.

Every fire insurance policyholder, engaged in commerce in this state, is required by law to report the presence of hazardous materials at their business address.

Failure to file in accordance with the provisions of section 209-u of the General Municipal Law could result in a fine.

A separate report is required annually for each business address.

WHEN COMPLETED, THIS FORM MUST BE SENT TO YOUR LOCAL FIRE DEPARTMENT.

		Hazardous Materials Location*	
Firm Name	SULZER METCO (US) INC.	Street Add. Only	SAME
Bus. Add.	1101 PROSPECT AVE.	Bldg. Name or No.	SAME
City, State, Zip	WESTBURY, NY 11590	City, State, Zip	SAME
Tel. No.	516-338-2337	Policy Anniv. Date	
Name of Emergency Contact	ALFONSO ROLLI	Bus. Tel. 516-338-2337	Home Tel. 914-946-3799

(Signature and Title of Person Completing Form)

*It is suggested that a separate form be filled out for each building that contains hazardous materials.

EXEMPTIONS

Requests for exemptions from this law must be made in writing, attached to this form, and filed annually with your local fire department not later than the anniversary date of your policy.

All exemptions approved shall expire on the next policy anniversary date.

Exemptions denied shall require that the insured file a completed hazardous materials report form within 15 days of denial.

FOR FIRE DEPARTMENT USE ONLY

Exemptions: Approved _____ Denied _____ Additional Information Needed _____

(Date) (Signature of Fire Chief)

(Fire Department Name and Address) (Print Name of Fire Chief)

Note: Definitions of symbols are on the second page of the instruction sheet.

Identifying Symbol	Material Description & Proper Shipping Name	Total Amount	Identifying Symbol	Material Description & Proper Shipping Name	Total Amount
EXPLOSIVE / BLASTING AGENT			NON FLAMMABLE GAS	ARGON CYLINDERS	2860-cuft
				HELIUM CYLINDERS	1320-cuft
				NITROGEN (2) BULK SYSTEMS	235K-cuft
POISON GAS			OXIDIZER	OXYGEN CYLINDERS	1350-cuft
POISON / IRRITANT			ORGANIC PEROXIDE		
FLAMMABLE LIQUID	METHYL ALCOHOL	330-gal	RADIOACTIVE		
	JP-5 AIRCRAFT FUEL	110-gal.			
	ACETIC ACID	104 gal.			
	NAPHTA	20-gal.			
	PHENOLIC BINDER	220-gal			
COMBUSTIBLE SOLID	VARIOUS LUBE OILS	110-gal.	CORROSIVE	ACETIC ACID	104-gal
				CHROMIC ACID	110-gal
FLAMMABLE SOLID	TITANIUM POWDERS	300-lbs	DANGEROUS WHEN WET		
	ALUMINUM POWDERS	4500-lbs			
COMPRESSED GAS	ACETYLENE CYLINDERS	1600-cuft	ETIOLOGIC AGENTS BIOMEDICAL MATERIAL IN CASE OF DAMAGE OR LEAKAGE NOTIFY DIRECTOR CDC ATLANTA, GEORGIA 404/633-5313		
	PROPYLENE CYLINDERS	450-cuft			
	METHANE CYLINDERS	450-cuft			
	HYDROGEN BULK SYSTEM	43K-cuft			
	PROPANE TANKS (FORK LIFTS)	230-lbs.			

VI Special Considerations/Remarks:

1. FACILITY IS FULLY SPRINKLERED BY A WET PIPE SYSTEM.
2. ADJACENT BUILDING (NORTH) IS A TECHNICAL SCHOOL.
3. ACCESS TO BUILDING IS GOOD.
4. FLAMMABLE LIQUIDS STORED WITHIN 2-HR ROOM w/ SECONDARY CONTAINMEN

Instructions for Hazardous Material Listing

Identifying Symbol: This area identifies different classes of hazardous material. Most material will fall within one of these classes. If a particular material falls within two or more classes, it should be listed in each applicable class.

Two additional boxes are provided for material that does not fall within any class. These boxes may also be used if additional space is needed to further identify previously listed categories.

Amounts to be reported are shown in Table 1 below.

NOTE: SHIPPING AND PACKAGING LABELS MAY BE OF ASSISTANCE IN IDENTIFYING THE CLASS OF MATERIAL.

Hazardous Material Description and Proper Shipping Name

This area is reserved for the description and name of any hazardous material within a given class. If there is more than one material within a certain class, at a given location, then the most prevalent or most common should be used (indicate "most common").

Total Amount

List the total amount of reportable material within the given class. If the amounts vary from day to day, then the average amount should be listed.

Identifying Symbol	Hazardous Material Description and Proper Shipping Name	Total Amount
	Ethyl Chloride	60 gals.
	(most common)	

Special Considerations/Remarks

This area is reserved for the policyholder and the fire chief for making any notes or comments they feel are pertinent. Several examples are listed below:

1. Building has a sprinkler system.
2. Adjacent building is a school.
3. Guard dogs are on the premises from 6:00 p.m. to 6:00 a.m.
4. Hazardous material amounts may vary greatly from day to day.
5. Poor water supply.
6. Access to the building is poor.
7. Flammable liquid is stored in the same building as oxidizer.

Table 1

Amounts to be Reported

1. Explosives and Blasting Agents - any amount
2. Poison Gas - any amount
3. Poison and Irritant - any amount
4. Flammable Liquid - over 5 gallons inside a building and over 10 gallons outside a building
5. Flammable Solid - any amount
6. Flammable Gas - over 2,000 cubic feet at normal temperature
7. Nonflammable Gas - over 6,000 cubic feet at normal temperature
8. Oxidizer - over 50 pounds
9. Organic Peroxide - over 10 pounds
10. Combustible Liquid - over 25 gallons inside a building and over 60 gallons outside a building
11. Radioactive Material - any amount
12. Corrosive Material - over 55 gallons
13. Dangerous When Wet Material - any amount
14. Etiologic Material - any amount

(OVER)

F100965-001 (4/82)
New York State Department of State, Office of Fire Prevention and Control

The following definitions have been abstracted from the Code of Federal Regulations, Title 49-Transportation, Parts 100 to 199. Refer to the referenced sections for complete details.

NOTE: Rulemaking proposals are outstanding or are contemplated concerning some of these definitions.

Hazardous Material - Means a substance or material which has been determined by the Secretary of Transportation to be capable of posing an unreasonable risk to health, safety and property, when transported in commerce, and which has been so designated. (Sec. 171.8)

Multiple Hazards - A material meeting the definitions of more than one hazard class is classed according to the sequence given in Sec. 173.2.

HAZARD CLASS	DEFINITIONS
EXPLOSIVES	An Explosive - Any chemical compound, mixture or device, the primary or common purpose of which is to function by explosion, i.e., with substantially instantaneous release of gas and heat, unless such compound, mixture or device is otherwise specifically classified in Parts 170-189. (Sec. 173.50)
CLASS A EXPLOSIVE	Detonating or otherwise of maximum hazard. The nine types of Class A explosives are defined in Sec. 173.53.
CLASS B EXPLOSIVE	In general, function by rapid combustion rather than detonation and include some explosive devices such as special fireworks, flash powders, etc. Flammable hazard. (Sec. 173.88)
CLASS C EXPLOSIVE	Certain types of manufactured articles containing Class A or Class B explosives, or both, as components but in restricted quantities, and certain types of fireworks. Minimum hazard. (Sec. 173.100)
BLASTING AGENTS	A material designed for blasting which has been tested in accordance with Sec. 173.114a(b) and found to be so insensitive that there is very little probability of accidental initiation to explosion or of transition from deflagration to detonation. (Sec. 173.114a(a))
COMBUSTIBLE LIQUID	Any liquid having a flash point above 100'F. and below 200oF. as determined by tests listed in Sec. 173.115(d). Exceptions to this are found in Sec. 173.115(b).
CORROSIVE MATERIAL	Any liquid or solid that causes visible destruction of human skin tissue or a liquid that has a severe corrosion rate on steel. See Sec. 173.240(a) and (b) for details.
FLAMMABLE LIQUID	Any liquid having a flash point below 100'F. as determined by tests listed in Sec. 173.115(d). Exceptions are listed in Sec. 173.115(a).
COMPRESSED GAS	Compressed Gas - Any material or mixture having in the container a pressure exceeding 40 psia at 70°F., or a pressure exceeding 104 psia at 130°F.; or any liquid flammable material having a vapor pressure exceeding 40 psia at 100°F. (Sec. 173.300(a))
FLAMMABLE GAS	Any compressed gas meeting the requirements for lower flammability limit, flammability limit range, flame projection, or flame propagation criteria as specified in Sec. 173.300(b).
NONFLAMMABLE GAS	Any compressed gas other than a flammable compressed gas.
FLAMMABLE SOLID	Any solid material, other than an explosive, which is liable to cause fires through friction, retained heat from manufacturing or processing, or which can be ignited readily and when ignited burns so vigorously and persistently as to create a serious transportation hazard. (Sec. 173.150)
ORGANIC PEROXIDE	An organic compound containing the bivalent -0-0 structure and which may be considered a derivative of hydrogen peroxide where one or more of the hydrogen atoms have been replaced by organic radicals must be classed as an organic peroxide unless ... (See Sec. 173.151 (a) for details)
OXIDIZER	A substance such as chlorate, permanganate, inorganic peroxide, or a nitrate, that yields oxygen readily to stimulate the combustion of organic matter. (See Sec. 173.151)
POISON A (Poison Gas)	Extremely Dangerous Poisons - Poisonous gases or liquids of such nature that a very small amount of the gas, or vapor of the liquid, mixed with air is dangerous to life. (Sec. 173.326)
POISON B (Poison)	Less Dangerous Poisons - Substances, liquids, or solids (including pastes and semi-solids), other than Class A or Irritating materials, which are known to be so toxic to man as to afford a hazard to health during transportation; or which, in the absence of adequate data on human toxicity, are presumed to be toxic to man. (Sec. 173.343)
IRRITATING MATERIAL	A liquid or solid substance which upon contact with fire or when exposed to air gives off dangerous or intensely irritating fumes, but not including any poisonous material, Class A. (Sec. 173.381)
ETIOLOGIC AGENT	An "etiologic agent" means a viable micro-organism, or its toxin which causes or may cause human disease. (Sec. 173.386) (Refer to the Department of Health, Education and Welfare Regulations, Title 42, CFR, Sec. 72.25(c) for details.)
RADIOACTIVE MATERIAL	Any material, or combination of materials, that spontaneously emits ionizing radiation, and having a specific activity greater than 0.002 microcuries per gram. (Sec. 173.389) NOTE: See Sec. 173.389(a) through (1) for details.
WATER REACTIVE MATERIAL (SOLID)	Means any solid substance (including sludges and pastes) which, by interaction with water, is likely to become spontaneously flammable or to give off flammable or toxic gases in dangerous quantities.

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART III. CHEMICAL-SPECIFIC INFORMATION

(This space for your optional use.)

1. CHEMICAL IDENTITY (Do not complete this section if you complete Section 2.)

1.1	[Reserved]
1.2	CAS Number (Enter only one number exactly as it appears on the 313 list. Enter NA if reporting a chemical category.)
1.3	Chemical or Chemical Category Name (Enter only one name exactly as it appears on the 313 list.)
1.4	Generic Chemical Name (Complete only if Part I, Section 1.1 is checked "Yes." Generic name must be structurally descriptive.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you complete Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation).)

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture the chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing e. [ ] As a byproduct	d. [ ] For sale/distribution f. [ ] As an impurity
3.2	Process the chemical:	a. [ ] As a reactant d. [ ] Repackaging only	b. [ ] As a formulation component	c. [ ] As an article component
3.3	Otherwise use the chemical:	a. [ ] As a chemical processing aid	b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

[ ][ ] (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)		A. Total Release (pounds/year) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a	[ ]	[ ]	[ ]		5.1b [ ]	
5.2 Stack or point air emissions	5.2a	[ ]	[ ]	[ ]		5.2b [ ]	
5.3 Discharges to receiving streams or water bodies (Enter letter code for stream from Part I Section 3.10 in the box provided.) 5.3.1 [ ]	5.3.1a	[ ]	[ ]	[ ]		5.3.1b [ ]	5.3.1c %
5.3.2 [ ]	5.3.2a	[ ]	[ ]	[ ]		5.3.2b [ ]	5.3.2c %
5.3.3 [ ]	5.3.3a	[ ]	[ ]	[ ]		5.3.3b [ ]	5.3.3c %
5.4 Underground injection on-site	5.4a	[ ]	[ ]	[ ]		5.4b [ ]	
5.5 Releases to land on-site 5.5.1 Landfill	5.5.1a	[ ]	[ ]	[ ]		5.5.1b [ ]	
5.5.2 Land treatment/application farming	5.5.2a	[ ]	[ ]	[ ]		5.5.2b [ ]	
5.5.3 Surface impoundment	5.5.3a	[ ]	[ ]	[ ]		5.5.3b [ ]	
5.5.4 Other disposal	5.5.4a	[ ]	[ ]	[ ]		5.5.4b [ ]	

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: CE 2184

MSDS No.: METCO / 50-347
Revision No.: 2
Revision Date: July 30, 1993
Original Date of Issue: August 1, 1992

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: CE 2184

Description: Metal Powder

Other Designation: HIGH CHROMIUM IRON BASE STAINLESS STEEL COMPOSITE POWDER

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Chromium *	15	7440-47-3	1 mg/m³ TWA	0.5 mg/m³ TWA	
Aluminum *	5	7429-90-5	15 mg/m³ TWA total dust 5 mg/m³ TWA respirable 5 mg/m³ TWA fume	10 mg/m³ TWA metal dust 5 mg/m³ TWA fume	
Molybdenum	2	7439-98-7	10 mg/m³ TWA total dust Insoluble as Mo	10 mg/m³ TWA Insoluble as Mo	
Manganese *	1	7439-96-5	5 mg/m³ CEIL compounds 1 mg/m³ TWA fume 3 mg/m³ STEL fume as Mn	5 mg/m³ TWA compounds 1 mg/m³ TWA fumes 3 mg/m³ STEL fume as Mn	
Organic Binder	3	N/A	N/A	N/A	
Iron	74	7439-89-6	10 mg/m³ TWA total particulate Fe_2O_3 fume, as Fe	5 mg/m³ TWA Fe_2O_3 fume, as Fe	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	3.2
Vapor Pressure (mmHg):	N/A	**Melting Point:**	1200 - 1250° F
Vapor Density (Air=1):	N/A	**Percentage Volatiles:**	N/A
Solubility in water (%):	Negative	**Evaporation Rate:**	N/A
Appearance and Odor:	Powder, no odor	**pH of Solution:**	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	NONE	**Flammable Limits:**	**LEL %:**	N/A	**UEL%:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Fine metal dusts are flammable and may explode when exposed to heat, flame or oxidizers. Chromium and iron may ignite if airborne in the presence of an ignition source. Aluminum is a flammable solid, do not expose to water or moisture.
Fine metal dusts of molybdenum are flammable and may explode if exposed to heat, flame or oxidizers.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Oxidizers, Acids, Sulfur, $Ni(NO_3)_2$, Combustibles. Molybdenum may react with water to form explosive hydrogen gas.

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (similar to welding fumes). This action is independent of metal powder. When molybdenum is heated to decomposition, toxic fumes of molybdenum are emitted. Thermal decomposition products of the organic binder include carbon monoxide, carbon dioxide, nitrogen oxides, sulfur oxides.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
CHROMIUM:	Hazard by inhalation and skin contact. Inhalation may cause pneumoconiosis and mucous membrane irritation or ulceration. Skin contact may cause dermatitis, sensitization or chrome lesions. A portion of metallic chromium may be converted during the thermal spray process to hexavalent chromium. Exposure to hexavalent chromium may cause bronchogenic, lung and stomach cancers. Target Organ(s): Lungs, skin.

ALUMINUM: Hazard by inhalation, skin and eye contact. Inhalation may cause pneumoconiosis. Pulmonary, skin and eye irritant due to abrasive action. Under normal use/conditions, aluminum oxide may be formed.

Target Organ(s): Lungs, skin, eyes.

MOLYBDENUM: Hazard by inhalation, ingestion, skin and eye contact. Inhalation may cause respiratory tract irritation and pneumoconiosis. Inhalation of metallic dust from alloys and carbides may cause hard metal lung disease. Ingestion may cause anemia, liver and kidney fatty degeneration. Skin and eye contact may cause irritation to the skin and eyes. A portion of metallic molybdenum may be converted during the thermal spray process to molybdenum oxide.

Target Organ(s): Respiratory tract, kidneys, liver, blood forming organs, skin, eyes.

MANGANESE: Hazard by inhalation. Chromic inhalation may cause manganism characterized by psychosis and neurological impairment.

Target Organ(s): Central Nervous System.

ORGANIC BINDER: Hazard by inhalation, ingestion, skin and eye contact. Inhalation and ingestion may cause respiratory tract irritation. Skin and eye contact may cause irritation to the skin and eyes.

Target Organ(s): Respiratory tract, skin, eyes

IRON: Hazard by inhalation. Inhalation may cause Siderosis (benign pneumoconiosis).

Target Organ(s): Lungs.

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, skin, eye contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Possible irritation.

Skin Contact: Possible dermatitis.

Inhalation: Possible irritation, pneumoconiosis.

Ingestion: Possible irritation.

FIRST AID

Eye Contact: Flush eye with sufficient amounts of water. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII — SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with Aluminum metallic dusts should be utilized. Wet wipe area clean. Do not use water for clean up operations. Do not dry sweep. Avoid generating airborne dust.

Waste Management and Disposal: Empty product containers, product waste and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION VIII — SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10 and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

Gloves: Aluminized gloves are to be worn during the plasma spray process. Rubber or other appropriate gloves may be worn as necessary during other phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) An aluminized apron is to be worn during the plasma spray process. Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX — HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: Avoid ingestion, inhalation and excessive skin contact. Avoid contact of powder with water and oxidizers.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

T# 5186 ONCT-7800

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D31905023 PPW01/10/2008 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD131318651
2. Page 1 of 1
3. Emergency Response Phone: (800) 483-3716
4. Manifest Tracking Number: 002099113 FLE

GENERATOR

5. Generator's Name and Mailing Address
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590
Generator's Phone: 516 338-2303
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc
U.S. EPA ID Number: MAD039322250

7. Transporter 2 Company Name: Dart Trucking Company, Inc
U.S. EPA ID Number: OHD004965825

8. Designated Facility Name and Site Address
Spring Grove Resource Recovery Inc
4979 Spring Grove Avenue
Cincinnati, OH, 45232
Facility's Phone: (513) 681-5738
U.S. EPA ID Number: OHD000816629

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., (ETHANOL, ISOPROPANOL), 3, PG II	1	DM	60	P	D001		
X	2. UN3264, WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (HYDROCHLORIC ACID, NITRIC ACID), 8, PG II	1	DF	495	P	D002	D006	D007
						D008		
X	3. UN1755, WASTE CHROMIC ACID SOLUTION, 8, PG II	1	DF	496	P	D002	D006	D007
						D008		
	4.							

SULZER METCO (US) INC.
MAY 30 2008
EHS DEPARTMENT

14. Special Handling Instructions and Additional Information
1. CH310091 1x55 ERG#128 3. CH189142 ERG#154
2. CH189112 1x55 ERG#154

DSPE #05195 Dral. 082663

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jim Koukoumelis
Signature:
Month 05 Day 08 Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: MANUEL GARCIA
Signature: Manuel Garcia
Month 05 Day 08 Year 08

Transporter 2 Printed/Typed Name: DAVE SHEDDEN
Signature: Dave Shedden
Month 05 Day 12 Year 08

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1: H061 2. H141 3. H141 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Alyson Wright
Signature: Alyson Wright
Month 05 Day 13 Year 08

EPA Form 8700-22 (Rev. 3-05). Previous editions are obsolete.

Clean Harbors has the appropriate permits for and will accept the waste the generator is shipping. DESIGNATED FACILITY TO GENERATOR

T# 9186

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) D31005023 PPW01/10/2008 Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
NYD131318651	1	(800) 483-3710	002099113 FLE

5. Generator's Name and Mailing Address
Sukor Maico US Inc
1101 Prospect Avenue
Westbury, NY 11590
Generator's Phone: 516 338-2300

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Clean Harbors Environmental Services Inc — U.S. EPA ID Number: MAD039322260

7. Transporter 2 Company Name — U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Spring Grove Resource Recovery Inc
4879 Spring Grove Avenue
Cincinnati, OH, 45232
Facility's Phone: (513) 681-5738
U.S. EPA ID Number: OHD000816629

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. UN1993, WASTE FLAMMABLE LIQUIDS, N.O.S., (ETHANOL, ISOPROPANOL), 3, PG II	1	DM	60	P	D001
X	2. UN1284, WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S., (HYDROCHLORIC ACID, NITRIC ACID), 8, PG II	1	DF	495	P	D002 D006 D007 D009
X	3. UN1758, WASTE CHROMIC ACID SOLUTION, 8, PG II	1	DF	496	P	D002 D006 D007 D009
	4.					

14. Special Handling Instructions and Additional Information
1. CH310191 / x 65 ERG#128
2. CH180112 / x 55 ERG#154
3. CH169142 ERG#154

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jim Kourkoumelis — Signature: [signature] — Month 05 Day 08 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: MANUEL GARCIA — Signature: Manuel Garcia — Month 05 Day 08 Year 08
Transporter 2 Printed/Typed Name — Signature — Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) — U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) — Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name — Signature — Month Day Year

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Land Disposal Restriction Notification Form

CleanHarbors® ENVIRONMENTAL SERVICES, INC.

Print Date: 05/07/2008

MANIFEST INFORMATION

Generator: Sulzer Metco US Inc
Address: 1101 Prospect Avenue
Westbury, NY 11590
EPA ID#: N Y D 1 3 1 3 1 8 6 5 1

Manifest No
002099113FLE
Sales Order No: D31905023

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category:
1	1	CH310091	NON- WASTEWATER	2 : This is subject to LDR.

EPA Waste Codes	EPA Waste Subcategory
D001	High TOC Ignitable Liquids

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category:
2	1	CH189112	WASTEWATER	2 : This is subject to LDR.

EPA Waste Codes	EPA Waste Subcategory
D002	Corrosive Characteristic
D006	Toxicity characteristic for Cadmium
D007	Toxicity Characteristic for Chromium
D008	Toxicity Characteristic for Lead

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category:
3	1	CH189142	WASTEWATER	2 : This is subject to LDR.

EPA Waste Codes	EPA Waste Subcategory
D002	Corrosive Characteristic
D006	Toxicity characteristic for Cadmium
D007	Toxicity Characteristic for Chromium
D008	Toxicity Characteristic for Lead

LDR Chemical Data

Chemical	Underlying Hazardous Constituents	Constituents of Concern	Contaminants Subject to Treatment
CADMIUM	Y	N	N
Chromium	Y	N	N
LEAD	Y	N	N

Certification	Applies to Manifest Line Items
Pursuant to 40 CFR 268.7(a), I hereby notify that this shipment contains waste restricted under 40 CFR Part 268.	1 2 3

CleanHarbors® ENVIRONMENTAL SERVICES, INC.

Land Disposal Restriction Notification Form

Print Date: 05/07/2008

MANIFEST INFORMATION

Generator: Sulzer Metco US Inc
Address: 1101 Prospect Avenue
Westbury, NY 11590
EPA ID#: N Y D 1 3 1 3 1 8 6 5 1

Manifest No
002099113FLE
Sales Order No: D31905023

Waste analysis data, where available, is attached

Signature: [signature]
Print Name: Jim Koonkoumelas
Title: Hazardous Waste Coordinator
Date: 5/8/07

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name _____

Street _____

City _____ County _____ State _____ Zip _____

SIC Code [ ][ ][ ][ ] Dun & Brad Number [ ][ ] - [ ][ ][ ] - [ ][ ][ ][ ]

FOR OFFICIAL USE ONLY

ID # _____

Date Received _____

Owner/Operator Name

Name _____ Phone ( )

Mail Address _____

Emergency Contact

Name _____ Title _____

Phone ( ) 24 Hr Phone ( )

Name _____ Title _____

Phone ( ) 24 Hr Phone ( )

Important Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 _____

[ ] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Container Type / Pressure / Temperature	Storage Codes and Locations (Non-Confidential) *Storage Locations*	Optional
CAS [ ][ ][ ][ ][ ][ ][ ][ ] [ ] Trade Secret [ ] Chem Name _____ *Check all that apply* [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max. Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No. of Days On-site (days)	[ ][ ][ ]	_____	[ ]
CAS [ ][ ][ ][ ][ ][ ][ ][ ] [ ] Trade Secret [ ] Chem Name _____ *Check all that apply* [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No. of Days On-site (days)	[ ][ ][ ]	_____	[ ]
CAS [ ][ ][ ][ ][ ][ ][ ][ ] [ ] Trade Secret [ ] Chem Name _____ *Check all that apply* [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name _____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	[ ][ ] Max. Daily Amount (code) [ ][ ] Avg. Daily Amount (code) [ ][ ][ ] No of Days On-site (days)	[ ][ ][ ]	_____	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through _____ and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true accurate and complete

Name and official title of owner operator OR owner operator s authorized representative _____ Signature _____ Date signed _____

Optional Attachments

[ ] I have attached a site plan

[ ] I have attached a list of site coordinate abbreviations

[ ] I have attached a description of dikes and other saleguard measures

New York State Department of Environmental Conservation
Division of Hazardous Substances Regulation
50 Wolf Road, Albany, New York 12233-7250

1993 HAZARDOUS WASTE REGULATORY FEE INFORMATION FORM

The attached form IS NOT the Hazardous Waste Report.

The Hazardous Waste Report MUST be completed PRIOR to filling out the Hazardous Waste Regulatory Fee Information Form.

All Generators and TSD Facilities MUST complete this form. You may be responsible for regulatory fees, depending on the quantity and type of hazardous waste generated and\or managed during the reporting year. The Hazardous Waste Regulatory Fee Information Form is used solely for assessing regulatory fees.

PLEASE, READ THE INSTRUCTIONS CAREFULLY before completing the form. The instructions explain which wastes should NOT be included in the Hazardous Waste Regulatory Fee Information Form waste totals. Inclusion of these wastes may result in higher fees.

Questions on the Hazardous Waste Regulatory Fee Information Form should be directed to the **Regulatory Compliance Section of NYSDEC at 518-485-8988**.

New York State Department of Environmental Conservation
Division of Hazardous Substances Regulation
50 Wolf Road, Albany, N.Y. 12233-7250

INSTRUCTIONS FOR THE 1993 HAZARDOUS WASTE REGULATORY FEE INFORMATION FORM

PLEASE READ ALL INSTRUCTIONS CAREFULLY BEFORE COMPLETING THIS FORM. SUBMIT THE COMPLETED FORM WITH YOUR 1993 HAZARDOUS WASTE REPORT.

THE INFORMATION ON THIS FORM WILL BE USED TO CALCULATE HAZARDOUS WASTE PROGRAM FEES THAT MAY BE APPLICABLE FOR YOUR FACILITY OR SITE.

Section I - Complete Section I of the summary form. Please check your EPA ID# for correctness. The "location" must reflect the address associated with the EPA ID#.

Section II - **GENERATORS - Box #1** - Total all hazardous waste reported in Section II, Box B of your GM forms that is NOT a wastewater (see definitions on the next page) and is not exempt from fees as described below. This total must be converted to tons (2,000 pounds/ton). An incorrect conversion could cause an incorrect fee assessment, PLEASE DOUBLE CHECK this total.

SPECIAL NOTES: **For NON-HAZARDOUS wastewaters that are treated, resulting in a hazardous sludge, include the dewatered sludge only in your nonwastewater total in Section II, Box #1.**

For the Hazardous Waste Regulatory Fee Information Form, DO NOT INCLUDE EXEMPT REMEDIAL WASTE. Pursuant to Title 6, New York Codes of Rules and Regulations, Part 483 defines exempt remedial wastes as those resulting from services:

(1) under a contract with the Department, or with the Department's approval and in compliance with Department regulations, or pursuant to an order of the Department, the United States Environmental Protection Agency or a court, related to the cleanup or remediation of a hazardous material or hazardous waste spill, discharge, or surficial cleanup, pursuant to the Environmental Conservation Law, other than ECL section 27-1313, or a removal action pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et seq.); or

(2) under a contract for, or with the Department's approval and in compliance with Department regulations for, the cleanup and removal of petroleum spill or discharge, pursuant to subdivision seven of section one hundred seventy-six of the navigation law; or

(3) under the order of a court, the Department or the Department of Health, or the United States Environmental Protection Agency related to an inactive hazardous waste disposal site pursuant to ECL section 27-1313 section thirteen hundred eighty-nine-b of the Public Health Law or the Comprehensive Environmental Response, Compensation and Liability Act (42 U.S.C. 9601 et seq.); or

(4) under permit or order requiring corrective action pursuant to title nine of ECL article twenty-seven or the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.).

Section II, Box #2 - Total the amount of HAZARDOUS wastewater generated prior to any treatment, pretreatment, or discharge. Each source must meet the definition of "wastewater" on the next page. If the definition is not met, the waste is a nonwastewater and must be totalled in Box #1. If no hazardous wastewater is generated at your site or if it is exempt as previously stated, enter "0." **NOTE: NON-HAZARDOUS wastewaters that are treated, resulting in a hazardous sludge, are NOT counted as hazardous wastewater. Include the dewatered sludge only in your nonwastewater total in Section II, Box #1.**

NOTE: No generator or TSDF need total any hazardous waste that is designated **EXCLUSIVELY** by EPA code(s) D018-D043, F032, F034, F035, F037, F038, K141-K145, K147-K151. **If ANY other waste code(s) are applicable to the waste, it MUST be totalled.**

INSTRUCTIONS FOR 1993 HAZARDOUS WASTE REGULATORY FEE INFORMATION FORM - Cont.

Section III - Section III must be completed ONLY if your facility is a Treatment, Storage, or Disposal (TSD) Facility. **DO NOT complete this section if you are a Generator only.**

A TSD Facility is a facility that has one or more hazardous waste process units on site that require a permit or certificate for the treatment, storage, or disposal of hazardous waste pursuant to Title 9 of the ECL and the 6 NYCRR 370 Series. All TSD Facilities should have filed a Part A application for a hazardous waste permit at some point in time, and be permitted, seeking a permit, or in the process of closing any TSD units on site. Any TSD facilities with TSD units not certified closed are charged fees, regardless of the amount of waste presently handled.

Item 1: Applies only to special hazardous waste units requiring a certificate or permit.

Item 3: Only hazardous waste managed through TSD units are to be tallied here. Exempt systems should NOT be included.

Item 4: This value will not be found anywhere in your Hazardous Waste Report and must be provided from facility records.

Item 5: Postclosure facilities are those facilities that have certified closed RCRA units for which a management permit is needed.

Section IV - **Certification - GENERATORS and TSD FACILITIES MUST complete this section or the form will be rejected and returned. ALL FORMS MUST BE SUBMITTED WITH AN ORIGINAL SIGNATURE.**

Definitions:

"Wastewater" means liquid hazardous waste that contains: (I) a minimum of ninety-five percent water by weight; and (2) a maximum of one percent by weight of total organic carbon; and (3) a maximum of one percent by weight of total suspended solids (i.e., total filterable solids).

"Non-wastewater" means all hazardous waste that is not a "wastewater."

"Generator" means any person, by site, whose act or process produces hazardous waste or whose act first causes a hazardous waste to become subject to regulation. **(THIS INCLUDES HAZARDOUS WASTE RESULTING FROM A ONE-TIME OCCURRENCE.)**

Weight Conversions: Use the following unless you have knowledge of actual densitites/specific gravities of your waste:

2000 lbs = 1 ton (same as short tons)
1 gallon = 8.3 lbs (If the specific gravity is known, multiply the specific gravity by 8.3 to determine lbs/gal. For example: If the specific gravity of a waste is 0.9, the lbs/gal for this waste is 0.9 X 8.3 = 7.47 lbs/gal, or 1 gallon = 7.47 lbs.)
1 cubic yard = 0.85 tons
1 kilogram = 2.2 lbs
1 metric ton = 1000 kilograms
1 liter = 0.26 gallons

Return the completed Hazardous Waste Regulatory Fee Information Form with your Hazardous Waste Report as described on page 5 of the Hazardous Waste Report instructions. If you have any questions or need assistance in completing this Regulatory Fee Information Form, call the Department of Environmental Conservation at (518) 485-8988.

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF HAZARDOUS SUBSTANCES REGULATION
50 WOLF ROAD ALBANY, NEW YORK 12233-7250

1993 Hazardous Waste Regulatory Fee Information Form

NOTE: PLEASE CAREFULLY READ INSTRUCTIONS BEFORE COMPLETING THIS FORM

I GENERAL

NAME OF GENERATOR OR TSD FACILITY		EPA I.D.
FACILITY MAILING ADDRESS		
CITY	STATE	ZIP
LOCATION OF GENERATOR OR FACILITY (if different from above)		
CITY	STATE	ZIP

AT LEAST ONE BLOCK MUST BE CHECKED

☐ GENERATOR ONLY ☐ TREATMENT, STORAGE, DISPOSAL (TSD) FACILITY ☐ GENERATOR AND TSD

II GENERATOR

1. Summarize all hazardous nonwastewater totals, in tons, from GM, Section II, Box B of the Hazardous Waste Report. DO NOT include waste that is exempt from fees (SEE INSTRUCTIONS)

   TOTAL HAZARDOUS NON WASTEWATER → _____ Tons

2. Summarize the total hazardous wastewater generated, including hazardous wastewater treated in on-site systems. (SEE INSTRUCTIONS)

   TOTAL HAZARDOUS WASTEWATER → _____ Tons

III TREATMENT, STORAGE & DISPOSAL

COMPLETE THIS SECTION ONLY IF YOUR FACILITY IS A RCRA REGULATED TSD

1. Please check all special process units
   - ☐ Hazardous Waste Landfill
   - ☐ Hazardous Waste Incinerator How many? ☐
   - ☐ Hazardous Waste Surface Impoundment
2. Please summarize all WR, Box E and convert the total to tons.
   TOTAL HAZARDOUS WASTE RECEIVED FROM OFF-SITE → _____ Tons
3. FOR RCRA REGULATED TSD PROCESS UNITS: When Section 1, Box E "Origin Code" is 1, 2, 3 or 5, summarize all totals in GM, Section II, "On-Site System 1" and "On-Site System 2" and all totals in GM, Section III, Box E, "Site 1" and "Site 2". Convert the totals to tons.
   TOTAL HAZARDOUS WASTE MANAGED THROUGH RCRA REGULATED TSD UNITS → _____ Tons
4. Amount of hazardous waste stored on-site on December 31, 1993, in tons → _____ Tons
5. Is your facility under post closure care? ☐ Yes ☐ No

IV CERTIFICATION

I certify that this form accurately represents the hazardous waste activities at this site during 1993. This activity (ies) may be subject to regulatory fees.

Name	Title
Signature (ORIGINAL ONLY - NO PHOTOCOPIES)	Date:
Contact if other than above	Telephone No.

THIS FORM MUST BE COMPLETED AND RETURNED WITH THE HAZARDOUS WASTE REPORT

FOR OFFICIAL USE ONLY

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA
United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: Aluminum Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

For EPA use only

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 94

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms)
[X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joseph D. Reardon, Global Quality

Signature: Joseph D Reardon

Date Signed: July 20, 1995

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Sulzer Metco (US) Inc.

TRI Facility ID Number: 11590PRKNL1101P

Street Address: 1101 Prospect Avenue

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check a or b; check c if applicable)	a. ☐ An entire facility	b. ☒ Part of a facility	c. ☐ A Federal facility			
4.3	Technical Contact	Name: Joseph D. Reardon			Telephone Number (include area code): (516) 334-1300		
4.4	Public Contact	Name: Joseph D. Reardon			Telephone Number (include area code): (516) 334-1300		
4.5	SIC Code (4-digit)	a. 3542	b.	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		075	09	50	027	53	16
4.7	Dun & Bradstreet Number(s) (9 digits)	a. 15-208-4398					
		b.					
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD131318651					
		b.					
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A					
		b.					
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A					
		b.					

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	☐ NA Sulzer Inc.
5.2	Parent Company's Dun & Bradstreet Number	☐ NA (9 digits) 00-182-6957

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7429-90-5
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Aluminum (Fume or Dust)
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	**Manufacture the toxic chemical:**	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	**Process the toxic chemical:**	a. ☐ As a reactant b. ☐ As a formulation component	c. ☐ As an article component d. ☐ Repackaging
3.3	**Otherwise use the toxic chemical:**	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☒ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04 (Enter two-digit code from instruction package.)	

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name				
	N/A				
5.3.2	Stream or Water Body Name				
	N/A				
5.3.3	Stream or Water Body Name				
	N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name	N/A	6.1.B.__ POTW Name	
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]

(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): NJD089216790

Off-Site Location Name: Chemical Waste Managemet of New Jersey, Inc.

Street Address: 100 Lister Avenue

City: Newark

County:

State: New Jersey

Zip Code: 07105

Is location under control of reporting facility or parent company? [X] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. B	1. M	1. M 72
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes No
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes No
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes No
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes No
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes No

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Chemical, Category, or Generic Name
Aluminum Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A Prior Year (pounds/year)	Column B Current Reporting Year (pounds/year)	Column C Following Year (pounds/year)	Column D Second Following Year (pounds/year)
8.1	Quantity released *	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	200	200	200	200
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.90			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	N/A	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

COMMONWEALTH OF VIRGINIA
DEPARTMENT OF AIR POLLUTION CONTROL

AIR QUALITY PROGRAM POLICIES AND PROCEDURES

TITLE: AIR TOXICS PROGRAM PRIORITY IMPLEMENTATION POLICY

NUMBER: AQP-5

EFFECTIVE DATE: OCTOBER 15, 1991

APPROVED: Wallace N. Davis

Wallace N. Davis
Executive Director

PURPOSE

The purpose of this document is to set priorities for the implementation of Rules 4-3 and 5-3 concerning Emission Standards for Toxic Pollutants.

BACKGROUND

A. The approach to regulating air toxics in the Commonwealth of Virginia since the promulgation of Rules 4-3 and 5-3 on January 1, 1985 has been to inventory the emissions of all sources of air toxics in the State and to require facility owners to reduce the levels of those emissions from individual facilities to levels that will provide protection of human health. Because this process involves looking at all emissions from each facility, the progress in inventorying these emissions from approximately 4,000 existing facilities and all new facilities has been slow. Furthermore it is not clear that this approach efficiently and immediately evaluates the pollutants of greatest concern: those which are most toxic and those emitted in the greatest quantities in the State. The board has decided to set a policy for the implementation of Rules 4-3 and 5-3 that requires priority be given to the evaluation of the pollutants and affected facilities of greatest concern.

B. The priorities are set in two ways. One way is through the establishment of a list of pollutants of concern. This list is developed through a compilation of air toxic pollutant lists which have significance for air quality in the Commonwealth. These lists comprise federal priority pollutants which the board must otherwise regulate, toxic pollutants reported to be emitted in large quantities from Virginia facilities, and toxic pollutants of particular concern from the American Conference of Governmental Industrial Hygienists (ACGIH) Handbook, which forms the basis of the significant ambient air concentration (SAAC) in Rules 4-3 and 5-3. The second way is through the establishment of a list of facilities of concern. This list is comprised of facilities reporting high levels of emissions under federal toxics programs and facilities of specific concern in Virginia which come to the department's attention through a variety of means.

GENERAL REFERENCES

Regulations for the Control and Abatement of Air Pollution (VR 120-01), Sections 120-04-0301 A and 120-05-0301 A.

LOCATION OF REFERENCED DOCUMENTS

The documents referenced above and any others that may be referenced throughout this document are available for viewing at the central office of the department and are otherwise available as indicated below:

Regulations for the Control and Abatement of Air Pollution.

The regulations are available for viewing at any regional office of the department and copies are available upon request from the central office of the department. A nominal fee may be required.

RECISION

None.

CONTACT

Nancy S. Saylor, Policy Analyst, Division of Program Development, 804/786-1249, may be contacted about any questions or decisions regarding this document.

DEFINITIONS

As used in this document, all terms not defined herein shall have the meaning given them in the *Regulations for the Control and Abatement of Air Pollution* (VR 120-01) [hereinafter the regulations], unless otherwise required by context.

STATEMENT OF POLICY

While it is the intention of the board to implement the air toxics rules for all pollutants and all affected facilities in the State, constraints on resources compel that priorities be set for implementing the air toxics program under Rules 4-3 and 5-3. The authority of the board to evaluate all air emissions of toxic pollutants from any affected facility in the Commonwealth is retained by regulation. The department through this policy shall evaluate emissions of air toxics regulated under Rules 4-3 and 5-3 as set out in the instructions below. No amendments may be made to any part of this policy without board approval.

INSTRUCTIONS

A. **General.** Implementation of Rules 4-3 and 5-3 will be carried out by the department with priority given to the pollutants and affected facilities listed in Attachments A and B as explained below.

1. **Implementation Priorities for Existing Facilities (Rule 4-3).** The following general principles are to be used by the department in implementing Rule 4-3 which covers existing facilities.

a. **All Affected Facilities.** All affected facilities subject to the rule shall submit data on emission rates of all toxic pollutants emitted with each operating permit application or upon request by the department.

b. **Which Pollutants to Evaluate for All Affected Facilities.** For all affected facilities, the department shall focus its evaluation on the pollutants listed in Attachment A. Other pollutants may be evaluated as deemed necessary by the department.

c. **Which Pollutants to Evaluate for Priority Facilities.** For the facilities listed in Attachment B, the department shall focus its evaluation on all pollutants emitted by the listed facilities.

d. **Meaning of Evaluation.** An evaluation means that the department shall determine whether or not the facility is exempt for the pollutant and, if not exempt, whether or not the facility's emissions of a pollutant exceeds the significant ambient air concentration (SAAC). If an exceedance of the SAAC is determined, the department will notify the facility owner that the facility must come into compliance with the rule. The procedures used by the department shall be those set out in Rule 4-3.

e. **Review Priorities for Existing Facilities.** The priority of review for existing facilities by the department shall be as follows: (1) priority facilities listed in Attachment B, (2) facilities that must apply for operating permits, and (3) all other facilities.

2. **Implementation Priorities for New and Modified Facilities (Rule 5-3).** The following general principles are to be used by the department in implementing Rule 5-3 which covers new and modified facilities.

a. **All Affected Facilities.** All affected facilities subject to the rule shall submit data on emission rates of all toxic pollutants that are or may be emitted with each new or modified source permit application.

b. **Which Pollutants to Evaluate for All Affected Facilities.** For all affected facilities, the department shall focus its evaluation on the pollutants listed in Attachment A. Other pollutants may be evaluated as deemed necessary by the department.

c. **Meaning of Evaluation.** The meaning of evaluation for new or modified facilities shall be the same as under A 1 d above. The procedures used by the department shall be those set out in Rule 5-3.

B. **List of Priority Pollutants (Attachment A)**

1. The list of priority pollutants is established by the board based on considerations of potential public health impact, nature and amount of pollutants emitted on a statewide basis, and available resources.

2. The list of priority pollutants is based upon the following lists:

a. Hazardous air pollutants listed in Title III of the Clean Air Act Amendments of 1990 (CAA TITLE III).

b. Toxic air pollutants reported by Virginia facilities at or above 100 pounds per year on a yearly basis through the U.S. Environmental Protection Agency's SARA Section 313 program starting in 1989 (SARA 313).

c. The pollutants targeted by the U.S. Environmental Protection Agency's Industrial Toxics Project (ITP).

d. The pollutants selected by a consultant to assist the department in implementing the pilot air toxics program (PILOT).

e. The pollutants selected by the department based on the toxicity, release characteristics, and the relative abundance or accessibility of the pollutants (DEPARTMENT).

f. The list also indicates whether or not the pollutants listed are included in the ACGIH Handbook.

3. The list of pollutants in Attachment A may be amended by the board as needed to accommodate any changes to the lists in B 2 above.

C. **List of Priority Facilities (Attachment B)**

The current list of priority facilities, established by the board, is comprised of the top 25 facilities reporting the highest level of air emissions under SARA Section 313 as of 1989. This list of facilities may change from year to year depending on the emissions reported. Any new facilities listed in the years to come as part of the top 25 facilities reporting the highest level of air emissions under SARA Section 313 will be incorporated into the list by the department after approval by the board. A priority facility will remain on the list until the department completes its evaluation for all pollutants emitted by the facility. As the need arises other facilities may be given priority by the department in consideration of the following criteria: SARA 313 reporting, complaints, inspections, pending permits, violations, SIC codes, geographical areas, and other factors.

Any changes made to the list in Attachment B shall be approved by the board.

D. **Miscellaneous Implementation Policies**

1. **SIC Code.** Where prioritizing facilities by SIC code is feasible, that approach to evaluation will be taken by the department.

2. **Reevaluation Due to ACGIH Handbook TLV® Change.** Facilities previously reviewed for a pollutant for which the TLV® value subsequently changes will not be required to be reviewed by the department under any new TLV® value unless the facility is required to obtain a permit under Part VIII of the regulations.

3. **Reevaluation for Previously Evaluated Facilities Due to 1991 Rule Changes.** Facilities previously reviewed by the department under the program in effect from 1985 through September 1991 will not be required to be reviewed by the department under the new rules unless the facility is required to obtain a permit under Part VIII of the regulations.

4. **Synergistic Effects.** Synergistic effects will not be evaluated by the department because this evaluation would require more knowledge than is readily available for many substances at this time.

E. **Implementation Deferrals.**

1. Implementation of the requirements of Rules 4-3 and 5-3 may be deferred by the department for one or more affected facilities under the provisions of § 120-04-0301 A and § 120-05-0301 A when at least one of the following conditions occur:

a. Reasonable technical methods are not available to determine the ambient air concentration for a specific pollutant.

b. The configuration or function of the affected facility or facilities creates substantial difficulties in determining the public health impacts of the ambient air concentration for a specific pollutant.

c. The configuration or function of the affected facility or facilities creates substantial difficulties in determining the controls needed to limit the ambient air concentration to levels below the significant ambient air concentration for a specific pollutant.

2. A deferral shall be initiated by a representative of an affected facility or facilities. The application for the deferral must contain at a minimum the following information:

a. The names and addresses of those affected including the locations and descriptions of the affected facility or facilities.

b. An explanation of the basis for the deferral request.

c. Any other pertinent information the department may request which may include, but not be limited to, a quantification of air quality impact from the affected facility or facilities' emissions, including the following:

(1) An estimate of the emissions level (quantity) emitted.

(2) Any current estimates of air quality impact (concentrations at the property line) and how these estimates were calculated.

(3) Any anticipated changes in emission levels within the next two years.

3. A deferral may be granted by the department for a time period not to exceed two years.

4. During the implementation deferral for any one or more facilities, the department and the owners of the affected facilities will work together to establish specific milestones to resolve the issues that necessitated the request for the deferral. If the milestones are not met, the deferral may be withdrawn.

5. If the department and the owner(s) agree that the resolution of the issues causing the deferral will result in the need to amend Rule 4-3 or Rule 5-3 or both, the department will recommend to the board that it begin the process to consider amending the rule(s).

ATTACHMENTS

A. List of Priority Pollutants

B. List of Priority Facilities

I:\DPD\AQPRGPOL\AQP-5

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Acetaldehyde*	75070	x	x		x	x
Acetamide	60355	x				
Acetic acid*	64197					x
Acetone*	67641		x			
Acetonitrile*	75058	x	x			
Acetophenone	98862	x				
2-Acetylaminofluorene	53963	x				
Acrolein*	107028	x			x	x
Acrylamide*	79061	x	x			
Acrylic acid*	79107	x	x			
Acrylonitrile*	107131	x	x		x	x
Allyl chloride*	107051	x	x		x	x
Aluminum (fume or dust)*	7429905		x			
Aluminum oxide*	1344281		x			
4-Aminodiphenyl*	92671	x				
Ammonia*	7664417		x			
Ammonium hydroxide	1336216					x
Ammonium nitrate (solution)	6484522		x			
Aniline and homologues*	62533	x				x
o-Anisidine, p-Anisidine*	29191524	x	x			
Anthracene	120127		x			
Antimony compounds*		x	x			
Arsenic*	7440382		x		x	x
Arsenic compounds*		x	x			x
Barium compounds			x			
Benzene(inc.from gasoline)*	71432	x	x	x	x	x
Benzidine*	92875	x			x	x
Benzotrichloride	98077	x				
Benzyl chloride*	100447	x			x	x
Beryllium compounds*		x			x	x
Biphenyl*	92524	x	x			
Bis(2-ethylhexyl) adipate	103231		x			
Bis(2-ethylhexyl)phthalate	117817	x				
Bis(chloromethyl)ether*	542881	x			x	x

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Bromoform*	75252	x				
1,3 Butadiene*	106990	x				x
2-Butoxy ethanol*	111762					x
Butyl acrylate*	141322		x			
n-Butyl alcohol*	71363		x			
Butyraldehyde	123728		x			
Cadmium*	7440439		x		x	x
Cadmium compounds		x	x			x
Calcium cyanamide*	156627	x				
Calcium oxide*	1305788					x
Caprolactam*	105602	x				
Captan*	133062	x				
Carbaryl*	63252	x	x			
Carbon disulfide*	75150	x	x			
Carbon tetrachloride*	56235	x	x	x	x	x
Carbonyl sulfide	463581	x				
Catechol*	120809	x	x			
Chloramben	133904	x				
Chlordane*	57749	x				
Chlorine*	7782505	x	x			
Chlorine dioxide*	10049044		x			
Chloroacetic acid	79118	x	x			
alpha-Chloroacetophenone*	532274	x				
Chlorobenzene*	108907	x			x	x
Chlorobenzilate	510156	x				
Chloroform*	67663	x	x	x	x	x
Chloromethyl methyl ether*	107302	x				
beta-Chloroprene*	126998	x			x	x
Chromium	7440473		x		x	x
Chromium compounds		x	x			x
Coal tar pitch volatiles*	65996932					x
Cobalt*	7440484		x			
Cobalt compounds		x	x			
Coke oven emissions		x			x	x

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Copper	7440508		x			
Copper compounds			x			
Cresols/Cresylic acid (isomers and mixture)*	1319773	x	x			
o-Cresol*	95487	x			x	x
m-Cresol*	108394	x			x	x
p-Cresol*	106445	x			x	x
Cumene*	98828	x	x			
Cyanide compounds*		x	x			
Cyclohexane*	110827		x			
2,4-D, salts and esters*	94757	x				
DDE	72559	x				
Decabromodiphenyl oxide	1163195		x			
Diazomethane*	334883	x				
Dibenzofurans	132649	x	x			
1,2-Dibromo-3-chloropropane	96128	x				
Dibutyl phthalate*	84742	x	x			
1,4-Dichlorobenzene(p)*	106467	x			x	x
3,3-Dichlorobenzidene*	91941	x			x	x
Dichloroethyl ether(Bis (2-chloroethyl)ether)*	111444	x				
1,3-Dichloropropene*	542756	x				
Dichlorvos*	62737	x				
Diethanolamine*	111422	x				
N,N-Diethyl aniline (N,N-Dimethylaniline)*	121697	x				
Di(2-Ethylhexyl) phthalate*	117817		x			
Diethyl ether*	60297					x
Diethyl phthalate*	84662		x			
Diethyl sulfate	64675	x				
3,3-Dimethoxybenzidine	119904	x				
Dimethyl acetamide*	127195					x
Dimethyl aminoazobenzene	60117	x				
3,3'-Dimethyl benzidine	119937	x				

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Dimethyl carbamoyl chloride*	79447	x				
Dimethyl formamide*	68122	x				x
1,1-Dimethyl hydrazine*	57147	x				
Dimethyl phthalate*	131113	x	x			
Dimethyl sulfate*	77781	x	x		x	x
4,6-Dinitro-o-cresol, and salts*	534521	x				
2,4-Dinitrophenol	51285	x				
2,4-Dinitrotoluene	121142	x	x			
n-Dioctyl phthalate	117840		x			
1,4-Dioxane (1,4-Diethyleneoxide)*	123911	x			x	x
Dioxins			x	x	x	x
1,2-Diphenylhydrazine	122667	x				
Epichlorohydrin (1-Chloro-2,3-epoxypropane)*	106898	x			x	x
1,2-Epoxybutane	106887	x				
Ethanol*	64175					x
2-Ethoxy ethanol*	110805					x
Ethyl acrylate*	140885	x	x			
Ethyl benzene*	100414	x	x			
Ethyl carbamate(Urethane)	51796	x				
Ethyl chloride(Chloroethane)*	75003	x	x			
Ethylene*	74851		x			
Ethylene chlorohydrin*	107073					x
Ethylene dibromide (Dibromoethane)*	106934	x			x	x
Ethylene dichloride (1,2-Dichloroethane)*	107062	x	x		x	x
Ethylene glycol*	107211	x	x			
Ethylene oxide*	75218	x	x		x	x
Ethylene thiourea	96457	x				
Ethylenimine (Aziridine)*	151564	x			x	x

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Ethylidene dichloride (1,1-Dichloroethane)*	75343	x				
Formaldehyde*	50000	x	x		x	x
Furfural*	98011					x
Heptachlor*	76448	x				
Hexachlorobenzene	118741	x				
Hexachlorobutadiene*	87683	x				
Hexachlorocyclopentadiene*	77474	x			x	
Hexachloroethane*	67721	x	x			
Hexamethylene-1,6-diisocyanate*	822060	x				
Hexamethyl phosphoramide*	680319	x				
Hexane*	110543	x				
Hydrazine*	302012	x	x		x	x
Hydrochloric acid*	7647010	x	x			
Hydrogen fluoride (Hydrofluoric acid)*	7664393	x	x			
Hydroquinone	123319	x	x			
Isobutyraldehyde	78842		x			
Isophorone*	78591	x				
Isopropyl alcohol*	67630		x			
Lead arsenate*	7784409				x	x
Lead compounds		x	x	x		
Lindane (all isomers)*	58899	x				
Maleic anhydride*	108316	x	x		x	x
Manganese*	7439965				x	x
Manganese compounds*		x	x			
Mercury*	7439976			x	x	x
Mercury compounds*		x		x		
Methanol*	67561	x	x			

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Methoxychlor*	72435	x				
Methyl acrylate*	96333		x			
Methyl bromide(Bromomethane)*	74839	x				x
Methyl chloride (Chloromethane)*	74873	x	x			x
Methyl chloroform (1,1,1-Trichloroethane)*	71556	x		x	x	x
Methyl ethyl ketone (2-Butanone)*	78933	x	x	x		
Methyl hydrazine*	60344	x				
Methyl iodide (Iodomethane)*	74884	x				
Methyl isobutyl ketone (Hexone)*	108101	x	x	x		
Methyl isocyanate*	624839	x				
Methyl methacrylate*	80626	x	x			
Methyl tert butyl ether	1634044	x				
4,4-Methylene bis (2-chloroaniline)*	101144	x				
Methylenebis (phenylisocyanate)	101688		x			
Methylene chloride (Dichloromethane)*	75092	x	x	x		
Methylene diphenyl diisocyanate (MDI)*	101688	x				
4,4'-Methylene dianiline*	101779	x				
Naphthalene*	91203	x	x			
beta-Napthylamine*	91598				x	x
Nickel*	7440020		x	x	x	x
Nickel carbonyl*	13463393					x
Nickel compounds*		x	x	x		x
Nitric acid*	7697372		x			
Nitrobenzene*	98953	x			x	x
4-Nitrodiphenyl*	92933	x				

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Nitroglycerin*	55630		x			
4-Nitrophenol	100027	x				
2-Nitropropane*	79469	x				
N-Nitroso-N-methylurea	684935	x				
N-Nitrosodimethylamine*	62759	x			x	x
N-Nitrosomorpholine	59892	x			x	x
Parathion*	56382	x			x	x
Pentachloronitrobenzene (Quintobenzene)	82688	x				
Pentachlorophenol*	87865	x				
Phenol*	108952	x	x		x	x
p-Phenylenediamine*	106503	x	x			
Phosgene*	75445	x			x	x
Phosphine*	7803512	x				
Phosphoric acid*	7664382		x			
Phosphorus*	7723140	x				
Phthalic anhydride*	85449	x	x			
Polychlorinated biphenyls (Aroclors)	1336363	x			x	x
Polycyclic organic matter		x			x	
1,3-Propane sultone*	1120714	x				
beta-Propiolactone*	57578	x				
Propionaldehyde	123386	x				
Propoxur (Baygon)*	114261	x	x			
Propylene*	115071		x			
Propylene dichloride (1,2-Dichloropropane)*	78875	x				
Propylene oxide*	75569	x	x		x	x
1,2-Propylenimine (2-Methyl aziridine)	75558	x	x			
Pyridine*	110861		x			
Quinoline	91225	x	x			
Quinone*	106514	x				

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Selenium compounds*		x				
Silver*	7440224		x			
Styrene*	100425	x	x			
Styrene oxide	96093	x				
Sulfuric acid*	7664939		x			
Terephthalic acid	100210		x			
2,3,7,8-Tetrachlorodibenzo-p-dioxin	1746016	x				
1,1,2,2-Tetrachloroethane*	79345	x				x
Tetrachloroethylene (Perchloroethylene)*	127184	x	x	x	x	x
Titanium tetrachloride	7550450	x				
Toluene*	108883	x	x	x	x	x
2,4-Toluene diamine	95807	x				
2,4-Toluene diisocyanate*	584849	x	x			
2,6-Toluene diisocyanate	91087		x			
o-Toluidine*	95534	x				
Toxaphene (chlorinated camphene)*	8001352	x				
1,2,4-Trichlorobenzene*	120821	x				
1,1,2-Trichloroethane*	79005	x				x
Trichloroethylene*	79016	x	x	x	x	x
2,4,5-Trichlorophenol	95954	x				
2,4,6-Trichlorophenol	88062	x				
Triethylamine*	121448	x				
Trifluralin	1582098	x				
2,2,4-Trimethylpentane	540841	x				
Vanadium (fume or dust)*	1314621		x			
Vinyl acetate*	108054	x	x			
Vinyl bromide*	593602	x				
Vinyl chloride*	75014	x			x	x
Vinylidene chloride (1,1-Dichloroethylene)*	75354	x	x		x	x

* Listed in the ACGIH Handbook

ATTACHMENT A: PRIORITY POLLUTANTS

CHEMICALS	CAS NO.	CAA TITLE III	SARA 313	ITP	PILOT	DEPARTMENT
Xylenes(isomers and mixture)*	1330207	x	x	x		
o-Xylenes*	95476	x		x	x	x
m-Xylenes*	108383	x		x	x	x
p-Xylenes*	106423	x		x	x	
Zinc (fume or dust)*			x			
Zinc compounds*			x			

NOTE: The following compounds have been deleted from the Clean Air Act Title III list for the following reasons:

(1) Radionuclides, asbestos, and lead are omitted because these materials are adequately regulated under EPA's National Ambient Air Quality Standard and National Emission Standards for Hazardous Air Pollutant programs.

(2) Mineral fibers are omitted because the category is too broad.

(3) Freon 113 is omitted because it is an exempt VOC and relatively non-toxic.

(4) Glycol ethers are omitted as a group but replaced by the addition of the specific glycol ether compounds, 2-ethoxy ethanol and 2-butoxy ethanol. Glycol ethers have been studied as a group by the department which has determined that these two compounds are the only two of critical concern.

The following compounds have been added to the priority pollutant list because they are emitted in large quantities at various sources: ammonium hydroxide, acetic acid, diethyl ether, ethanol, calcium oxide, furfural, dimethyl acetamide and coal tar pitch volatiles.

I:\DPD\AQPRGPOL\AQP-5A

* Listed in the ACGIH Handbook

ATTACHMENT B

PRIORITY FACILITIES

1. Hoechst Celanese, Narrows, VA, Registration #20304
2. Westvaco-Bleached Board Division, Covington, VA, Registration # 20328
3. O'Sullivan Corporation, Winchester, VA, Registration # 20333
4. Westvaco-Chemical Division, Covington, VA, Registration # 20329
5. Crown Cork & Seal, Winchester, VA, Registration # 20237
6. Aqualon Company, Hopewell, VA, Registration # 50363
7. James River Corporation, Filtration Products Divison, Richmond, VA, Registration # 50270
8. Union Camp Corporation, Fine Paper Division, Franklin, VA, Registration # 60214
9. Meredith/Burda, Lynchburg, VA, Registration # 30124
10. Radford Army Ammunition Plant, Radford, VA, Registration # 20656
11. Reynolds Metals, Bellwood Printing Plant, Richmond, VA, Registration # 50784
12. Marley Mouldings, Inc., Marion, VA, Registration #10284
13. Martin Processing, Inc. - Plant #2, Fieldale, VA, Registration # 30294
14. Lane Company, Altavista, VA, Registration # 30248
15. Maxwell Communications, Richmond, VA, Registration # 50880
16. Chesapeake Corporation, West Point, VA, Registration # 40126
17. Ford Motor Company, Norfolk, VA, Registration # 60268
18. Amoco Oil Company, Yorktown Refinery, Grafton, VA, Registration # 60116
19. Rubatex Corporation, Plant #2, Bedford, VA, Registration # 30296
20. Bassett-J.D. Mfg., Bassett, VA, Registration # 30287
21. Merck & Company, Elkton, VA, Registration # 20524
22. ICI Americas - Hopewell, Hopewell, VA, Registration # 50418
23. Merillat Industries - Mt. Jackson, Mt. Jackson, VA, Registration # 21062
24. Bassett Superior Lines, Bassett, VA, Registration # 30285
25. Newport News Shipbuilding & Dry Dock, Newport News, VA, Registration # 60153

I:\DPD\AQPRGPOL\AQP-5B

US EPA 1992 CALENDER YEAR FILED 1993
TOXIC CHEMICAL RELEASE INVENTORY REPORT
SECTION 313 FORM R

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1993

Certified Mail P 617 298 199

Local Emergency Planning Committee
c/o Civil Preparedness Office
140 15th Street
Mineola, NY 11501

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:taf
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1993

Certified Mail P 617 298 200

EPCRA Reporting Center
c/o Computer Based Systems Inc.
4301 N. Fairfax Drive
6th Floor, Suite 650
Arlington, VA 22203

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:taf
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1993

Certified Mail P 617 298 197

Mr. William Miner
New York Emergency Response Commission
New York State Department of
Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road/Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Mr. Miner:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:taf
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1993

Certified Mail P 617 298 198

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:taf
Enclosures
cc: A.B. Mazzone
C.L. Conroy

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: COPPER POWDER

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 92

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms)
[X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: JOE MACRI, MANAGER FACILITIES

Signature: Joseph Macri

Date Signed: June 30, 1993

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: METCO DIVISION PERKIN-ELMER

TRI Facility ID Number: 11590PRKNL1101P

Street Address: 1101 Prospect Avenue

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3542	b.	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		075	09	50	027	53	16

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663 b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD131318651 b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA PERKIN-ELMER CORPORATION
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-50-8
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COPPER
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	Process the toxic chemical:	a. ☐ As a reactant b. ☐ As a formulation component	c. ☐ As an article component d. ☐ Repackaging
3.3	Otherwise use the toxic chemical:	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☒ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	03	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	47	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name				
	N/A				
5.3.2	Stream or Water Body Name				
	N/A				
5.3.3	Stream or Water Body Name				
	N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 1
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: COPPER POWDER

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: LONI-JO SCRAP METAL

Street Address: 70 KINKEL STREET

City: WESTBURY

County: NASSAU

State: NY

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. C	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
COPPER POWDER

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Chemical, Category, or Generic Name
COPPER POWDER

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1991 (pounds/year)	Column B 1992 (pounds/year)	Column C 1993 (pounds/year)	Column D 1994 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	250	910	900	900
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.95			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b.	c.
8.10.2	W29	a. T04	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

SULZER METCO

Material Safety Data Sheet

SULZER METCO (US) INC.

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 405, 405-1, 405NS, 405NS-1 WIRE
MSDS No.: 50-215
Revision No.: 10
Revision Date: January 7, 1997
Original Date of Issue: September 7, 1987

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION I MATERIAL IDENTIFICATION

Trade/Material Name: METCO 405, 405-1, 405NS, 405NS-1 WIRE

Description: Thermal Spray Metallic Wire

Other Designation: NICKEL ALUMINIDE WIRE

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Aluminum *	20	7429-90-5	15 mg/m³ TWA total dust 5 mg/m³ TWA respirable 5 mg/m³ TWA fume	10 mg/m³ TWA metal dust 5 mg/m³ TWA fume	
Nickel * +	80	7440-02-0	1 mg/m³ TWA	1 mg/m³ TWA	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

¤ Contains no asbestos and <1% crystalline silica.

\+ Indicates on the list of Hazardous Air Pollutants that are regulated under Section 112 of the EPA Clean Air Act, 1990.

N/A - Not Available, Not Applicable. NE - Not Established.

SECTION III PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	N/A
Vapor Pressure (mmHg):	N/A	**Melting Point:**	1300 - 2500° F
Vapor Density (Air=1):	N/A	**Percentage Volatiles:**	N/A
Solubility in water (%):	Insoluble	**Evaporation Rate:**	N/A
Appearance and Odor:	Wire, no odor	**pH of Solution:**	N/A

SECTION IV FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used): N/A

Flammable Limits:
LEL %: N/A **(% by VOLUME)**
UEL%: N/A **(% by VOLUME)**

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire. Use NIOSH/MSHA approved self-contained breathing apparatus and full protective clothing if involved in a fire.

Unusual Fire and Explosive Hazards: Moderate fire hazard in the form of wire when exposed to flame. Aluminum is a flammable solid, do not expose to water or moisture.

SECTION V REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Aluminum is incompatible with strong oxidizers, acids and halogenated hydrocarbons. Nickel is incompatible with acids, sulfur, selenium, wood, other combustibles and nickel nitrate.

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (similar to welding fumes). This action is independent of metal wire.

SECTION VI HEALTH HAZARD DATA

COMPONENTS	SUMMARY OF RISKS
ALUMINUM:	Hazard by inhalation, ingestion, skin and eye contact. Inhalation may cause pneumoconiosis. Ingestion may cause irritation to the gastrointestinal tract. Pulmonary, skin and eye irritant due to abrasive action. Under normal use/conditions, aluminum oxide may be formed. Target Organ(s): Respiratory system, gastrointestinal tract, skin, eyes.
NICKEL:	Hazard by inhalation, ingestion, skin and eye contact. Inhalation may cause irritation to the respiratory system, Central Nervous System depression, cancers of the lung and nasal sinuses. Ingestion may cause irritation to the gastrointestinal tract, loss muscular coordination, confusion and convulsions. Skin contact may cause dermatitis. Eye contact may cause irritation. ACGIH classified A1 Confirmed Human Carcinogen. IARC classification Group 1 Carcinogenic to Humans. NTP classifies nickel as Reasonably Anticipated to be Carcinogens. Target Organ(s): Respiratory system, Central Nervous System, gastrointestinal tract, skin, eyes.

SECTION VI HEALTH HAZARD DATA CONTINUED

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, skin and eye contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Possible irritation.

Skin Contact: Possible irritation, dermatitis.

Inhalation: Possible irritation to the respiratory system.

Ingestion: Possible irritation to the gastrointestinal tract, loss of muscular coordination, confusion and convulsions.

FIRST AID

Eye Contact: Flush eye with water for at least 15-20 minutes while holding eyelid open. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water. If irritation persists, consult a physician.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Dry sweep loose/small pieces of wire.

Waste Management and Disposal: Empty product containers, product waste and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION VIII SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10 and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

Gloves: Aluminized gloves are to be worn during the plasma spray process. Rubber or other appropriate gloves may be worn as necessary during other phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) An aluminized apron is to be worn during the plasma spray process. Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin.

SECTION VIII SPECIAL PROTECTION INFORMATION CONTINUED

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: In the form of solid wire, this product poses low to negligible hazards in terms of inhalation, ingestion and skin contact.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. SULZER METCO (US) INC. shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

HMIS®

HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

©1981 NPCA
NC-L501R LABELMASTER, CHICAGO, IL (800) 621-5808

HMIS®

HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

©1981 NPCA
NC-L501R LABELMASTER, CHICAGO, IL (800) 621-5808

HMIS®

HEALTH

FLAMMABILITY

REACTIVITY

PERSONAL PROTECTION

©1981 NPCA
NC-L501R LABELMASTER, CHICAGO, IL (800) 621-5808

HMIS®

HEALTH 3

FLAMMABILITY 3

REACTIVITY Ø

PERSONAL PROTECTION SEE MSDS

©1981 NPCA
NC-L501R LABELMASTER, CHICAGO, IL (800) 621-5808

HMIS®

HEALTH 3

FLAMMABILITY 3

REACTIVITY Ø

PERSONAL PROTECTION SEE MSDS

©1981 NPCA
NC-L501R LABELMASTER, CHICAGO, IL (800) 621-5808

METCO

METCOSEAL® SA

METALLIC PIGMENTED COATING

(SILICONE ALUMINUM)

A special material for finishing treatment of metallized coatings. Refer to METCO System Specifications and Instructions for full data on use.

CONTENTS 1 GALLON U.S.

a division of

PERKIN-ELMER

IDENT. NO. 02327

STOP CORROSION WITH METALLIZING

INSTRUCTIONS:

A Silicone Resin Formulation containing Metallic Aluminum, used in METCO Systems of Corrosion Prevention.

See METCO System Specifications and Instructions for full data on use.

Sir thoroughly before using.

Apply one or more coats as required, by brush or spray gun.

Apply heavy enough to produce a thoroughly wet appearance.

Allow ½ hour minimum drying time, or bake dry at 350°F. for 15 minutes.

METCOSEAL SA can be applied by brush or spray. When brushed, it should be applied as it comes from the container without thinning. For spraying, thin with one part METCOSEAL ST-I Thinner to three parts METCOSEAL SA.

Use METCOSEAL ST-I Thinner for cleaning spray equipment or brushes.

HAZARD:

Flammable liquid. Keep away from heat, sparks, and open flame. Use only with adequate ventilation. Avoid prolonged or repeated breathing of vapors. Do not take internally. Call a physician immediately if breathing become difficult or material is swallowed. Avoid contact with eyes and skin to prevent eye burn and skin irritation. In case of eye contact flush eyes with water for at least 15 minutes and seek prompt medical attention. For skin contact wash thoroughly with soap and water. If material is spilled onto clothing wash clothes before reusing.

Danger — After container is emptied it may contain explosive vapors. Keep away from heat, sparks, and flames. Do not puncture, cut, or metallize near or on this container. Do not transfer contents to bottles or other unlabeled containers.

This product contains one or more of the following:

- **Organic Solvents (e.g. chlorinated hydrocarbons, ketones, alcohols, aldehydes)**
- **Organic Compounds (e.g. paraffins, asphalts, silicons, esters)**
- **Inorganic Compounds (e.g. phosphoric acid, zinc chromate, silica, aluminum)**

Refer to the material safety data sheet for exact chemical composition and specific hazard information.

Label Q 2331, Iss.n

Metco, Westbury, NY 11590

TIER TWO INSTRUCTIONS

GENERAL INFORMATION

Submission of this Tier Two form is required when requested under Title III of the Superfund Amendments and Reauthorization Act of 1986, Section 312, Public Law 99–499, codified at 42 U.S.C. §11022. The purpose of this Tier Two form is to provide state and local officials and the public with specific information on hazardous chemicals present at your facility during the past year.

Certification

The owner or operator or the officially designated representative of the owner or operator must certify that all information included in the Tier Two submission is true, accurate, and complete. On the first page of the Tier Two report, enter your full name and official title. Sign your name and enter the current date. Also, enter the total number of pages included in the Confidential and Non-Confidential Information Sheets as well as all attachments. An original signature is required on at least the first page of the submission. Submissions to the SERC, LEPC, and fire department must each contain an original signature on at least the first page. Subsequent pages must contain either an original signature, a photocopy of the original signature, or a signature stamp Each page must contain the date on which the original signature was affixed to the first page of the submission and the total number of pages in the submission.

You must provide all information requested on this form to fulfill Tier Two reporting requirements

This form may also be used as a worksheet for completing the Tier One form or may be submitted in place of the Tier One form.

Who Must Submit This Form

Section 312 of Title III requires that the owner or operator of a facility submit this Tier Two form if so requested by a state emergency planning commission, a local emergency planning committee, or a fire department with jurisdiction over the facility.

This request may apply to the owner or operator of any facility that is required, under regulations implementing the Occupational Safety and Health Act of 1970, to prepare or have available a material safety data sheet (MSDS) for a hazardous chemical present at the facility. MSDS requirements are specified in the Occupational Safety and Health Administration (OSHA) Hazard Communication Standard, found in Title 29 of the Code of Federal Regulations at §1910.1200.

This form does not have to be submitted if all of the chemicals located at your facility are excluded under Section 311(e) of Title III.

What Chemicals Are Included

If you are submitting Tier Two forms in lieu of Tier One, you must report the required information on the Tier Two form for each hazardous chemical present at your facility in quantities equal to or greater than established threshold amounts (discussed below), unless the chemicals are excluded under Section 311(e) of Title III. Hazardous chemicals are any substance for which your facility must maintain an MSDS under OSHA's Hazard Communication Standard.

If you elect to submit Tier One rather than Tier Two, you may still be required to submit Tier Two information upon request.

What Chemicals Are Excluded

Section 311(e) of Title III excludes the following substances:

(i) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration;

(ii) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under any normal conditions of use;

(iii) Any substance to the extent it is used for personal, family or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public;

(iv) Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual;

(v) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

OSHA regulations, Section 1910.1200(b), stipulate exemptions from the requirement to prepare or have available an MSDS.

Reporting Thresholds

Minimum thresholds have been established for Tier One/Tier Two reporting under Title III, Section 312. These thresholds are as follows:

For extremely hazardous substances (EHSs) designated under section 302 of Title III, the reporting threshold is 500 pounds (or 227 kg) or the threshold planning quantity (TPQ), whichever is lower.

For all other hazardous chemicals for which facilities are required to have or prepare an MSDS, the minimum reporting threshold is 10,000 pounds (or 4,540 kg.).

You need to report hazardous chemicals that were present at your facility at any time during the previous calendar year at levels that equal or exceed these thresholds. For instructions on threshold determinations for components of mixtures, see "What About Mixtures?" on page 2 of these instructions.

A requesting official may limit the responses required under Tier Two by specifying particular chemicals or groups of chemicals. Such requests apply to hazardous chemicals regardless of established thresholds.

INSTRUCTIONS

Please read these instructions carefully. Print or type all responses.

When To Submit This Form

Owners or operators of facilities that have hazardous chemicals on hand in quantities equal to or greater than set threshold levels must submit either Tier One or Tier Two forms by March 1.

If you choose to submit Tier One, rather than Tier Two, be aware that you may have to submit Tier Two information later, upon request of an authorized official. You must submit the Tier Two form within 30 days of receipt of a written request.

Where To Submit This Form

Send either a completed Tier One form or Tier Two form(s) to each of the following organizations:

1. Your State Emergency Response Commission.
2. Your Local Emergency Planning Committee.
3. The fire department with jurisdiction over your facility.

If a Tier Two form is submitted in response to a request, send the completed form to the requesting agency.

Penalties

Any owner or operator who violates any Tier Two reporting requirements shall be liable to the United States for a civil penalty of up to $25,000 for each such violation. Each day a violation continues shall constitute a separate violation.

If your Tier Two responses require more than one page use additional forms and fill in the page number at the top of the form

Reporting Period

Enter the appropriate calendar year, beginning January 1 and ending December 31.

Facility Identification

Enter the full name of your facility (and company identifier where appropriate).

Enter the full street address or state road. If a street address is not available, enter other appropriate identifiers that describe the physical location of your facility (e.g., longitude and latitude). Include city, state, and zip code.

Enter the primary Standard Industrial Classification (SIC) code and the Dun & Bradstreet number for your facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. If your firm does not have this information, contact the state or regional office of Dun & Bradstreet to obtain your facility number or have one assigned.

Owner/Operator

Enter the owner's or operator's full name, mailing address, and phone number.

Emergency Contact

Enter the name, title, and work phone number of at least one local person or office who can act as a referral if emergency responders need assistance in responding to a chemical accident at the facility.

Provide an emergency phone number where such emergency chemical information will be available 24 hours a day, every day.

The requirement is mandatory. The facility must make some arrangement to ensure a 24 hour contact is available.

Identical Information

Check the box indicating identical information, located below the emergency contacts on the Tier Two form, if the current chemical information being reported is identical to that submitted last year. Chemical descriptions, hazards, amounts, and locations must be provided in this year's form, even if the information is identical to that submitted last year.

Chemical Information: Description, Hazards, Amounts, and Locations

The main section of the Tier Two form requires specific information on amounts and locations of hazardous chemicals, as defined in the OSHA Hazard Communication Standard.

If you choose to indicate that all of the information on a specific hazardous chemical is identical to that submitted last year, check the appropriate optional box provided at the right side of the storage codes and locations on the Tier Two form Chemical descriptions, hazards, amounts, and locations must be provided even if the information is identical to that submitted last year

- What units should I use?

Calculate all amounts as weight in pounds. To convert gas or liquid volume to weight in pounds, multiply by an appropriate density factor.

- What about mixtures?

If a chemical is part of a mixture, you have the option of reporting either the weight of the entire mixture or only the portion of the mixture that is a particular hazardous chemical (e.g., if a hazardous solution weighs 100 lbs. but is composed of only 5% of a particular hazardous chemical, you can indicate either 100 lbs. of the mixture of 5 lbs. of the chemical).

The option used for each mixture should be consistent with your Section 311 reporting.

Because EHSs are important to Section 303 planning, EHSs have lower thresholds. The amount of an EHS at a facility (both pure EHS substances and EHSs in mixtures) must be aggregated for purposes of threshold determination. It is suggested that the aggregation calculation be done as a first step in making the threshold determination. Once you determine whether a threshold for an EHS has been reached, you should report either the total weight of the EHS at your facility, or the weight of each mixture containing the EHS.

Chemical Description

Enter the Chemical Abstract Service registry number (CAS#). For mixtures, enter the CAS number of the mixture as a whole if it has been assigned a number distinct from its components. For a mixture that has no CAS number, leave this item blank or report the CAS numbers of as many constituent chemicals as possible

If you are withholding the name of a chemical in accordance with criteria specified in Title III, Section 322, enter the generic chemical class or category that is structurally descriptive of the chemical (e.g., list toluene disocynate as organic isocynate) and check the box marked Trade Secret. Trade secret information should be submitted to EPA and must include a substantiation. Please refer to EPA's final regulation on trade secrecy (53 FR 28772, July 29, 1988) for detailed information on how to submit trade secrecy claims.

2. Enter the chemical name or common name of each hazardous chemical.

3. Check box for ALL applicable descriptors: pure or mixture, and solid, liquid, or gas; and whether the chemical is or contains an EHS.

4. If the chemical is a mixture containing an EHS, enter the chemical name of each EHS in the mixture.

Example:

You have pure chlorine gas on hand, as well as two mixtures that contain liquid chlorine. You write "chlorine" and enter the CAS#. Then you circle "pure" and "mix" — as well as "liquid" and "gas".

Physical And Health Hazards

For each chemical you have listed, check all the physical and health hazard boxes that apply. These hazard categories are defined in 40 CFR 370.2 The two health hazard categories and three physical hazard categories are a consolidation of the 23 hazard categories defined in the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

HAZARD CATEGORY COMPENSATION FOR REPORTING UNDER SECTIONS 311 AND 312

EPA's hazard categories	OSHA's hazard categories
Fire Hazard	Flammable Combustion Liquid Pyrophoric Oxidizer
Sudden Release of Pressure	Explosive Compressed Gas
Reactive	Unstable Reactive Organic Peroxide Water Reactive
Immediate (Acute) Health Hazards	Highly Toxic Toxic Irritant Sensitizer Corrosive Other hazardous chemicals with an adverse effect with short term exposure
Delayed (Chronic) Health Hazard	Carcinogens Other hazardous chemicals with an adverse effect with long term exposure

Maximum Amount

1. For each hazardous chemical, estimate the greatest amount present at your facility on any single day during the reporting period.

2. Find the appropriate range value code in Table I.

3. Enter this range value as the Maximum Amount.

Table I REPORTING RANGES

Range Value	Weight Range in Pounds From	To
01	0	99
02	100	999
03	1,000	9,999
04	10,000	99,999
05	100,000	999,999
06	1,000,000	9,999,999
07	10,000,000	49,999,999
08	50,000,000	99,999,999
09	100,000,000	499,999,999
10	500,000,000	999,999,999
11	1 billion	higher than 1 billion

If you are using this form as a worksheet for completing Tier One, enter the actual weight in pounds in the shaded space below the response blocks. Do this for both Maximum Amount and Average Daily Amount.

Example:

You received one large shipment of a solvent mixture last year. The shipment filled five 5,000-gallon storage tank. You know that the solvent contains 10% benzene, which is a hazardous chemical.

You figure that 10% of 25,000 gallons is 2,500 gallons. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 2,500 by 7.29 to get a weight of 18,225 pounds

Then you look at Table I and find that the range value 04 corresponds to 18,225. You enter 04 as the Maximum Amount

(If you are using the form as a worksheet for completing a Tier One form, you should write 18,225 in the shaded area.)

Average Daily Amount

1. For each hazardous chemical, estimate the average weight in pounds that was present at your facility during the year.

To do this, total all daily weights and divide by the number of days the chemical was present on the site.

2. Find the appropriate range value in Table I.

3. Enter this range value as the Average Daily Amount.

Example:

The 25,000-gallon shipment of solvent you received last year was gradually used up and completely gone in 315 days. The sum of the daily volume levels in the tank is 4,536,000 gallons. By dividing 4,536,000 gallons by 315 days on-site, you calculate an average daily amount of 14,400 gallons.

You already know that the solvent contains 10% benzene, which is a hazardous chemical. Since 10% of 14,400 is 1,440, you figure that you had an average of 1,440 gallons of benzene. You also know that the density of benzene is 7.29 pounds per gallon, so you multiply 1,440 by 7.29 to get a weight of 10,500 pounds.

Then you look at Table I and find that the range value 04 corresponds to 10,500 You enter 04 as the Average Daily Amount.

(If you are using the form as a worksheet for completing a Tier One form, you should write 10,500 in the shaded area.)

Number Of Days On-Site

Enter the number of days that the hazardous chemical was found on-site.

Example

The solvent composed of 10% benzene was present for 315 days at your facility. Enter 315 in the space provided.

Storage Codes and Storage Locations

List all non-confidential chemical locations in this column, along with storage types/conditions associated with each location. Please note that a particular chemical may be located in several places around the facility. Each row of boxes followed by a line represents a unique location for the same chemical.

Storage Codes: Indicate the types and conditions of storage present.

a. Look at Table II. For each location, find the appropriate storage type and enter the corresponding code in the first box.

b. Look at Table III*. For each storage type, find the appropriate storage types for pressure and temperature conditions. Enter the applicable pressure code in the second box. Enter the applicable temperature code in the third box.

Table II — STORAGE TYPES

CODES	Types of Storage
A	Above ground tank
B	Below ground tank
C	Tank inside building
D	Steel drum
E	Plastic or non-metallic drum
F	Can
G	Carboy
H	Silo
I	Fiber drum
J	Bag
K	Box
L	Cylinder
M	Glass bottles or jugs
N	Plastic bottles or jugs
O	Tote bin
P	Tank wagon
Q	Rail car
R	Other

Table III — TEMPERATURE AND PRESSURE CONDITIONS

CODES	Storage Conditions
	(PRESSURE)
1	Ambient pressure
2	Greater than ambient pressure
3	Less than ambient pressure
	(TEMPERATURE)
4	Ambient temperature
5	Greater than ambient temperature
6	Less than ambient temperature but not cryogenic
7	Cryogenic conditions

Example:

The benzene in the main building is kept in a tank inside the building, at ambient pressure and less than ambient temperature.

Table II shows you that the code for a tank inside a building is C. Table III shows you that code for ambient pressure is 1, and the code for less than ambient temperature is 6.

You enter: C 1 6

Storage Locations: Provide a brief description of the precise location of the chemical, so that emergency responders can locate the area easily. You may find it advantageous to provide the optional site plan or site coordinates as explained below.

For each chemical, indicate at a minimum the building or lot. Additionally, where practical, the room or area may be indicated. You may respond in narrative form with appropriate site coordinates or abbreviations.

If the chemical is present in more than one building, lot, or area location, continue your responses down the page as needed. If the chemical exists everywhere at the plant site simultaneously, you may report that the chemical is ubiquitous at the site

Optional Attachments: If you choose to attach one of the following, check the appropriate Attachments box at the bottom of the Tier Two form.

a. A site plan with site coordinates indicated for buildings, lots, areas, etc., throughout your facility.

b. A list of site coordinate abbreviations that correspond to buildings, lots, areas, etc., throughout your facility.

c. A description of dikes and other safeguard measures for storage locations throughout your facility.

Example:

You have benzene in the main room of the main building, and in tank 2 in tank field 10. You attach a site plan with coordinates as follows: main building = G-2, tank field 10 = B-6. Fill in the Storage Location as follows:

B-6 (Tank 2) G-2 (Main Room)

Confidential Information

Under Title III, Section 324, you may elect to withhold location information on a specific chemical from disclosure to the public. If you choose to do so:

- Enter the word "confidential" in the Non-Confidential Location section of the Tier Two form on the first line of the storage location.
- On a separate Tier Two Confidential Location information Sheet, enter the name and CAS# of each chemical for which you are keeping the location confidential.
- Enter the appropriate location and storage information, as desribed above for non-confidential locations.
- Attach the Tier Two Confidential Location information Sheet to the Tier Two form. This separates confidential locations from other information that will be disclosed to the public.

CleanHarbors
ENVIRONMENTAL SERVICES®

INVOICE

REMIT TO:
Clean Harbors Env. Services
PO Box 3442
Boston, MA 02241-3442

OFFICE:
Clean Harbors Env Services Inc
41 Tompkins Point Road
Newark, NJ 07114
(973) 643-6025

If you have any questions regarding this invoice, please contact your customer service representative at the telephone number listed above

SOLD TO:
Alfonso Rolli
Sulzer Metco US Inc
Attn: Accounts Payable
1101 Prospect Avenue
Westbury,NY 11590

JOB SITE/GENERATOR:
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury,NY 11590

Job Description: Drum Shipment

**** Payable in USD funds ****

Last Service Date	Invoice No	Customer	Sales Order	Purchase Order	Terms
30 May 2008	D30851956	SUL025	D31930235	KOURKOUMELIS	NET 15 DAYS

SUMMARY BY LINE TYPE

Disposal	$2,323.00	
Fees	$1.06	
Transportation	$357.30	
SUBTOTAL	**$2,681.36**	**USD**
TAX	**0.00**	
INVOICE TOTAL	**$2,681.36**	**USD**

SULZER METCO (US) INC.
JUL 14 2008
EHS DEPARTMENT

Manifest Info	Item ID	Description	Shipment Qty	Shipment UOM	Billing Qty	Billing UOM	Unit Price	Amount
		30 May 2008						
002099267FLE 1	DISPSL / B22C	CAUSTIC COPPER DIP/SODIUM HYDROXIDE CH189106 3000320	1	DF	1.000	55DF	227.0000	$227.00
	FEE-DOWN	Ohio Hazardous Waste Fee (Treatment)			0.253	T	2.0000	$0.51
BOL261468 1	DISPSL / CNO	OIL SPILL CLEANUP/FILTERS CH189102 3000320	2	DM	2.000	55DM	67.0000	$134.00
BOL261468 2	DISPSL / CNOS	NYLON TURNINGS CH189144 3000320	1	DM	1.000	55DM	78.0000	$78.00
BOL261468 3	DISPSL / CNOS	Oil and Speedi dry CH66118 3000320	2	DM	2.000	55DM	78.0000	$156.00
BOL261468 4	DISPSL / CNO	Filters/PPE/Metal & Ceramic Powder CH189109 3000406	4	CF	4.000	BOX	67.0000	$268.00
BOL261468 5	DISPSL / A32	WASTE COMPRESSOR OIL OFFSPEC TO A32 DUE TO >5% WATER CH189111 3000320	2	DM	2.000	55DM	98.0000	$196.00

Interest will be charged at a rate of 1.5% per month for all past due amounts.

PLEASE RETURN A COPY OF INVOICE WITH PAYMENT - THANK YOU

CleanHarbors
ENVIRONMENTAL SERVICES®

INVOICE

Manifest Info	Item ID	Description	Shipment Qty	Shipment UOM	Billing Qty	Billing UOM	Unit Price	Amount
BOL2614685	DISPSL / A31	WASTE COMPRESSOR OIL CH189111 3000320	3	DM	3.000	55DM	47.0000	$141.00
BOL2614686	DISPSL / EEE	Computer Equipment CH231707 3000393	1	CW	1.000	MIN	250.0000	$250.00
BOL2614687	DISPSL / CNOS	METAL/CERAMIC POWDER & WATER CH189134 3000406	8	DM	8.000	55DM	78.0000	$624.00
BOL261468	TRAN	TRANSPORTATION			32.000	EA	10.4000	$332.80
002099266FLE1	DISPSL / CCSM	CHROMIC ACID DEBRIS CH25445 3000320	1	DM	1.000	55DM	145.0000	$145.00
	FEE-DISP	North Carolina Hazardous Waste Fee			0.040	T	4.7500	$0.19
	FEE-DOWN	Oklahoma Hazardous Waste Storage, Treatment or Land Disposal Fee			0.040	T	9.0000	$0.36
BOL2614671	DISPSL / D23	Empty Drums CH74873 3000404	4	DM	4.000	55DM	26.0000	$104.00
	DEM	Loading Demurrage			0.250	HR	98.0000	$24.50
							SUBTOTAL	**$2,681.36**
							TAX	**$0.00**
							TOTAL	**$2,681.36**

Interest will be charged at a rate of 1.5% per month for all past due amounts.

PLEASE RETURN A COPY OF INVOICE WITH PAYMENT - THANK YOU

C TINGS INC.
CIRCLE
E MA. 01002-3794

****
* *
* MATERIAL SAFETY DATA SHEET *
* *
****

METCO

ATTENTION: Safety Director

DEAR CUSTOMER.

ENCLOSED PLEASE FIND UPDATED MSDS IN ACCORDANCE WITH THE OSHA HAZARD COMMUNICATION STANDARD (29CFR1910.1200) FOR A PRODUCT YOU RECENTLY ORDERED. IF YOU REQUIRE ANY ADDITIONAL MSDS PLEASE REQUEST BY ENTERING THE PRODUCT ID IN THE SPACES PROVIDED BELOW. FOLD REQUEST WITH RETURN ADDRESS FACING OUTWARD.

REQUEST FOR ADDITIONAL MSDS

LIST PRODUCT NUMBERS

1. _____ 2. _____

THIS PRODUCT CONTAINS A TOXIC CHEMICAL OR CHEMICALS SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND OF 40CFR372 IF "YES" IS PRINTED IN THE COLUMN LABELED SARA 313 IN SECTION II OF THE MSDS.

(STAPLE)

PLACE POSTAGE HERE

MORTON COATINGS INC.
HAYNES CIRCLE
CHICOPEE MA 01020-3794

MATERIAL SAFETY DATA SHEET

FOR COATINGS . RESINS AND RELATED MATERIALS

DATE OF PREPARATION 4/18/94

MANUFACTURER'S NAME : MORTON COATINGS INC.
ADDRESS : CHICOPEE FACILITY
ADDRESS : HAYNES CIRCLE
CITY,STATE : CHICOPEE, MA 01020

EMERGENCY TELEPHONE NO. DAY: 413-592-4191 NIGHT: 800-424-9300
INFORMATION TELEPHONE NO. DAY: 413-592-4191 NIGHT: 800-424-9300

SECTION I PRODUCT IDENTIFICATION

Manufacturer's Code Identification: BCA 378 Revision : 05
Product Class: CLEAR LACQUER
Trade Name: CLEAR UNICHROME LACQUER
HMIS Information Health- 3 Flammability- 3
Reactivity- 0 Personal Protective Equipment-

SECTION II HAZARDOUS INGREDIENTS

----- INGREDIENT ----- MATERIAL DESCRIPTION	CAS#	% BY WEIGHT	OSHA-PEL	ACGIH-TLV	VAPOR PRESSURE MMHg @68DF	LEL	SARA 313	----- OTHER -----
TOLUENE	108-88-3	8.14	100 PPM	50 PPM	54.00	1.0	YES	ACGIH: "SKIN" NOTATION
ISOPROPANOL	67-63-0	9.81	400 PPM	400 PPM	33.00	2.0	NO	OSHA/ACGIH STEL:500PPM
N-BUTANOL	71-36-3	6.08	50PPM-CEIL	50 PPM	4.39	1.5	YES	OSHA/ACGIH-SKIN NOTAT.
N-BUTYL ACETATE	123-86-4	37.66	150 PPM	150 PPM	10.00	1.4	NO	OSHA/ACGIH STEL:200PPM
METHYL N-AMYL KETONE	110-43-0	4.37	100 PPM	50 PPM	2.14	1.1	NO	100 PPM - SUPPLIER
XYLENE	1330-20-7	5.09	100 PPM	100 PPM	6.60	1.0	YES	OSHA/ACGIH STEL:150PPM
ETHANOL	64-17-5	13.51	1000 PPM	1000 PPM	42.00	3.3	NO	
PHENOL	108-95-2	.19	5 PPM-SKIN	5 PPM-SKIN	N/A	N/A	YES	

SECTION III PHYSICAL DATA

BOILING RANGE, DEG. F HIGH 360.0 LOW 170.5
VAPOR PRESSURE, MM HG 54.00
VAPOR DENSITY HEAVIER THAN AIR
EVAPORATION RATE SLOWER THAN ETHER
WEIGHT PER GALLON, LBS. 7.3
% VOLATILE BY VOLUME 92.77
% VOLATILE BY WEIGHT 89.83 N/A = NOT APPLICABLE N/E = NOT ESTABLISHED

MANUFACTURER'S CODE: BCA 378 Revision : 05 DATE OF PREPARATION- 4/18/94

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION OSHA-CLASS IB DOT- FLAMMABLE LIQUID
LOWEST FLASHPOINT T.C.C., DEG. F 40.0 LOWER EXPLOSION LEVEL (LEL) 1.0

EXTINGUISHING MEDIA: (XXX)-Foam (XXX)-Alcohol foam (XXX)-CO2
(XXX)-Dry chemical ( )-Water fog ( )-Other
SPECIAL FIRE FIGHTING PROCEDURES: Isolate from heat, sparks, electrical equipment and open flame. Water is not usually effective in fighting liquid fires.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Water spray may be used to cool closed containers to help prevent explosion from pressure build-up when exposed to extreme heat.

****

SECTION V -- HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE-(ACUTE): Irritating to eyes, skin, nose and throat. Headache, dizziness and nausea can result from inhalation. Repeated or prolonged skin contact may result in dryness possibly leading to dermititis. TOXIC IF INGESTED. Note-if methanol is listed in Section II-may be fatal or cause blindness if swallowed; cannot be made non-poisonous.

EFFECTS OF OVEREXPOSURE-(CHRONIC): Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this product may be harmful or fatal. Contains a small amount of Phenol which is a poison & a caustic. Chronic poisoning with renal and hepatic damage may occur from industrial contact w/phenol. *May contain TOLUENE and/or XYLENE, which may harm the developing fetus if a pregnant woman is exposed. See Section II for specific ingredients.
PRIMARY ROUTE(S) OF ENTRY: (XXX)-DERMAL (XXX)-INHALATION ( )-INGESTION
EMERGENCY AND FIRST AID PROCEDURES: INHALATION-Remove to fresh air. Restore breathing. CONSULT A PHYSICIAN. SPLASH(EYES)-Flush with water for at least 15 minutes. CONSULT A PHYSICIAN. SPLASH(SKIN)-Wash affected area with soap and water. Remove contaminated clothing. CONSULT A PHYSICIAN IF IRRITATION PERSISTS. INGESTION-Drink 1 or 2 glasses of water to dilute. Do NOT induce vomiting. CONSULT A PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

DOES THIS PRODUCT CONTAIN ANY CHEMICALS CLASSIFIED AS KNOWN OR SUSPECTED CARCINOGENS (IARC, NTP, OSHA, ACGIH)? ( )-YES (XXX)-NO
MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Pre-existing skin disorders, chronic respiratory disease.

****

SECTION VI -- REACTIVITY DATA

STABILITY: (XXX)-STABLE ( )-UNSTABLE
CONDITIONS TO AVOID: None reasonably foreseeable.
INCOMPATABILITY (MATERIALS TO AVOID): None reasonable foreseeable.
HAZARDOUS POLYMERIZATION: ( )-WILL OCCUR (XXX)-WILL NOT OCCUR
CONDITIONS TO AVOID: None reasonably foreseeable.
HAZARDOUS DECOMPOSITION PRODUCTS: Mostly CO2 with some CO.

****

MANUFACTURER'S CODE: BCA 378 Revision : 05 DATE OF PREPARATION- 4/18/94

SECTION VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all spark sources, flames, and hot surfaces. Maintain adequate ventilation. Avoid breathing vapors. Add absorbent to spill area. Recover free liquid. Keep chemical products out of streams and waterways.

WASTE DISPOSAL METHOD: Dispose of in accordance with local, state and federal regulations.

****

SECTION VIII -- SAFE HANDLING AND USE INFORMATION

RESPIRATORY PROTECTION: Unless air monitoring demonstrates vapor/dust/mist levels below the current PEL/TLV values always wear an appropriate, properly fitted (NIOSH/MSHA approved) respirator during use.

VENTILATION: Should be explosion proof and keep the air contaminant concentration below current applicable OSHA Permissible Exposure Limit (PEL) or ACGIH's Threshold Limit Value (TLV).

PROTECTIVE GLOVES: Required to prevent skin contact.

EYE PROTECTION: Chemical safety goggles or face shields to prevent eye splashes.

OTHER PROTECTIVE EQUIPMENT: Remove and wash contaminated clothing before re-use.

HYGEINIC PRACTICES: Wash hands before eating, smoking or using toilet facilities.

****

SECTION IX-- SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid storage in high temperature areas or near fire or open flame. Keep container closed. Use only with adequate ventilation.

OTHER PRECAUTIONS: Avoid contact with eyes and prolonged or repeated contact with skin. DO NOT INGEST. FOR INDUSTRIAL USE ONLY.

****

THE ABOVE INFORMATION HAS BEEN DERIVED FROM INFORMATION PROVIDED BY OUR RAW MATERIAL SUPPLIERS AND TO OUR BEST BELIEF AND KNOWLEDGE IS FACTUAL.

THESE DATA RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DO NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL.

****

MSDS:F7

Text revised 1/90 (Prepared by L. Dussault)

MATERIAL SAFETY DATA SHEET

FOR COATINGS , RESINS AND RELATED MATERIALS

DATE OF PREPARATION 4/18/94

MANUFACTURER'S NAME : MORTON COATINGS INC.
ADDRESS : CHICOPEE FACILITY
ADDRESS : HAYNES CIRCLE
CITY,STATE : CHICOPEE, MA 01020

EMERGENCY TELEPHONE NO. DAY: 413-592-4191 NIGHT: 800-424-9300
INFORMATION TELEPHONE NO. DAY: 413-592-4191 NIGHT: 800-424-9300

SECTION I PRODUCT IDENTIFICATION

Manufacturer's Code Identification: TL 469 Revision : 02
Product Class: MIXED SOLVENTS
Trade Name: THINNER
HMIS Information Health- 2 Flammability- 3
Reactivity- 0 Personal Protective Equipment-

SECTION II HAZARDOUS INGREDIENTS

----- INGREDIENT ----- MATERIAL DESCRIPTION	CAS#	% BY WEIGHT	OSHA-PEL	ACGIH-TLV	VAPOR PRESSURE MMHg @68DF	LEL	SARA 313	----- OTHER -----
DIACETONE ALCOHOL	123-42-2	14.04	50 PPM	50 PPM	.81	1.8	NO	
XYLENE	1330-20-7	37.59	100 PPM	100 PPM	6.60	1.0	YES	OSHA/ACGIH STEL:150PPM
METHYL ISOBUTYL KETONE	108-10-1	38.28	50 PPM	50 PPM	28.00	1.4	YES	OSHA/ACGIH-STEL 75 PPM
METHYL ISOBUTYL CARBINOL	108-11-2	10.09	25PPM-SKIN	25PPM-SKIN	5.00	1.0	NO	OSHA/ACGIH-STEL 40 PPM

SECTION III PHYSICAL DATA

BOILING RANGE, DEG. F HIGH 337.0 LOW 241.0
VAPOR PRESSURE, MM HG 28.00
VAPOR DENSITY HEAVIER THAN AIR
EVAPORATION RATE SLOWER THAN ETHER
WEIGHT PER GALLON, LBS. 7.0
% VOLATILE BY VOLUME 100.01
% VOLATILE BY WEIGHT 100.01 N/A = NOT APPLICABLE N/E = NOT ESTABLISHED

MANUFACTURER'S CODE: TL 469 Revision : 02 DATE OF PREPARATION- 4/18/94

SECTION IV -- FIRE AND EXPLOSION HAZARD DATA

FLAMMABILITY CLASSIFICATION OSHA-CLASS IB DOT- FLAMMABLE LIQUID
LOWEST FLASHPOINT T.C.C., DEG. F 62.0 LOWER EXPLOSION LEVEL (LEL) 1.0

EXTINGUISHING MEDIA: ( )-Foam (XXX)-Alcohol foam (XXX)-CO2
(XXX)-Dry chemical ( )-Water fog ( )-Other
SPECIAL FIRE FIGHTING PROCEDURES: Isolate from heat, sparks, electrical equipment and open flame. Water is not usually effective in fighting liquid fires.
UNUSUAL FIRE AND EXPLOSION HAZARDS: Water spray may be used to cool closed containers to help prevent explosion when exposed to extreme heat.

****

SECTION V -- HEALTH HAZARD DATA

EFFECTS OF OVEREXPOSURE-(ACUTE): Irritating to eyes, skin, nose and throat. Headache, dizziness and nausea can result from inhalation. Repeated or prolonged skin contact may result in dryness possibly leading to dermititis. TOXIC IF INGESTED. NOTE: If methanol is listed in section II-may be fatal or cause blindness if swallowed; cannot be made non-poisonous. If product contains toluene or xylene-may affect liver, kidneys or blood.

EFFECTS OF OVEREXPOSURE-(CHRONIC): Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents of this product may be harmful or fatal.
MAY CONTAIN TOLUENE and/or XYLENE WHICH MAY HARM THE DEVELOPING FETUS IF A PREGNANT WOMAN IS EXPOSED. SEE SECTION II FOR INGREDIENT LISTING.
DOES THIS PRODUCT CONTAIN ANY CHEMICALS CLASSIFIED AS KNOWN OR SUSPECTED CARCINOGENS (NTP/IARC/OSHA/ACGIH)? ( )-YES (XXX)-NO
PRIMARY ROUTE(S) OF ENTRY: (XXX)-INHALATION (XXX)-DERMAL ( )-INGESTION
EMERGENCY FIRST AID PROCEDURES: INHALATION-Remove to fresh air. Restore breathing. CONSULT PHYSICIAN. SPLASH(EYE)-Flush with water for at least 15 minutes. CONSULT PHYSICIAN. SPLASH(SKIN)-Wash with soap and water. Remove contaminated clothing. CONSULT PHYSICIAN IF IRRITATION PERSISTS. INGESTION-Drink 1 or 2 glasses of water to dilute. Do NOT induce vomiting. CONSULT PHYSICIAN OR POISON CONTROL CENTER IMMEDIATELY.

MEDICAL CONDITIONS PRONE TO AGGRAVATION BY EXPOSURE: Pre-existing skin disorders; chronic respiratory disease.

****

SECTION VI -- REACTIVITY DATA

STABILITY: (XXX)-STABLE ( )-UNSTABLE
CONDITIONS TO AVOID: None reasonably foreseeable.
INCOMPATIBILITY (MATERIALS TO AVOID): If product contains aluminum-do not contaminate with acids, caustics, chlorinated hydrocarbons or oxidizers as these materials will react with aluminum to produce hydrogen and heat. See Section II (Hazardous Ingredients) to see if product contains aluminum.
HAZARDOUS POLYMERIZATION: ( )-WILL OCCUR (XXX)-WILL NOT OCCUR
CONDITIONS TO AVOID: None reasonably foreseeable (see materials to avoid).
HAZARDOUS DECOMPOSITION PRODUCTS: Mostly CO2 with some CO.

****

MANUFACTURER'S CODE: TL 469 Revision : 02 DATE OF PREPARATION- 4/18/94

SECTION VII -- SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Remove all spark sources, flames and hot surfaces. Maintain adequate ventilation. Avoid breathing vapors. Add absorbent to spill area. Recover free liquid. Keep chemical products out of streams and waterways.
WASTE DISPOSAL METHOD: Dispose of in accordance with local, state, and federal regulations.

****

SECTION VIII -- SAFE HANDLING & USE INFORMATION

RESPIRATORY PROTECTION: Unless air monitoring demonstrates vapor/dust/mist levels below the current PEL or TLV values always wear an appropriate, properly fitted (NIOSH/MSHA approved) respirator during use.
EYE PROTECTION: Chemical safety goggles (or glasses with side shields) or face shields to prevent eye splashes.
VENTILATION: Should be explosion proof and keep the air contaminant concentration below current OSHA Permissible Exposure Limit (PEL) or ACGIH's Threshold Limit Value (TLV).
PROTECTIVE GLOVES: Required to prevent skin contact.
OTHER PROTECTIVE EQUIPMENT: Remove and wash contaminated clothing before re-use.
HYGIENIC PRACTICES: Wash thoroughly before eating, smoking or using toilet facilities.
****

SECTION IX-- SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING: Avoid storage in high temperature areas or near fire or open flame. Keep container closed. Use only with adequate ventilation.
OTHER PRECAUTIONS: Avoid contact with eyes and prolonged or repeated contact with skin. DO NOT INGEST. FOR INDUSTRIAL USE ONLY.
****

THE ABOVE INFORMATION HAS BEEN DERIVED FROM INFORMATION PROVIDED BY OUR RAW MATERIAL SUPPLIERS AND TO OUR BEST BELIEF AND KNOWLEDGE IS FACTUAL.
THESE DATA RELATE ONLY TO THE SPECIFIC MATERIAL DESIGNATED HEREIN AND DO NOT RELATE TO USE IN COMBINATION WITH ANY OTHER MATERIAL.
MSDS:A1 Text Revised 12/89. Prepared by: L. Dussault

8 1/2

WHITE LETTERING ON BLACK BACKGROUND

METCO®
SULZER METCO

METCOSEAL® SA
METALLIC PIGMENTED COATING
(SILICONE ALUMINUM)

A special material for finishing treatment of thermal spray coatings. Refer to SULZER METCO System Specifications and Instructions for full data on use.

INSTRUCTIONS:

A Silicone Resin Formulation containing Metallic Aluminum, used in SULZER METCO Systems of Corrosion Prevention.

See SULZER METCO System Specifications and Instructions for full data on use.

Stir thoroughly before using.

Apply one or more coats as required, by brush or spray gun.

Apply heavy enough to produce a thoroughly wet appearance.

Allow ½ hour minimum drying time, or bake dry at 350°F for 15 minutes.

METCOSEAL SA can be applied by brush or spray. When brushed, it should be applied as it comes from the container without thinning. For spraying, thin with one part METCOSEAL ST-I Thinner to three parts METCOSEAL SA.

Use METCOSEAL ST-I Thinner for cleaning spray equipment or brushes.

CONTENTS 5 GALLONS U.S. **IDENT. NO. 02328**

Label Q 2332, Iss. J

FRONT LABEL

Sulzer Metco (Westbury) Inc.
1101 Prospect Avenue
Westbury, NY 11590-0201

SA

SULZER METCO

HAZARD NOTICE: This material is for the thermal spraying process. Consult the Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.
Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.
Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.
2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.
Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning and stinging.
Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.
Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.
Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.
Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney dysfunction.
Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.
Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.
Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1-800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120°F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
	**Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 36°F
UN1263 PAINT

WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

WHITE LETTERING ON BLACK BACKGROUND

METCOSEAL SA

Sulzer Metco (Westbury) Inc.
1101 Prospect Avenue
Westbury, NY 11590-0201

HAZARD NOTICE: This material is for the thermal spraying process. Consult the SULZER METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.
Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.
Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.
2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.
Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning and stinging.
Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.
Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.
Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.
Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney dysfunction.
Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.
Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.
Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1-800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120°F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
**Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.	
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 16°F
UN1263 PAINT

WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

Label Q 2332, Iss. J

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue
Westbury, New York 11590
Phone (516) 334-1300
Fax (516) 334-6692
Telex 967759

September 15, 1989

CERTIFIED MAIL, RETURN RECEIPT REQUESTED
(P 732 039 290)

Mr. Robert Becherer, P.E.
Regional Hazardous Substances Engineer
New York State Dept. of Environmental Conservation
Building 40
SUNY at Stony Brook
Stony Brook, NY 11790
(516) 751-7900
Attention: Ms. Agnes Gara, Inspector

RE: Hazardous Waste Compliance Inspection Date: July 21, 1989
EPA Identification Numbers: NYD131318651 - Prospect Avenue
NYD981558570 - Miller Place
NYD057731663 - Duffy Avenue

Dear Ms. Gara:

In compliance to your request on your letter dated August 16, 1989, Metco has taken the following actions:

1) Ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures.

   Action taken: Attachments: #1, 2, 3 and 4.

2: GNYCRR Part 372.2(a)(5) required the generator to label each package of waste in accordance with the applicable USDOT regulations.

   Action taken: Attachment: #7.

3) 6NYCRR Part 372.2(a)(6) requires the generator to mark each container or package of waste properly.

   Action taken: Attachments: #3, 4, 5 and 7.

4) Generator marks his containers either with the words "Hazardous Waste" or with other words that identify the contents of the containers.

   Action taken: Attachments: #5, 6, 7 and 8.

5) The date on which each period of accumulation begins is clearly marked and visible for inspection on each container.

   Action taken: Attachments: #5 and 8.

6) A label or sign stating "Hazardous Waste" must identify all areas, tanks, and containers used to accumulate hazardous waste.

   Action taken: Attachments: #6 and 8.

7) 6NYCRR Part 373-3.9(e) requires that the owner or operator must inspect container storage areas at least weekly looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors.

   Action taken: Attachments: #9, 10 and 11.

8) 6NYCRR 373.3.3(f) requires that the owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency, unless aisle space is not needed for any of these purposes.

   Action taken: Attachments: #9, 10 and 11.

The attached information has been compiled in order to comply with the requirements citied in your letter. Our revised procedures will meet regulatory guidelines as they apply in all areas of Metco's facilities.

I would like to apologize for the delay in responding to your request. Also, I will make myself available for any further visit you may wish to make.

Very truly yours,

Patrick A. Tighe

Patrick A. Tighe
Superintendent
Facilities Coordination

PAT:eb
cc: T. Fisher
A. Mazzone
NYS Dept. Environmental Conservation
Div. Hazardous Substances Regulation
Bureau of Hazardous Waste Operations
Compliance Inspection Section
Attention: Mr. Michael Heck, Reviewer

ATTACHMENT #1

METCO

HAZARD COMMUNICATION PROGRAM

(PER OSHA 29 CFR 1910.1200(e))

A. PURPOSE

This Hazard Communication Program is implemented by the Metco Division of the Perkin-Elmer Corporation at its facilities located in Westbury and Hicksville, NY, in accordance with the requirements of OSHA Standard 29 CFR 1910.1200. This program is designed to transmit information to Metco employees concerning the hazards of chemicals used in their work areas. This information is transmitted by training, labeling, material safety data sheets and chemical listings.

B. RESPONSIBILITIES

1. The General Manager is ultimately responsible for the Hazard Communication Program at Metco. He issues periodic policy statements in support of the program and insures total management/employee cooperation in achieving program goals.

2. Patrick A. Tighe is delegated responsibility for the overall coordination of the program as Hazardous Materials Program Coordinator. He recommends procedures and plans for General Manager approval and assures the effective implementation of the approved plans. Responsibilities for this person include planning and directing the comprehensive training training program for supervisors and employees required to meet the objectives of the Standard.

3. Supervisors are directly responsible for the continuing instruction of their employees concerning the hazardous materials used in their work areas. Appropriate training is provided, as required, to assist them in fulfilling this responsibility.

4. Employees are responsible for following instructions on the handling of hazardous material and waste.

C. HAZARD DETERMATION

1. Metco expects its chemical suppliers to evaluate and determine the hazardous nature of the chemicals supplied and to provide valid material safety data sheets and warning labels for these chemicals. When it is obvious that this information is incomplete or inaccurate, the Hazardous Materials Program Coordinator is responsible for assuring that the supplier is contacted in writing to provide the correct data.

2. When Metco supplies a chemical to a customer under a Perkin-Elmer label, it assumes responsibility for hazard determination and the preparation of labels and MSDS's. The Materials Engineering group is responsible for these results.

D. HAZARDOUS MATERIALS IDENTIFICATION

1. The Hazardous Materials Program Coordinator insures that all hazardous materials in work areas are properly identified, lists prepared and MSDS's available in accordance with Perkin-Elmer Corporate Procedure 2-100.

2. Each work area supervisor is responsible for maintaining up-to-date lists of the hazardous materials used in the work area and a current file of corresponding material safety data sheets.

E. LABELS AND OTHER FORMS OF WARNING

1. Metco retains the warning labels affixed by each chemical manufacturer to warn its employees about the hazardous materials in each originally shipped container.

   a) When containers are received with badly damaged or no labels, it is the responsibility of the Receiving Department Supervisor to coordinate with the Hazardous Materials Program Coordinator to obtain appropriate replacement labels before the materials are delivered to stores or work areas.

   b) Work area supervisors are responsible for following the same procedures when labels on containers in their sections are defaced or missing. The Coordinator assists as necessary.

2. The labels provided by the chemical manufacturers supplying Metco have certain unique and common information which employees are made aware of before using the materials described on the labels. The following is a description of these characteristics which are transmitted to employees:

   a) Health hazard including possible effect on the person.

   b) Carcinogenicity of material if applicable.

   c) Flammability of material.

3. When hazardous materials are recontainered, the new con-

tainer is labeled, tagged or marked with the following information: hazardous chemical identity; appropriate hazard warnings; and the name and address of the responsible chemical manufacturer. Consistency with the original label and MSDS is assured. The following describes the labeling systems used for this relabeling and responsibilities for this process.

a) Metco's Hazard Warning notice will be placed on each container.

4. All containers of materials that are stored for further processing or moved to another part of the building for additional process work or packaging will have either the batch card or a hazard warning notice attached.

5. The Materials Engineering group will prepare labels for any new product at the time they are preparing the Material Safety Data Sheet. As new information is released by manufacturer or government bodies, the Hazardous Material Coordinator will alert the Materials Engineering group to review the existing MSDS and label and update them as needed.

F. MATERIAL SAFETY DATA SHEETS

1. The Hazardous Material Coordinator is responsible for obtaining and maintaining material safety data sheets for all the hazardous materials used at Metco in accordance with the following procedures:

a) Purchasing to request an MSDS with all purchase orders.

b) No new material will be used at Metco until an MSDS has been received and reviewed by both Materials Engineering and the Hazardous Material Coordinator.

c) The Quality Control group will not approve any material for use at Metco until they are assured that an MSDS is available and in the department and company files.

2. Copies of all MSDS's are kept in a central master file in the Facilities Dept. Supervisors are responsible for maintaining file copies of MSDS for the hazardous materials used in their departments. Supervisors will maintain a file of MSDS on material used in their section at their desk. Copies can be obtained from the Hazardous Material Coordinator. Employees are advised of the availability of the MSDS and their access to them on a continuing basis.

3. No materials or material samples are accepted in any

division or group facility without an MSDS. The following procedures assure this control:

a) Quality Control will not release the material to production until they verify that an MSDS is available.

b) No samples are to be opened until an MSDS has been received and checked by either Hazardous Material Coordinator or Materials Engineering.

c) The Receiving Department will not accept any shipment of chemicals unless it is properly labeled. They will mark all material that requires an MSDS.

G. TRAINING

1. The Hazardous Material Program Coordinator plans and coordinates comprehensive information and training programs for supervisors and employees who use hazardous chemicals and assures the maintenance of appropriate training records. This program is continually reinforced by supervisors and by periodic supplementary training. In addition, general information and training is provided to all other employees.

a) The hazardous material information program consists of video tapes that are shown to all Metco employees as required. This program will be held for all new personnel. These tapes and associated discussioins will cover the following:

1. The requirements of the OSHA Hazard Communication standard.

2. A copy of the program will be given to each employee at the first training session. Additional copies can be obtained from the Hazardous Material Coordinator.

3. The location and availability of the required lists of hazardous chemicals and material safety data sheets.

4. The operations or work areas where hazardous chemicals are present.

5. Any cautions generally applicable to all employees whether they work with hazardous materials or not.

b) All supervisors will attend an annual training session where the following information will be discussed and reviewed. New materials, products

and information will be part of this discussion.

1. The role of the supervisor in the Hazard Communication process.

2. How to provide on-the-job instruction to employees regarding the hazardous materials they use.

3. What information to provide new or transferred employees about the program.

4. Where to go for resource information and support.

c) Hands on training by one of the following people will be done in the individual sections:

1. Corporate Safety Manager.

2. Hazardous Material Coordinator.

3. The Section Supervisor.

This training will cover the following:

1. Description of the physical and health hazards of the chemicals used in a specific area.

2. Methods and observations used to detect the presence or release of a hazardous chemical in a work area.

3. Ways to deal with the hazards of nonroutine tasks.

4. The hazards associated with chemicals contained in unlabeled pipes in work areas.

5. Measures employer has taken to provide engineering controls to protect employees.

6. Measures employees must take to protect themselves from hazardous materials, including work facilities, emergency procedures and personal protective equipment.

7. Details of the Hazard Communication Program, including explanations of the labeling systems, how to read and interpret MSDS and how to obtain additional hazard information.

2. Supervisors are key to the hazard training process and are responsible for the following:

a) On-the-job instruction of subordinates regarding the program and hazardous materials used in his/her section.

b) Orientation of new or transferred employees and contractor personnel about the Hazard Communication Program and the chemicals used in their immediate work areas.

c) On-the-job instruction when a new hazard is introduced into the work area.

d) Maintaining records of on-the-job training conducted.

e) Providing information to the Hazardous Material Program Coordinator on changes in hazards and personnel.

H. CONTRACTOR PERSONNEL

1. Contractors whose personnel are assigned to work in hazardous areas of Metco are informed of these hazards in accordance with the following procedure:

a) The Facilities Admin. will conduct all contract personnel on a tour of the area where they will be working. He will point out any and all hazards that may be present.

b) Copies of all pertinent MSDS will be given to the contractor's supervisor.

c) All contractor personnel will be informed of any special safety rules for the area where they will be working. These rules wil be enforced by Metco maintenance personnel.

I. DISTRIBUTION

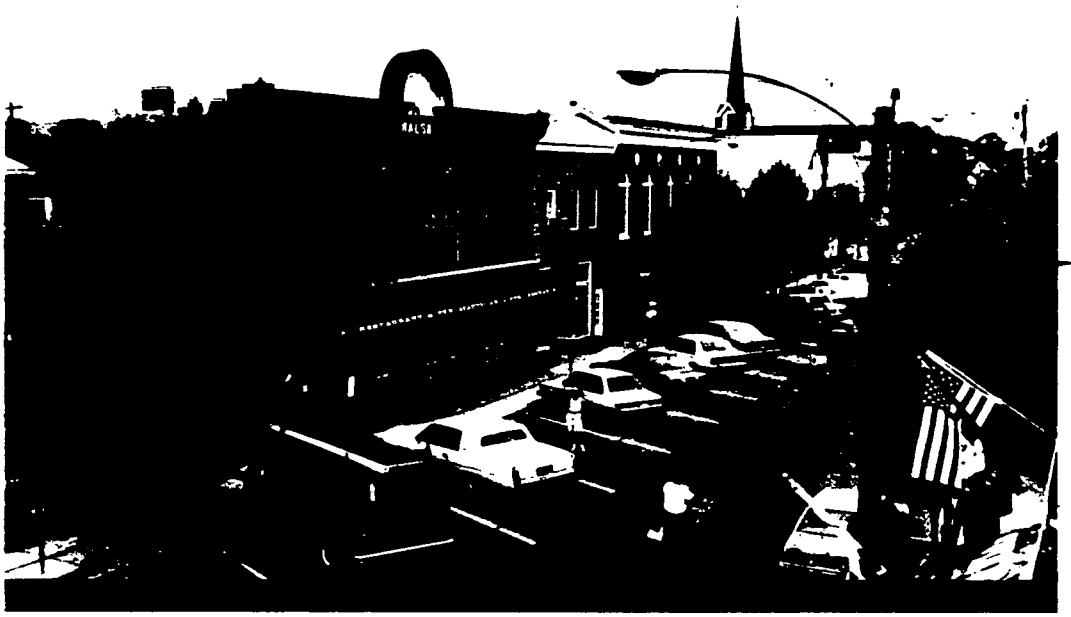
1. Copies of this written Hazard Communication Program are provided to all Metco Supervisors who are responsible for advising their employees about the program and its availability. The program is made available to employees for review on request.

Thomas Fisher
General Manager
Metco

ATTACHMENT #2

MAIN STREET

Right-to-Know for the Rest of Us



A Video Training Program in Chemical Safety Designed to Help You Meet OSHA's Expanded Right-to-Know Requirements

Send Today for a Preview*
Only $40!

*U.S. only.

BNA Communications Inc.

a subsidiary of The Bureau of National Affairs, Inc.

Supplement to BNA Publications

ATTACHMENT #2

MAIN STREET

Video training that will help you protect your workers against chemical health hazards and help you comply with the expanded Hazard Communication standard.

The Occupational Safety and Health Administration has expanded the Hazard Communication or "Right-to-Know" standard beyond the manufacturing and chemical industries to cover approximately 32 million additional employees who work with chemicals.

When employees have all the facts about on-the-job chemical health hazards, they work smarter and safer. Now there's an easy-to-use, easy-to-understand safety training program that emphasizes the importance of self-protection. It's MAIN STREET—and it's from BNA Communications Inc.

MAIN STREET is a 17-minute video program designed to instruct workers about the chemicals they work with, precautions to avoid injury, and what to do if accidents should occur.

MAIN STREET Will Show Your Employees:

- How Various Chemicals Can Enter the Body
- Why Reading Labels Is Essential
- The Physical and Health Hazards of Chemicals
- Signs and Symptoms of Exposure
- Emergency Response Procedures
- Why Chemical Safety Is Also Important Off the Job
- How to Use Material Safety Data Sheets
- and much more.

ATTACHMENT #2

Your Right-to-Know

MAIN STREET Will Help Your Organization—

- Train Workers in Chemical Safety Quickly, Easily, and Effectively
- Document the Training Each Employee Receives
- Reduce Accidents and Workers' Compensation Claims
- Comply with the Expanded Right-to-Know Standard

MAIN STREET Illustrates the Hazards and Precautions for These Chemical Types:

- Solvents
- Poisons
- Corrosives
- Gases
- Explosives
- Carcinogens

MAIN STREET Will Help You Instruct Your Employees in Chemical Safety—and Help You Comply with OSHA's Hazard Communication Requirements—Quickly, Easily, and Effectively!

MAIN STREET Includes:

- 17-Minute Color Video available in VHS, Beta, or ¾-Inch U-Matic
- 68-page Trainer's Manual with complete instructions for conducting the program
- 10 Participant Manuals which feature a "Safety Awareness Quiz" that serves as a permanent record of the training received by each employee

Preview MAIN STREET Today
Only $40!
CALL TOLL-FREE
800-233-6067

In Maryland, Alaska, and Hawaii, (301) 948-0540.
Previews available in the U.S. only.

About BNA Communications Inc.

A subsidiary of The Bureau of National Affairs, Inc., BNA Communications Inc. is a major producer and distributor of film/video training programs in management/supervisory development, EEO compliance, labor relations and safety. Its staff is also available for outside production work and in-house training.

Other Video Programs from BNA Communications Inc.

CHEMSAFE™—this nine-module hazard communication video training program shows workers how to work with hazardous chemicals safely and meet OSHA right-to-know requirements. Flexible, effective, and easy-to-administer, it includes modules on each major chemical hazard area.

HANDLING HAZARDOUS WASTE, a seven-part video series, complete with Leader's Guide and Participant Handouts, trains workers in the accepted EPA/DOT/OSHA procedures for handling hazardous waste. Comprehensive in scope, the series follows hazardous waste management procedures from generation at the plant through transport and eventual disposal at a hazardous waste facility.

RIGHT-TO-KNOW: CHEMICAL CONCERNS AT WORK—a fast-paced objective look at the right-to-know movement featuring on-location case studies and interviews with leading authorities including Ralph Nader, Center for the Study of Responsive Law; Patrick Tyson, former Acting Assistant Secretary of Labor for OSHA; Dr. Geraldine Cox of the Chemical Manufacturers Association; and many others.

RIGHT-TO-KNOW: WORKING AROUND HAZARDOUS SUBSTANCES—a film/video that stresses the importance of employee knowledge about the materials used in their jobs and what actions they should take if they suspect some chemical may be causing a problem for them.

WHAT YOU DON'T KNOW: LEARNING ABOUT HAZARDOUS MATERIALS—deals with employees' right to know about the chemicals they work with and the precautions they should take with hazardous substances. It stresses joint efforts by companies, supervisors, and workers in an overall effort for chemical safety.

STRAIGHT DOPE ON DRUG TESTING—an employee communications video program designed to help prevent the confusion and morale problems that often surround a drug testing policy. The program explains how the testing process works, shows how drugs affect performance and health, and demonstrates an overriding concern for safety.

CHEMSAFE™ is a trademark of Springborn Laboratories, Inc.

Plus Many Other Safety Films and Videos on Scores of Subjects to Help You Meet OSHA, EPA and DOT Requirements.

Call Today Toll-Free
800-233-6067

(In Maryland, Alaska, and Hawaii, please call 301-948-0540.)

BNA Communications Inc.

a subsidiary of The Bureau of National Affairs, Inc.
9439 Key West Avenue, Rockville, MD 20850-3396

PERKIN-ELMER

METCO Interoffice Memo:

Date: August 14, 1989

To: Distribution Location:

From: R. Barr Location: Net Extn:

Subject: Disposal of Dry, Wet and Scrap Powder
2nd Notice

Effective immediately all personnel wishing to dispose of powder, whether it be new, used or scrap powder from the wet collector; it must all be put into a 5 gallon pail with a lid which can be sealed (Pails and lids ar now available, stored in booth #23).

The powder can then be removed from the Spray Lab to the paint locker, located in the Shipping Department next to the Maintenance Office. A location in the paint locker is marked "SCRAP POWDER".

It is an OSHA requirement that a powder container which has been opened must be capped at all times.

Please advise the Safety Officer Pat Tighe extension 495 when material is to be put into the paint locker and specify on the container label the following:

- Type of powder
- Approximate weight
- Date powder is put in the paint locker
- Booth #

RB/cl

DISTRIBUTION:

A. Aly	S. Bauman	A. Biamonte	C. Bibas
H. Budke	S. Carlisle	H. Charlop	T. Chon
C. Conroy	S. Cucinella	M. D'Arpa	M. DeLuca
A. DelaRosa	B. DelRe	M. DeSanti	B. Dulin
J. Felz	A. Fuimefreddo	R. Fusaro	J. Galati
G. Garistina	E. Gianella	B. Goggans	P. Gottesman
G. Grieshaber	M. Hacker	R. Kaufold	B. Kushner
R. Lambert	S. Lipschitz	W. Maidhof	D. McDonough
J. Mercurio	L. Milito	R. Molz	J. Nerz
E. Novinski	A.Nissenbaum	P. O'Neill	C. Olsen
J. Reardon	P. Ribando	K. Rodgers	W. Rusch
L. Saia	J. Savino	A. Sole	M. Spaulding
A. Spiegel	J. Spinella	R. Stasi	P. Stegner
M. Swope	H. Thompson	P. Tighe	S. Tilkeran
R. Trapani	K. Varley	J. Viggiani	R. Waszkiewicz
J. Weber	W. Willen	J. Wissig	D. Young
J. Zanetti	R. Zounek		

PERKIN-ELMER

METCO Interoffice Memo:

Date: 31 August 1989

To: DISTRIBUTION

Location:

From: R. Barr RBr.

Location: Net Extn:

Subject: Identification of Waste Powder

All scrap and waste powder which is to be disposed of must be clearly marked for identification.

Required label information is:

DATE:
MATERIAL:
WEIGHT:
BOOTH NUMBER:
EMPLOYEE:
EMPLOYEE #:

Attached for those noted (*) below is a supply of labels.

Please complete and place the label on the side of the containers. Do not put the label on top or bottom of the container as it cannot be read when containers are stocked.

Contact Plant Maintenance (Connie Conroy X337) for additional labels.

RB/tw
Attch.

DISTRIBUTION:

S. Bauman
T. Chon
* A. DelaRosa
J. Felz
* J. Galati
* M. Hacker
W. Maidhof
R. Molz
C. Olsen
* W. Rusch
* M. Spaulding
P. Stegner
* S. Tilkeran
R. Waszkiewicz
D. Young

* A. Biamonte
[redacted]
* B. DelRe
* A. Fuimefreddo
* E. Gianella
* R. Kaufold
D. McDonough
J. Nerz
J. Reardon
* L. Saia
* A. Spiegel
M. Swope
* R. Trapani
J. Weber
* J. Zanetti

C. Bibas
S. Cucinella
* M. DeSanti
R. Fusaro
P. Gottesman
B. Kushner
J. Mercurio
E. Novinski
P. Ribando
J. Savino
J. Spinella
H. Thompson
* K. Varley
W. Willen
R. Zounek

H. Charlop
* M. D'Arpa
* B. Dulin
* G. Garistina
G. Grieshaber
* S. Lifschitz
L. Milito
P. O'Neill
K. Rodgers
L. Small
* R. Stasi
P. Tighe
* J. Viggiani
* J. Wissig

BUILDING:
DATE:
MATERIAL:
WEIGHT:
ORIGIN/BOOTH NUMBER:
EMPLOYEE:
EMPLOYEE #:

BUILDING:
DATE:
MATERIAL:
WEIGHT:
ORIGIN/BOOTH NUMBER:
EMPLOYEE:
EMPLOYEE #:

ATTACHMENT #5

HAZARDOUS WASTE

ATTACHMENT #6

HAZARDOUS WASTE

AETC
ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION
1 EDEN LANE, FLANDERS, NEW JERSEY 07836 201-347-7111

ATTACHMENT #7

September 15, 1989

Perkin Elmer Corporation, Metco Division
1101 Prospect Avenue
Westbury, New York 11590

Attention: Mr. Pat Tighe

Dear Mr. Tighe:

AETC is currently in the process of evaluating the MSDS, which you provided to us recently. As soon as our Regulatory and Technical Affairs Department has concluded its analysis of your information, AETC, in conjunction with your designation facilities personnel, will do the following:

1. Identify and properly label all material at your sites: NYD 131319651, NYD 981558570, NYD 057731663.

2. Insure proper segregation and packaging of materials with concern for chemical compatibility and safety.

3. Insure proper D.O.T. identification and hazard class designation of materials.

Thank you for the opportunity to be of service to you, and I appreciate your patience, as this process has required more time than I originally anticipated.

If we can be of any further service, please do not hesitate to call.

Sincerely,

Arthur E. Knight

Arthur E. Knight
Technical Sales Representative

AEK:sd

ATTACHMENT #8

To PURCHASING DEPT.

Date SEPTEMBER 12, 1989

To be used for

Date required ASAP

METCO INC.

REQUEST FOR PURCHASE

REQUISITION NUMBER 37060

LABEL MASTER
DIVISION OF AMERICAN LABELMARK CO.
5724 NORTH PULASKI ROAD
CHICAGO IL 60646-6797

PURCHASE ORDER NO.

CONTACT =

TEL. NO. = (800) 621-5808

SHIP VIA	F.O.B.	TERMS	PROMISED DELIVERY DATE

GRAY AREAS FOR PURCHASING USE ONLY

ITEM	QUANTITY	DESCRIPTION	TAX	PRICE
A	1000	ACCUMULATION LABELS STYLE HWA SIZE 4"x6"		35.75 FOR 1000
		90 DAY ACCUMULATION LABEL WITH THE WORDS		
		"HAZARDOUS WASTE"		
B	6	METAL SAFETY SIGN STYLE DS14 - 14		13.00 EACH
		STANDARD OSHA SIGN WITH WORDING "HAZARDOUS WASTE"		
		SIZE OF SIGNS 10" X 14"		
		Do Copies to P.A. Tighe		TOTAL

SUGGESTED SOURCE OF SUPPLY:

WORK ORDER NUMBER	CHARGE NUMBER	REQUESTED BY	APPROVED BY	APPROVED BY
	1/3 837.20 1/3 838.20 1/3 839.20	CJConroy	P.A. Tighe	

PLANT WESTBURY, PROSPECT AVE.

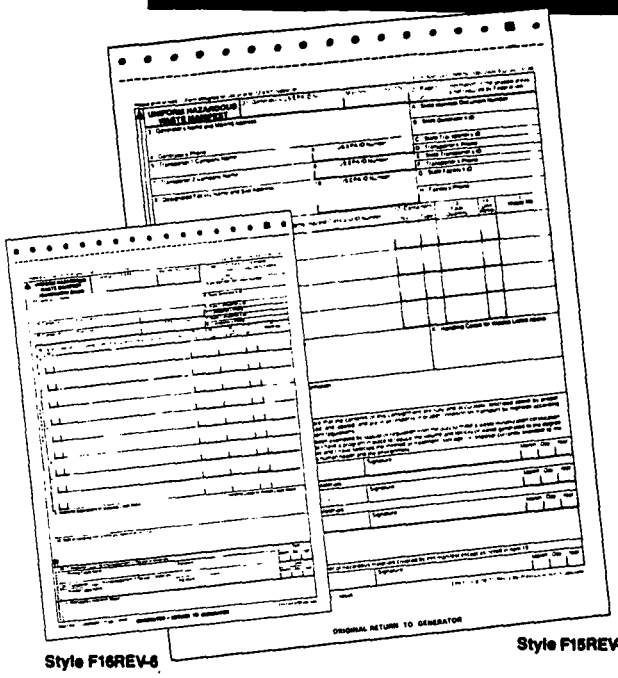
DELIVER TO: DEPT. FACILITIES COORDINATION

ATTN. C.L. CONROY

BUYER

PURCHASING

WASTE MANIFESTS AND SPECIAL LABELS



Style F16REV-6 Style F15REV-6

ATTACHMENT #8

UNIFORM HAZARDOUS WASTE MANIFEST

Labelmaster is offering the revised Manifest as Style F15REV-6 in a 6-part, fully-carbonized, snap-out form. Continuation sheets are available; order Style F16REV-6 for the 6-part form. The Uniform Manifest can also be custom imprinted with Generator's name, address, US EPA ID Number, sequential numbering, etc. Prices for these styles are followed by the letter "P." Continuation forms can be personalized, too.

Labelmaster Manifests have been printed with a special "HM" column for use when both federally-regulated and state-regulated wastes are shipped on the same Manifest. The regulations require the "HM" column be checked for only those line entries regulated under federal law. **NOTE:** The Uniform Hazardous Waste Manifest provided by Labelmaster will always comply with the MOST CURRENT official requirements.

USE THIS UNIFORM MANIFEST TO SPEED TRANSPORT OF HAZARDOUS WASTES! ORDER TODAY!

PRICES shown are per 100 (C) sets

STYLE	100	200	500	1000	2500	5000	10,00
F15REV-6 F16REV-6	21.00	19.70	16.30	13.40	12.10	11.30	10.8
F15REV6P F16REV6P	X	X	18.50	14.75	13.15	11.65	11.1

Please add $8.50 per complete quantity for sequential numbering on custom printed forms.

Style HWA 4"x6"

ACCUMULATION LABELS

Use this 90-Day Accumulation Label to comply with 40 CFR 262.34. Generators may accumulate hazardous waste on-site for 90 days or less without a permit provided that the accumulation date is clearly marked and the package or drum is marked with the words "Hazardous Waste." These special UV processed paper labels are available in rolls of 500.

PRICES are per 1000 (M) except 500 Lot price.

STYLE	500	1000	3000	6000	12,000	24,000
HWA	26.75	35.75	31.25	29.00	26.75	24.50

Style DS136-14 English Style PS136-14 — Spanish

Exterior Grade Vinyl

Style L135A 4"x5"

EMPTY DRUM WARNING LABELS

Eliminate unnecessary accidents with this distinctive drum label. It alerts people to the dangers present from hazardous residues remaining in empty drums. Silk-screened with fade-resistant UV inks on permanent vinyl for a long life in outdoor environments. Shrink-wrapped 500 to the package.

PRICES are per 1000 (M) except 500 Lot price

STYLE	500	1000	3000	6000	12,000	24,000
L135A	35.75	49.75	45.75	42.50	40.75	39.50

WARNING SIGNS

Posting Warning Signs, as prescribed under EPA regulation 40 CFR 264.14(c), is mandatory and Hazardous Waste Disposal facilities must comply. This specially fabricated 10"×14" metal sign is silk-screened with UV process in black and bright red on mill-coated white .026 gauge aluminum. With radiused corners and 3/16" holes for easy installation to any surface. Available in both English (DS136-14) and Spanish (PS136-14).

PRICES shown are per each

STYLE	1-5	6-11	12+
DS136-14, PS136-14	14.50	13.00	11.50

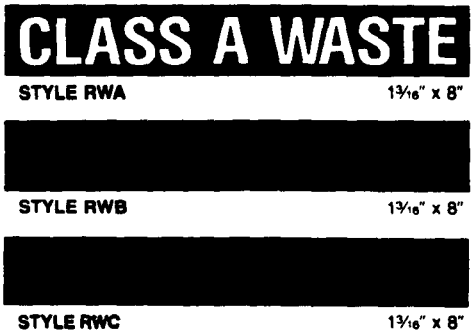
NOTE: Quantity price breaks (i.e., 6 or 12) apply only to signs in the same language.

MANDATORY RADIOACTIVE WASTE LABELS

These 1 3/16"x8" vinyl labels comply with the marking regulations for radioactive waste issued by the NRC in 10CFR 20.311(d)(2) and in 61.57. "STABLE" and "UNSTABLE" labels may be used with Class A, B, and C waste to aid in segregating wastes and to facilitate handling. Styles RWS and RWU are printed on fluorescent paper.

PRICES shown are per each

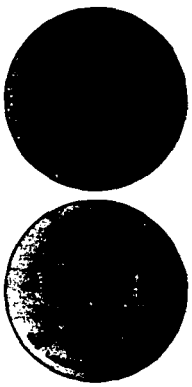
STYLE	500	1000	2500	5000	10,000
RWA RWB RWC	.14	.12	.10	.09	.08
Group styles for best quantity price					
RWS RWU	.08	.07	.06	.04	.03



STYLE RWA 1 3/16" x 8"

STYLE RWB 1 3/16" x 8"

STYLE RWC 1 3/16" x 8"



STYLE RWU

STYLE RWS

METAL SAFETY SIGNS

ATTACHMENT #8

CREATE YOUR OWN LEGENDS ON THESE EXPERTLY CONSTRUCTED OSHA APPROVED SIGNS

DS-7P 7" x 10"
DS-14P 10" x 14"

CS-7P 7" x 10"
CS-14P 10" x 14"

SS-7P 7" x 10"
SS-14P 10" x 14"

WS-7P 7" x 10"
WS-14P 10" x 14"

PS-7P 7" x 10"
PS-14P 10" x 14"

NS-7P
NS-14P

CUSTOM–WORDED SIG
With 6 Standard OSHA Headi

- **Constructed of sturdy .026 aluminum**
- **Screen printed with fade-resistant UV inks**
- **Meet OSHA requirements**

CUSTOMIZED SIGNS FOR SPECIAL COMPLIANCE NEEDS

Choose from the 6 standard OSHA headings shown above and add your own personalized legend. Inform employees of special health hazards, safety procedures and instructions unique to your facility so you'll be in compliance with OSHA regulations. Wording will be silk screened with fade-resistant UV inks for high visibility. High quality, .026 heavy aluminum signs can be used anywhere. Each sign has 4 mounting holes for convenience. Choice of 2 sizes. Add art and preparation charges @ $8.00 per line.

TO ORDER: Specify Style Number of sign and add suffix - for 7" x 10" size, or suffix -14P for 10" x 14" size. Specify e wording of legend—line by line; and quantity desired.

PRICES per sign

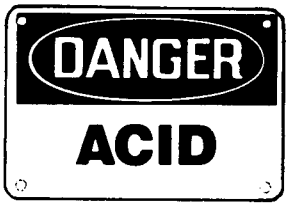
Size	2-5	6-9	10 or mor
7" x 10"	$16.90 each	$14.50 each	$12.25 eac
10" x 14"	21.60 each	18.90 each	16.50 eac

Note: Different wordings cannot be combined for quantity pricing.

LARGE SELECTION OF STANDARD-WORDED SIGNS IN STOCK

SIGNS WITH STANDARD WORDING

STYLE*	LEGEND
DS100	Blank
DS101	Acid
DS102	Authorized Personnel Only
DS103	Caustic
DS104	Chlorine
DS105	Do Not Enter
DS106	Do Not Operate Without Safety Glasses
DS107	Do Not Start Motor
DS108	Do Not Touch
DS109	Do Not Watch the Arc
DS110	Explosives
DS111	Flammable Materials
DS112	Hard Hat Area
DS113	Hazardous Area
DS114	Hazardous Waste
DS115	High Voltage
DS116	High Voltage—Keep Out
DS117	Hydrochloric Acid
DS118	Keep Away
DS119	Keep Open Flames Away
DS120	Keep Out
DS121	Men Working
DS122	No Admittance
DS123	No Smoking
DS124	No Smoking Beyond This Point
DS125	No Smoking In This Area
DS126	No Smoking Within 50 Feet
DS127	No Trespassing
DS128	No Welding Or Open Flame
DS129	Poison
DS130	Poison Gas
DS131	Propane Gas
DS132	Restricted Area—No Smoking
DS133	Safety Glasses Required In This Area
DS134	Sulphuric Acid
DS135	This Machine Starts Automatically
DS136	Unauthorized Personnel Keep Out
DS137	Unauthorized Personnel Keep Out—Hazardous Waste Storage Area
DS138	Wear Goggles When Chipping Or Grinding
DS139	220 Volts
DS140	480 Volts



Style DS100 Series

Style CS400 Series

Style SS800 Series

SIGNS WITH STANDARD WORDING

STYLE*	LEGEND
CS400	Blank
CS401	Buried Cable
CS402	Do Not Operate Machinery Without Guards
CS403	Ear Protection Required In This Area
CS404	Eye and Glove Protection Must Be Worn When Handling Chemicals
CS405	Eye Protection and Hard Hat Must Be Worn In This Area By All Persons
CS406	Eye Protection Required In This Area
CS407	Fork Trucks Go Slow
CS408	Goggles Positively Must Be Worn
CS409	Hands Off
CS410	Hard Hat Area
CS411	Hazardous Area Authorized Personnel Only
CS412	Hearing Protection Required In This Area
CS413	Highly Flammable
CS414	Keep Aisles Clear
CS415	No Smoking Beyond This Point
CS416	Respirators Required In This Area
CS417	Slippery When Wet
CS418	This Machine Must Not Be Operated Without Safety Guards In Position
CS419	Watch Out For Fork Lift Trucks
CS420	Watch Your Step
CS421	Wear Goggles, Rubber Gloves and Apron While Handling Acid or Caustic
CS422	Wear Goggles When Using This Machine
CS423	Wear Hair Net

Legends shown – in stock for immediate delivery.

SIGNS WITH STANDARD WORDING

STYLE*	LEGEND
SS800	Blank
SS801	Wear Goggles or Use Shield
SS802	Wear Your Safety Goggles
SS803	Safety Glasses Required Beyond This Point
SS804	Everyone Grinding Must Wear Goggles
SS805	Positively No Smoking
SS806	Keep Hands Out Of Moving Machinery
SS807	Employees Are Not Permitted To Remove Guards or Operate Machine Without Them
SS808	Do Not Oil or Clean Machine While In Motion
SS809	Do Not Enter Unless Wearing Safety Equipment
SS810	Walk—Don't Run
SS811	Watch Your Step
SS812	Safety Shoes Required In This Area
SS813	Keep All Aisles Clear
SS814	All Injuries No Matter How Slight Must Be Reported To Foreman
SS815	Report All Accidents No Matter How Small To Your Foreman
SS816	Ear Protection Required In This Area

PRICES 7" x 10" signs (add -7 to Style No.)
Each ..... $12.50 ea
6 or more ..... $10.50 ea
12 or more ..... $8.50 ea

PRICES 10" x 14" signs (add -14 to Style No.)
Each ..... $14.50 ea
6 or more ..... $13.00 ea
12 or more ..... $11.50 ea

Note: Signs purchased at 6 ea. & 12 ea. prices must be identical in wording and size.

ALL STANDARD OSHA SIGNS SHOWN HERE AVAILABLE IN 2 SIZES: 7" x 10" & 10" x 14"
*When ordering, please add suffix -7 to Style Number for 7" x 10" size: add suffix -14 for 10" x 14" size.

WEEKLY INSPECTION REPORT

FILL OUT COMPLETLY AND FORWARD TO PATRICK TIGHE

PROSPECT AVENUE FACILITY

METCO DIVISION PERKIN-ELMER
1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590

COORDINATOR: CONSTANCE CONROY

INSPECTED BY: _____

EMPLOYEE #: _____

DATE OF INSPECTION: _____

LOCATION OF MATERIAL: _____

INVENTORY OF MATERIAL:

MATERIAL	DESCRIPTION/ORIGIN	CONTAINER TYPE	QUANTITY

ALL CONTAINERS WITH: PROPER LABELS _____

SEALED TOP _____

INTACT - NO LEAKAGE _____

SIGNS CLEARLY VISIBLE: HAZARDOUS WASTE / SCRAP POWDER / NO SMOKING _____

AISLE SPACE TO ALLOW UNOBSTRUCTED MOVEMENT _____

ATTACHMENT # 10

WEEKLY INSPECTION REPORT

FILL OUT COMPLETLY AND FORWARD TO PATRICK TIGHE

MILLER PLACE FACILITY

METCO DIVISION PERKIN-ELMER
220 MILLER PLACE
HICKSVILLE, NEW YORK 11801

COORDINATOR: DICK UREVICH

INSPECTED BY: _____

EMPLOYEE #: _____

DATE OF INSPECTION: _____

LOCATION OF MATERIAL: _____

INVENTORY OF MATERIAL:

MATERIAL	DESCRIPTION/ORIGIN	CONTAINER TYPE	QUANTITY

ALL CONTAINERS WITH: PROPER LABELS _____

SEALED TOP _____

INTACT - NO LEAKAGE _____

SIGNS CLEARLY VISIBLE: HAZARDOUS WASTE / SCRAP POWDER / NO SMOKING _____

AISLE SPACE TO ALLOW UNOBSTRUCTED MOVEMENT _____

WEEKLY INSPECTION REPORT

FILL OUT COMPLETLY AND FORWARD TO PATRICK TIGHE

DUFFY AVENUE FACILITY

METCO DIVISION PERKIN-ELMER
325 DUFFY AVENUE
HICKSVILLE, NEW YORK 11801

COORDINATOR: JIM ZANETTI

INSPECTED BY: _____

EMPLOYEE #: _____

DATE OF INSPECTION: _____

LOCATION OF MATERIAL: _____

INVENTORY OF MATERIAL:

MATERIAL	DESCRIPTION/ORIGIN	CONTAINER TYPE	QUANTITY

ALL CONTAINERS WITH: PROPER LABELS _____

SEALED TOP _____

INTACT - NO LEAKAGE _____

SIGNS CLEARLY VISIBLE: HAZARDOUS WASTE / NO SMOKING _____

AISLE SPACE TO ALLOW UNOBSTRUCTED MOVEMENT _____

New York State Department of Environmental Conservation
50 Wolf Road, Albany, New York 12233

Thomas C. Jorling
Commissioner

CERTIFIED MAIL, RETURN RECEIPT REQUESTED

WL#Metco

AUG 14 1989

Mr. Patrick Tighe
Manager
Metco Corporation
Duffy Avenue
Hicksville, NY 11801

RE: Hazardous Waste Compliance Inspection Date: July 21, 1989
Location of Handler: Same as Above

EPA Identification Number: NYD057731663

Dear Mr. Tighe:

In order to determine compliance with the New York State Hazardous Waste Regulations, the New York State Department of Environmental Conservation conducted an inspection of your facility on the above referenced date.

As a result of that inspection, review of documentation submitted by your facility to this Department, and applying the New York State Hazardous Waste Regulations, we believe that your facility is operating as a small quantity generator of hazardous waste.

6NYCRR Part 372.2(a)(8)(iii) allows the generator who generates more than 100 kg but less than 1000 kg of hazardous waste in a calendar month to accumulate non-acute hazardous waste on-site for a period of 180 days or less without being subject to the permitting provisions of Part 373 provided the following requirements are met:

- ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures.

You have not met these requirements and, therefore, are in violation of 6NYCRR Part 372.2(a)(8)(iii).

6NYCRR Part 373-3.9(e) requires that the owner or operator must inspect container storage areas at least weekly looking for leaking containers and for deterioration of containers and the containment system caused by corrosion or other factors. You have not met this requirement and, therefore, are in violation of 6NYCRR Part 373-3.9(e).

Please confirm in writing within 30 days of the date of this letter, that the above referenced violations have been corrected and include supporting documentation as appropriate. You MUST include your EPA

Identification Number on all correspondence. This confirmation should be addressed to:

Mr. Robert Becherer, P.E.
Regional Hazardous Substances Engineer
New York State Department of Environmental Conservation
Building 40
SUNY at Stony Brook
Stony Brook, New York 11790
(516) 751-7900
Attention: Ms. Agnes Gara, Inspector

with a copy to:

New York State Department of Environmental Conservation
Division of Hazardous Substances Regulation
Bureau of Hazardous Waste Operations
Compliance Inspection Section
50 Wolf Road - Room 208/204
Albany, New York 12233-7252
(518) 457-0532
Attention: Mr. Michael Heck, Reviewer

If you have any questions about this notice or should you wish to discuss this matter further, please contact the Inspector or the Reviewer at the telephone number above. A copy of the Inspection Form is enclosed for your information.

Sincerely,

Janakrai M. Desai, P.E.
Acting Chief
Compliance Inspection Section
Bureau of Hazardous Waste Operations
Division of Hazardous Substances Regulation

Enclosure

cc: Ms. Lori Riley, Regional Attorney, Region 1
Mr. Robert Becherer, Regional Hazardous Substances Engineer, Region 1
Ms. Agnes Gara, Inspector, Region 1
Mr. Michael Heck, Reviewer, Central Office
New York State Department of Environmental Conservation

LAND BASED TSDF
COMMERCIAL TSDF
OTHER TSDF
LDR GENERATOR
OTHER GENERATOR
SUBSTITUTION

INSPECTION FORM

NEW YORK STATE INDUSTRIAL HAZARDOUS WASTE MANAGEMENT ACT
(Chapter 639, Laws of 1978)

Prepared for:

NEW YORK STATE DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Thomas C. Jorling, Commissioner

Send to: Division of Hazardous Substances Regulation
Compliance Inspection Section
50 Wolf Road - Room 208
Albany, New York 12233-7252

EPA I.D. NUMBER: NYD057731663

*HANDLER'S NAME (Corporate): Metco Corp.
(Division):

*HANDLER'S MAILING ADDRESS: Duffy Ave

City & State Hicksville NY Zip Code 11801

*HANDLER'S LOCATION ADDRESS:

(if different than mailing)

City & State _____, NY Zip Code _____

*HANDLER'S TELEPHONE NUMBER: (516) 334-1300 Extension

*FULL NAME OF HANDLER'S CONTACT: (Mr.) (Ms.) Patrick Tighe

*TITLE OF HANDLER'S CONTACT:

INSPECTION DATE: 7/4 19 89 TIME OF INSPECTION: ___ (a.m.) 2:00 (p.m.)
COUNTY:

INSPECTOR'S NAME: Anne Gere
TITLE:
NAME: asst. reh. eng.
TITLE:

CHECK ONE: Copy of THIS report (has) (X has not) been given to the Handler.

REPORT PREPARED BY: [signature] DATE: 7/21/89
REPORT APPROVED BY: [signature] DATE: 7/24/89

TABLE OF CONTENTS

		Page No.
Part I	General Information and Classification of Facility	
	1. Identification of Hazardous Waste	I-1
	2. Status Identification	I-4
	3. Exemptions	I-5
Part II	General Inspection Section	
	1. Exempt and Small-Quantity Generator Requirements	II-1
	2. General Requirements	II-4
	3. On-site Accumulation of Hazardous Waste Prior to Shipment	II-5
	4. Manifest Records and Reporting	II-9
	5. Personnel Training	II-11
	6. Preparedness and Prevention	II-12
	7. Contingency Plan and Emergency Procedures	II-14
Part III	Comments, Conclusions and Recommendations	III-1

APPENDICES

(Need Not Attach If Not Required - Circle Attached Appendices)

		Page No.
Appendix A	Treatment, Storage and Disposal Inspection Section	A-1
Appendix B	Transportation Terminal Inspection	B-1
Appendix C	Groundwater Monitoring	C-1
Appendix D	Surface Impoundments	D-1
Appendix E	Waste Piles	E-1
Appendix F	Secure Landburial Facilities	F-1
Appendix G	Land Treatment	G-1
Appendix H	Incinerators and Energy Recovery Facilities	H-1
Appendix I	Thermal Treatment	I-1
Appendix J	Chemical, Physical and Biological Treatment	J-1
Appendix K	Underground Injection	K-1
Appendix L	Closure/Post Closure Inspection	L-1
Appendix M	Part B Inspection	M-1
Appendix N	Requirements for Repeat Inspections	N-1
Appendix O	Requirements for Tanks	O-1
Appendix P	Requirements for Specific Hazardous Waste	P-1
Appendix Q	Elementary Neutralization Units/Wastewater Treatment Units	Q-1

*For the purpose of this Inspection Report - HANDLER means a hazardous waste Generator, Transporter, Treatment, Storage or Disposal Facility (TSDF).

PART I

General Information and Classification of Facility

1. Identification of Hazardous Waste - 371 — Yes / No

A. Is there reason to believe the facility has hazardous waste on-site? If yes, what leads you to believe it is hazardous waste? Check appropriate box/boxes and attach any applicable correspondence with DEC or EPA: X / ___

(1) ___ Company recognizes that its waste is hazardous during the inspection.

(2) ___ Company admitted the waste is hazardous in its RCRA notification and/or Part A permit application.

(3) ___ Testing has shown characteristics of:

( ) Ignitability - 371.3(b);
( ) Corrosivity - 371.3(c);
( ) Reactivity - 371.3(d);
( ) EP Toxicity - 371.3(e).

___ Has revealed hazardous constituents (please attach analysis report) 371.4(a)(2), Appendix 22, Appendix 23

(4) X The material is listed in the regulations as a hazardous waste from non-specific sources 371.4(b).

(5) ___ The waste is listed in the regulations as a hazardous waste from specific sources. 371.4(c).

(6) ___ The material or product is listed in the regulations as discarded commercial chemical products, off-specification species, container residues and spill residues thereof. 371.4(d).

(7) ___ Company is unsure, but has reason to believe that waste materials are hazardous. (Explain) _____

_____

_____

_____

5/89

B. Is there reason, other than those above, for you to believe that there is hazardous waste on site? (Explain) _____

_____

_____

C. What other environmental permits are held by the company, relative to hazardous waste management?

___ SPDES Permit Number X Air Permit Number

___ Part 364 Industrial Waste Transporter Permit (indicate this company's permit number if any)

Please describe other relative (if any) permits and give the name, address, Part 364 Permit Number and EPA I.D. Number of transporter(s) used by company.

Merisol NJD 002454544 Chem P.G. NJD 082785

Advanced Enviro NJD 980536593

D. If the facility is a treatment, storage or disposal facility, have they:

___ Submitted a Part A application.

___ Have changes been made that are not reflected in the Part A application?

___ Should the Part A be modified by the Company? If so, explain.

_____

_____

_____

___ Been granted a Part B application.

___ Submitted a Part 373 permit application.

___ Been granted a Part 373 permit.

If so, when does it expire: _____

Please attach or explain any special conditions or variances - 373-1.1(e)

_____

_____

If so, also complete Appendix M.

E. Describe the activities that result in the generation of hazardous waste. Include the company's manufacturing processes.

Machine Shop - degreasing of metals waste from solvents

F. Identify the hazardous wastes that are on-site, the quantity of each, and the storage method (use the identification numbers referred to in Part 371).

0 drums at present
Solvents: freon - shipped out. 111 trichloroethane is distilled + reused. Bottoms are sent out.

G. The handler notified EPA as a:

small q. gen.

Has EPA or DEC officially modified the handlers status? If so, attach correspondence.

no

Status Identification:

This handler should be inspected as a (check each appropriate category after considering exemptions).

A. ___ Transporter - complete Appendix B

B. Generator Status Identification 372.1

1. ___ Category 1 - Small Quantity Generator - Conditionally Exempt - generates less than 100 kg/mo and stores less than 100 kg. - 372.1(e)(1)(vii)(a) Complete Part II, 1A.

2. ___ Category 2 - Small Quantity Generator - generates less than 100 kg/mo and stores more than 100 kg but less than 1,000 kg. - 372.2(a)(8)(vi) - Complete Part II, 1B.

3. X Category 3 - Small Quantity Generator - subject to reduced generator requirements -generates more than 100 kg/mo but less than 1,000 kg/mo and stores less than 1,000 kg. - 372.2(a)(8)(iii) - Complete Part II, 1C.

4. ___ Category 4 - Generator - generates and/or stores 1,000 kilograms or more per month or generated acute hazardous waste in quantities greater than those specified in Part 372.1(e)(1)(v). Complete Part II, Questions 2-7. (Generators over sole source aquifers also complete Appendix A.)

C. Treatment, Storage or Disposal Facility Status

1. Hazardous waste is generated and stored on-site. If so:

(a) No Has hazardous waste been stored on-site longer than 90 days? 373-1.1(d)(1)(iii) - If yes, complete Appendix A.

(b) No Has more than 8,800 gallons of hazardous waste been stored in containers? 373-1.1(d)(1)(iii)(a) - If yes, complete Appendix A.

(c) No Has more than 20,000 gallons of hazardous waste been stored in tanks? 373-1.1(d)(1)(iii)(b) - If yes, complete Appendix A.

2. No Hazardous waste is received from off-site and not beneficially used, reused or legitimately recycled or stored. If yes, complete Appendix A.

3. ___ Hazardous waste is treated on-site. If yes, complete appropriate portion of this report.

4. No Hazardous waste is disposed on on-site. If yes, complete appropriate portion of this report.

3. Exemptions

A. Generator Exemptions

(1) ___ Not a regulated handler (be sure to indicate why in Part I 1F and 1G and/or in appropriate exemption below - for example the company notified for precautionary reasons or the waste generated is not hazardous as specified in 371.1(e)(2).

(2) ___ Delisted hazardous waste. IDENTIFY the waste that was delisted: (If the company is in the delisting process they are still regulated until their delisting petition is favorably approved). Complete appropriate parts depending on company status.

_____

_____

(3) ___ Exemption for used engine lubricating oil. 372.1(e)(8)

(4) ___ Exemption for publicly owned treatment works. 372.1(e)(4)

(5) ___ Samples collected for testing. 372.1(e)(5)

(6) ___ Residues of hazardous waste in empty containers. 372.1(e)(6)

(7) ___ A hazardous waste which is generated in a product or raw material storage tank, a product or raw material transport vehicle or vessel, a product or raw material pipeline, or in a manufacturing process unit or an associated non-waste treatment manufacturing unit is not subject to regulation until it exits the unit in which it was generated, unless the unit is a surface impoundment, or unless the hazardous waste remains in the unit more than 90 days after the unit ceases to be operated for manufacturing, or for storage or transportation of product or raw materials. 372.1(e)(7).

B. TSD Exemptions

1. TSD exemptions - 373-1.1(d)(1) (for facilities and operations that manage hazardous waste other than waste oil).

(a) ___ Storage and recycling or recyclable materials specified in Part 373-1.1(d)(1)(vi).

(b) ___ Storage of hazardous wastes specified in 373-1.1(d)(1)(vii). Must meet Part 374 requirements.

(c) ___ Recycling of Hazardous Wastes 373-1.1(d)(1)(viii). Parts 373-2.2(c), 372.4(b), 372.4(d)(1) must be complied with (Storage of wastes prior to recycling is not exempt under this subparagraph)

- This exemption does not apply to commercial facilities which recycle listed hazardous wastes or hazardous waste sludges received from off-site or burn these wastes for energy recovery;

- Commercial facilities that reclaim precious metals from hazardous wastes do qualify;

- This exemption does not apply to boiler and industrial furnaces that burn hazardous wastes for energy recovery if the waste stream has a heat value of less than 8,000 BTU/lb.

(d) ___ Totally enclosed treatment facility - 373-1.1(d)(1)(xi).

(e) ___ Elementary neutralization units or wastewater treatment units other than units located at commercial facilities. Units utilized only to neutralize or treat hazardous waste from recycling characteristic hazardous wastes or for precious metal recovery at commercial facilities are exempt. Must meet 373-3.2, 373-3.3, 373-3.4 and storage requirements of 373-3.9, 373-3.10(k) and (l). Containers and tanks must be marked with the words "Hazardous Waste" and dated where applicable. - 373-1.1(d)(1)(xii) (Complete Appendix Q).

(f) ___ The addition of absorbent material with the purpose of preparing the waste for incineration or to fill void spaces in containers intended for land disposal. If yes, complete Part II 3.D.3, 3.D.4, 3.D.9. - 373-1.1(d)(1)(xvii).

2. TSD exemptions - 373-1.1(d)(2) (for facilities and operations that manage waste oils).

   (a) ___ Storage or treatment of waste oil generated on-site prior to its beneficial use or reuse or legitimate recycling or reclamation if the waste oil is not a listed hazardous waste, and the waste oil is not a hazardous sludge. 373-1.1(d)(2)(ii). If yes, complete Part II: 2D, 2E, 3C, 3D, 5, 6, 7, Appendix O (if required).

   (b) ___ Exemptions for storage of waste oil at an energy recovery facility prior to its on-site combustion of such waste oils are not listed hazardous wastes, waste oils are not hazardous sludges, and the facility stored less than 80,000 gallons of waste oil. 373-1.1(d)(2)(iii). If yes, complete Part II: 2D, 2E, 3C, 3C, 5, 6, 7.

   (c) ___ Combustion units that recover energy from waste oil, other than listed hazardous waste and sludges and the related treatment on-site of such combustion units. 373-1.1(d)(2)(iv).

3. TSD exemptions - (for facilities and operations that manage hazardous waste or waste oils).

   (a) ___ Storage of hazardous waste generated and stored on-site for 90 days or less and 8,800 gallons or less is stored in containers or 20,000 gallons or less is stored in tanks. The facility can not be located in a geographical area overlying a sole source aquifer. If yes, complete Part II, 2B, 3. 373-1.1(d)(1)(iii).

   (b) ___ Storage and treatment of hazardous waste on-site of generation if generated less than 100 kilograms and stored less than 1,000 kilograms of hazardous waste in each calendar month and not generate or store acute hazardous waste as described in 373-1.1(d)(1)(i)(b). 373-1.1(d)(1)(v).

   (c) ___ Treatment or containment activities during an immediate response 373-1.1(d)(1)(xiii).

   (d) ___ Accumulation areas. If yes, complete Part II: 3A. 373-1.1(d)(1)(xiv).

   (e) ___ Storage of manifested shipments of hazardous waste in containers or vehicles by a transporter at its own transfer facility for 5 days or less. If yes, complete Appendix B. 373-1.1(d)(1)(xv).

Part II

Generator Inspection Section

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

1. Requirements Exempt and Small Quantity Generator (Category 1-3 Generators):

   A. Category 1 - The conditionally exempt generator has:

      1. ___ made a hazardous waste determination - 372.1(e)(1)(vii)(a). ___

      2. ___ accumulated no more than 100 kg of hazardous waste on-site - 372.1(e)(1)(vii)(b). ___

      3. ___ disposed of hazardous waste in an authorized, permitted or licensed on-site or off-site facility - 372.1(e)(1)(vii)(c). ___

      4. ___ ensured delivery to an off-site facility by a transporter authorized under Part 364 or by the generator himself - 372.1(e)(1)(vii)(d). ___

   B. Category 2 - The generator who generates less than 100 kg/month and stores between 100-1000 kg has complied with the following:

      General Requirement - Items 2A-E (pg. II-5)
      Manifest & Reporting - Item 4A-N (pgs. II-9, 10)

      1. ___ use tanks that are properly sheltered and protected to prevent spillage, seepage or any discharge - 372.2(a)(8)(vi)(a). ___

      2. ___ keep containers and tanks holding hazardous waste closed during storage except to add or remove wastes. Containers and tanks must not be opened, handled or stored in a manner which may rupture the tank or containers or cause them to leak. Tanks and containers must be inspected at least quarterly for leaks or damage - 372.2(a)(8)(vi)(b). ___

      3. ___ use tanks that are designed, constructed or operated in accordance with whichever of the following requirements are in effect in the municipality where the facility is located: 372.2(a)(8)(vi)(c). ___

5/89

Table:	Table:
X Violations	X Satisfactory NA Not Applicable

(a) ___ the State Uniform Fire Protection and Building Code Title 9 (B) NYCRR, Subchapter C. including the National Fire Protection Association Flammable and Combustible Liquids Code (NFPA-30) - 372.2(a)(8)(vi)(c)(1), or ___

(b) ___ the applicable local building and fire codes - 372.(a)(8)(vi)(c)(2). ___

4. ___ the quantity of waste accumulated on-site must never exceed 1,000 kilograms - 372.2(a)(8)(vi)(d). ___

C. Category 3 - The generator subject to reduced requirements has complied with the following:

General Requirements - Complete Items 2A-E (pg. II-5)
Manifest & Reporting - Complete Items 4A-N (pgs. II-9, 10)
Container Requirements - Complete Item 3C,
Item 3D, questions 1-9 [except for Question 8(a)] (pgs. II-5, 6)
Preparedness & Prevention - Complete Items 6A-F (pgs. II-12, 13)

1. ___ quantity of waste on-site never exceeds 1000 kg and may be stored for up to 180 days unless the disposal facility is 200 miles or more away. Storage up to 270 days then is allowed. - 372.2(a)(8)(iii)(a). X

2. ___ at all times there must be at least one employee on-site or on call with the responsibility for coordinating emergency measures - 372.2(a)(8)(iii)(e)(1). X

3. ___ the name and phone number of the emergency coordinator must be posted next to the telephone - 372.2(a)(8)(iii)(e)(2)(i). X

4. ___ location of fire extinguishers and spill control material and, if present, fire alarm must be posted next to the telephone - 372.(a)(8)(iii)(e)(2)(ii). X

5. ___ telephone number of the fire department must be posted next to the phone unless the facility has a direct alarm - 372.2(a)(8)(iii)(e)(2)(iii). X

6. X ensure that all employees are thoroughly familiar with proper waste handling and emergency procedures - 372.2(a)(8)(iii)(e)(3). ___

7. ___ the emergency coordinator or a designee have responded applicably to any emergencies that have arisen - 372-2(a)(8)(iii)(e)(4). NA

[for storage in tanks complete the following section - 373-3.10(1)]

X Violations

X Satisfactory
NA Not Applicable

as per conversation w/ A. Gara 8/1/

8. ___ the owner or operator must take precautions to prevent accidental ignition of ignitable or reactive wastes. "No Smoking" signs must be placed wherever there is a hazard from either waste - 373-3.2(h)(1). X

9. ___ the treatment, storage or disposal of ignitable or reactive waste, and the mixture or commingling of incompatible waste must be conducted so that it does not: NA

(a) ___ generate extreme heat or pressure, fire or explosions or violent reactions - 373-3.2(h)(2)(i). ___

(b) ___ produce uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to threaten human health - 373-3.2(h)(2)(ii). ___

(c) ___ produce uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosion - 373-3.2(h)(2)(iii). ___

(d) ___ damage the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv). ___

(e) ___ through other like means threaten human health or the environment - 373-3.2(h)(2)(v). ___

10. ___ hazardous wastes or treatment reagents must not be placed in a tank if they could cause the tank or its inner liner to fail - 373-3.10(1)(2)(ii). ___

11. ___ uncovered tanks must be operated to ensure at least 60 centimeters (2 feet) of freeboard, unless there is adequate containment - 373-3.10(1)(2)(iii). ___

12. ___ where hazardous waste is continuously fed into a tank, the tank must be equipped with a means to stop this inflow - 373-3.10(1)(2)(iv). ___

13. ___ the owner or operator must mark all tanks with the words "Hazardous Waste" and with other words that identify the contents of the tanks. For underground tanks, the markings must be placed on a sign in the area above the tank - 373-3.10(1)(2)(v). ___

NA

Tank(s) are inspected each operating day for:

14. ___ discharge control equipment (e.g. waste feed cutoff systems, bypass systems and drainage systems) - 373-3.10(1)(3)(i) ___

15. ___ monitoring equipment (e.g. pressure and temperature gauges) - 373-3.10(1)(3)(ii) ___

16. ___ level of waste in tank to ensure proper freeboard - 373-3.10(1)(3)(iii). ___

Tank(s) are inspected weekly for:

17. ___ corrosion or leaking of fixtures or seams - 373-3.10(1)(3)(iv). ___

18. ___ erosion or obvious signs of leakage (e.g. wet spots or dead vegetation) of the construction materials of, and the area immediately surrounding discharge confinement structures (e.g. dikes) - 373-3.10(1)(3)(iv). ___

19. ___ at closure all hazardous waste must be removed from tanks, discharge control equipment and discharge confinement structures - 373-3.10(1)(4). ___

Special requirements for ignitable or reactive waste:

20. ___ Ignitable or reactive waste is placed in a tank and the waste is stored, treated, rendered or mixed before or immediately after placement in the tank so that the resulting wastes, mixture or dissolution of material is no longer ignitable or reactive - 373-3.10(1)(5)(i)(a)(1). ___

21. ___ Section 373-3.2(h) is complied with - 373-3.10(1)(5)(i)(a)(2). ___

22. ___ the waste is stored or treated in such a way that it is protected from any material or conditions that may cause the waste to ignite or react - 373-3.10(1)(5)(i)(b). ___

23. ___ the tank is used solely for emergencies - 373-3.10(1)(5)(i)(c). ___

24. ___ storage of ignitable or reactive waste in covered tanks complies with the National Fire Protection Association's (NFPA's) buffer zone requirements for tanks, contained in Tables 2-1 thru 2-6 of the "Flammable and Combustible Liquids Codes." - 373-3.10(1)(5)(ii). ___

Incompatible Wastes - 373-3.10(1)(5)(ii):

25. ___ Incompatible wastes, or incompatible wastes and materials must not be placed in the same tank unless 373-3.2(h)(2) is complied with - 373-3.10(1)(6)(i). ___

26. ___ Hazardous waste must not be placed in an unwashed tank which previously held an incompatible waste or material, unless section 373-3.2(h) of the Subpart is complied with - 373-3.10(1)(6)(ii). ___

X Violations

X Satisfactory
NA Not Applicable

For Category 4 generators of Hazardous Waste - complete remainder of Part II.

2. General Requirements

A. ____ The generator has made a determination as to whether or not his solid waste is a hazardous waste - 372.2(a)(2). X

B. ____ The generator has obtained an EPA identification number - 372.2(a)(3). X

C. ____ The generator has packaged the waste in accordance with the applicable USDOT regulations - 372.(a)(4). Not any at present

D. ____ The generator has labeled each package of waste in accordance with the applicable USDOT regulations - 372.2(a)(5).

E. ____ The generator has marked each container or package of waste properly - 372.2(a)(6).

3. On-site Accumulation of Hazardous Waste Prior to Shipment

A. ____ Accumulation areas - 372.2(a)(8)(i)(a).

____ 1. The generator complies with section 373-3.9(b)-(d) [Complete Part II 3.D.3-6.] X

____ 2. The containers are marked with the words "Hazardous Waste" or with other words that identify the contents 372.2(a)(8)(i)(a)(2). Not any

B. ____ All such wastes are shipped off-site to an authorized treatment, storage or disposal (TSD) facility in 90 days or less - 372.2(a)(8)(ii).

C. ____ The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container or tank - 372.2(a)(8)(ii): 373-1.1(d)(1)(iii)(c)(2), 373-1.1(d)(1)(iv)(d).

D. Standards for management of containers - 372.2(a)(8)(ii); 373-3.9 (This section will also be completed for TSD's as referred to from Appendix A.)

Violations | Satisfactory
NA Not Applicable

1. What type of containers are used for accumulation? Describe the size, type. (e.g., 12 fifty-five gallon drums of waste acetone).

55 gal steel drums

2. ___ Each container is marked with the word "Hazardous Waste." 372.2(a)(8): 373-1.1(d)(1)(iii) (c)(3), 373-1.1(d)(1)(iv)(d). — not any

3. ___ The containers appear to be in good condition and are not in danger of leaking. (If containers are leaking, describe the type, condition and number that are leaking or corroded. Be detailed and specific) - 373-3.9(b). — ✓

4. ___ Hazardous waste is stored in containers made of compatible materials - 373-3.9(c). (If not, please explain). — X

5. ___ All containers except those in use are closed - 373-3.9(d)(1). — not any

6. ___ Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the container or cause it to leak - 373-3.9(d)(2). — ✓

7. X The storage area is inspected at least weekly - 373-3.9(e). — ___

8. The generator complies with the following special requirements related to storage of ignitable or reactive wastes. 373-3.9(f):

Indicate: | Indicate:

X Violations | X Satisfactory
NA Not Applicable

As per conversation w/ A. Cara 8/11

(a) ___ Containers holding ignitable or reactive waste are located at least 15 meters (50 feet) from the facility property line - 373-3.9(f). ___

(b) ___ Generator has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste - 373-3.2(h)(1). ___

(c) ___ Generator has placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 373-3.2(h)(1). ___

9. The generator complies with the following special requirements related to incompatible wastes: 373-3.9(g). NA

(a) The treatment, storage or disposal of ignitable or reactive wastes, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials, is conducted to prevent: 373-3.2(h)(2).

(1) ___ the generation of extreme heat or pressure, fire or explosion, or violent reaction - 373-3.2(h)(2)(i). ___

(2) ___ production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(ii). ___

(3) ___ production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(iii). ___

(4) ___ damage to the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv). ___

(5) ___ a threat to human health or the environment - 373-3.2(h)(2)(v). ___

(b) ___ Incompatible wastes, or incompatible wastes and materials, are not placed in the same container - 373-3.9(g)(1). ___

(c) ___ Hazardous waste must not be placed in an unwashed container that previously held an incompatible waste or material - 373-3.9(g)(2). ___

(d) ___ Hazardous waste in containers stored nearby incompatible waste or material is separated from the incompatible waste by a dike, berm, wall or other device - 373-3.9(g)(3). ___

X Violations

X Satisfactory
NA Not Applicable

10. Special requirements for generators over sole source aquifers: 373-1.1(d)(1)(iv) NA

(a) ___ the facility submits written notification to the regional office that they qualify for the exemption under 373-1.1(d)(1)(iv) and submit a TSD annual report - 373-1.1(d)(1)(iv)(c).

(b) ___ the facility complies with the requirements of ECL Article 17 - 373-1.1(d)(1)(iv)(e). X

(c) ___ The container storage areas are within a secondary containment system designed and and operated in accordance with the following: 373-1.1(d)(1)(iv)(f). X

(1) ___ the base under the containers must be free of cracks or gaps and sufficiently impervious to contain collected material until it is removed - 373-2.9(f)(1)(i). X

(2) ___ the base must be sloped or the containment system otherwise designed and operated to drain and remove liquid unless the containers are elevated or protected from contact with accumulated liquids - 373-2.9(f)(1)(ii). X

(3) ___ the containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids are not considered in this determination - 373-2.9(f)(1)(iii). X

(4) ___ Run-on is prevented unless the system has sufficient excess capacity to that required in (3) - 373-2.9(f)(1)(iv). X

(5) ___ Accumulated waste and precipitation must be removed as necessary to prevent overflow 373-2.9(f)(1)(v). X

X Violations

X Satisfactory
NA Not Applicable

(d) Storage areas that have containers with no free liquid do not need a containment system provided either of the following is met: 373-2.9(f)(2)

(1) ___ the storage area is sloped or designed to drain and remove accumulated liquid - 373-2.9(f)(2)(i). X

(2) ___ the containers are elevated or protected from contact with accumulated liquid - 373-2.9(f)(2)(ii). X

(e) ___ Storage areas that contain F020-F027 with no free liquid must have a containment system as described in (c) 373-2.9(f)(3). X

E. Standards for management of tanks: 373-3.10

1. ___ Generators complete Appendix O except for Section 373-3.10(h)(3); Items 7C1-5 (pages O-14 to O-15). [In addition, sections 373-3.7 and 3.8 which are cross-referenced do not apply except for section 373-3.7(b) and (e)].

2. ___ Generators over sole-source aquifers complete Appendix O except for Section 373-3.10(h)(3), Items 7C1-5 (pages O-14 to O-15). [Requirements of section 373-3.8 do not apply.]

4. Manifest Records and Reporting: 372.2(b)

A. ___ It appears, from the available information, that there is manifest copy available for each hazardous waste shipment off-site that has been made - 372.2(b)(5)(i). X

If "violation" checked or "don't know," please elaborate.

1-2 drums/mo

B. Describe the approximate size of an average shipment made and how many shipments per month? X

C. ___ The transporter has a valid Part 364 permit or is otherwise authorized to transport the waste to the designated facility - 372.2(b)(5)(ii). X

D. Each manifest (a representative sample) has the following information: 372.2(b)(1); Appendix 30.

Key:

X Violations

Key:

X Satisfactory
NA Not Applicable

		Generator	Transporter 1	Transporter 2	TSDF	
1. ___	Name of	X	X	X	X	X
2. ___	EPA ID No. of	X	X	X	X	X
3. ___	Mailing Address of	X	X	X	X	X
4. ___	Telephone No. of	X	X	X	X	X
5. ___	Manifest Document #					X
6. ___	The proper USDOT description.					X
7. ___ ___	The appropriate: X quantity, X container number, container type, and X waste type by units of weight or volume.					X
8. ___	Signed certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the USDOT and NYSDEC - 372.2(a)(4) and 372.2(a)(5) and 372.2(a)(6).					X
9. ___	Signed copies of the manifest records have been retained at the facility for at least three years - 372.2(c)(1)(i).					X

E. ___ The generator must distribute copies of the manifest as specified on the manifest form - 372.2(b)(3). X

F. ___ The generator has received signed copies (from the TSD facility) of all manifests for wastes shipped off-site more than 20 days ago: X

___ If not, exception reports have been submitted covering these shipments - 372.2(c)(3) NA

G. ___ A generator annual report has been prepared and sent to the Department - 372.2(c)(2). X

H. For international shipments the generator has done the following: 372.5. NA

1. ___ EPA and the Department have been notified 60 days prior to shipment of hazardous waste destined for treatment, storage or disposal outside the United States - 372.5(c)(1). ___

2. ___ Delivery of the wastes has been confirmed by the consignee within 90 days of acceptance by initial transporter - 372.5(e)(2). ___

Indicate: | Indicate:

X Violations | X Satisfactory
NA Not Applicable

As per conversation w/ A. Lou 8/11

3. ___ Primary exporters of hazardous waste must file with the Administrator and the Department no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year - 372.5(b)(1). ___

I. ___ Has complied with interstate shipments - 372.6 NA

J. ___ Has complied with shipments by rail or water (bulk) - 372.7 NA

K. ___ Copies of all records have been kept for at least three years (e.g., annual reports, manifests, exception reports, sampling data) - 372.2(c)(1)(i),(ii), and (iii). X

L. ___ All records required under this subdivision were furnished upon request, or made available at a reasonable time for inspection - 372.2(c)(1)(iv). X

M. ___ There is written communication that the designated treatment, storage or disposal facility is an authorized treatment, storage or disposal facility for the particular wastes being offered for shipment and has capacity to accept the hazardous waste set forth on the manifest and will assure the ultimate disposal method is followed - 372.2(b)(2)(i). X

N. ___ There is written communication that the designated transporter is authorized to deliver the waste to the facility on the manifest - 372.2(b)(2)(ii). X

5. Personnel Training - 372.2(a)(8)(ii) and 373-3.2(g)

A. There is a:

1. ___ written description of the job title for each position at the facility related to hazardous waste management and name of the employee filling each job - 373-3.2(g)(4)(i) ___

2. ___ written job description for each position - 373-3.2(g)(4)(ii) ___

3. ___ written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii) ___

4. ___ records that document the training or job experience required has been given to and completed by facility personnel - 373-3.2(g)(4)(iv). ___

X Violations X Satisfactory
NA Not Applicable

B. ___ The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. 373-3.2(g)(1)(i),(ii) and (iii). The components are: ___

1. ___ Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; ___

2. ___ Key parameters for automated waste feed cutoff systems; ___

3. ___ Communications or alarm systems; ___

4. ___ Response to fires and explosions; ___

5. ___ Response to groundwater contamination incidents; and ___

6. ___ Shutdown of operations. ___

C. ___ Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment. 373-3.2(g)(2). ___

D. ___ Facility personnel have taken part in an annual review of the initial training required - 373-3.2(g)(3). ___

E. ___ Training records on current personnel have been kept permanently at the facility (until closure) - 373-3.2(g)(5). ___

F. ___ Training records on former employees have been kept for at least three years from the date the employee last worked at a facility - 373-3.2(g)(5). ___

6. <u>Preparedness and Prevention</u> - 372.2(a)(8)(ii); 373-3.3

A. ___ The facility is maintained and operated to minimize the possibility of a fire or explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water - 373-3.3(b). X

B. The facility must be equipped with the following (Check missing equipment if needed in this facility's particular operations.) - 373-3.3(c):

X Violations

X Satisfactory
NA Not Applicable

1. ___ An internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel; X

2. ___ A device, such as a telephone or a hand-held, two-way radio capable of summoning emergency assistance from local police departments, fire departments or state or local emergency response teams; X

3. ___ Portable fire extinguishers, fire control equipment; X

4. ___ Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers, or water spray systems. X

C. ___ Facility communications or alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure their proper operation in time of emergency - 373-3.3(d). X

D. ___ Personnel involved in hazardous waste operations have immediate access to an internal alarm or emergency communication device - 373-3.3(e). X

E. ___ The facility has the required aisle space - 373-3.3(f) (Inspections should be able to be made of each drum and space should be sufficient to fight a fire). X

F. The facility owner or operator has made an attempt in good faith to make the following arrangements with local authorities, as appropriate for the type of waste handled at the facility and the potential need for the services of these organizations - 373-3.3(g)(1):

1. ___ Arrangements to familiarize police, fire departments and emergency response teams with the functions and layout of the facility; X

2. ___ Where more than one police and fire department might respond to an emergency, an agreement designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to primary emergency authority; X

3. ___ Agreements with government emergency response teams, emergency response contractors, and equipment suppliers; X

X Violations

X Satisfactory
NA Not Applicable

4. ___ Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illness which could result from fires, explosions or releases at the facility; and

5. ___ Where state or local authorities decline to enter into such arrangements, the owner or operator has documented the refusal in the operating record. NA

7. Contingency Plan and Emergency Procedures - 372.2(a)(8)(ii); 373-3.4

A. ___ The facility has a contingency plan or some other emergency plan which incorporates hazardous waste management. ___

B. The following are included in the contingency plan - 373-3.4(c):

1. ___ A description of actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water; ___

2. ___ A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and state and local emergency response teams to coordinate emergency services; ___

3. ___ Names, addresses and phone numbers of all persons qualified to act as emergency coordinator; ___

4. ___ A list of all emergency equipment at the facility, and decontamination equipment, where this equipment is required; ___

5. ___ The location and the physical description of each item on the list, and a brief outline of its capabilities; ___

6. ___ An evacuation plan for facility personnel, where there is a possibility that evacuation could be necessary. ___

C. ___ Copies of the contingency plan are maintained at the facility. 373-3.4(d)(1) ___

D. ___ Copies of the contingency plan have been submitted to all local police departments, fire departments, hospitals, and state and local emergency response teams that may be called upon to provide emergency services. 373-3.4(d)(2) ___

E. ___ The contingency plan has been amended. 373-3.4(e) ___

F. ___ There was at least one employee either on the facility premises or on call with the responsibility for coordinating all emergency response measures - 373-3.4(f) ___

G. ___ During a past emergency situation the emergency coordinator (or his designee when the emergency coordinator is not on call) immediately activated emergency procedures - 373-3.4(g). ___

The following was done:

1. ___ Activated internal facility alarms or communication systems; ___

2. ___ Notified appropriate state or local agencies; ___

3. ___ Immediately identified the character, exact source, amount and a real extent of any released materials; ___

4. ___ The emergency coordinator assessed possible hazards to human health and the environment; ___

5. ___ The emergency coordinator, after determining that that facility had a release, fire or explosion which could threaten human health or the environment outside the facility, reported his findings; ___

6. ___ During the emergency, the emergency coordinator took all reasonable measures necessary to ensure that fire, explosions and releases do not occur, recur or spread to other hazardous waste; ___

X Violations

X Satisfactory
NA Not Applicable

7. ___ The emergency coordinator monitored for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, where appropriate during the facility's response to the emergency; ___

8. ___ The emergency coordinator provided for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that resulted from a release, fire or explosion at the facility; ___

9. ___ The emergency coordinator ensured that in the affected area no waste that may be incompatible with the released material was treated, stored or disposed of prior to cleanup procedures being completed; ___

10. ___ The emergency coordinator ensured that all emergency equipment listed in the contingency plan was cleaned and fitted for its intended use before operations were resumed; ___

11. ___ The owner or operator notified the Commissioner that the facility is in compliance with Part 373-3.4(g)(8) before operations were resumed in the affected areas of the facility; ___

12. ___ The owner or operator noted in the operating record the time, date and details of the incident that required implementation of the contingency plan; ___

13. ___ The owner or operator submitted a complete written report on the incident within 15 days after the incident occurred. ___

RCRA LAND DISPOSAL RESTRICTION INSPECTION

GENERATOR CHECKLIST

GENERATOR REQUIREMENTS

A. BDAT Treatability Group - Treatment Standards Identification

1. F-Solvent Wastes: Does the generator correctly determine the appropriate treatability group of the waste?

____ Yes ____ No ____ NA

If yes, check the appropriate treatability group.

____ Wastewaters containing solvents (less than or equal to 1% TOC by weight)
____ Pharmaceutical wastewater containing spent methylene chloride
__X__ All other spent solvent wastes

2. California List Wastes: Does the generator correctly determine the appropriate treatment standard of the waste? NA

a. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 50 but less 500 ppm, is the treatment in accordance with existing TSCA thermal treatment regulations for burning in high efficiency boilers (40 CFR 761.60) or incineration (40 CFR 761.70)?

____ Yes ____ No ____ NA

If yes, specify the method: _____

b. For liquid hazardous waste that contains PCBs at concentrations greater than or equal to 500 ppm, is the waste incinerated or disposed of by other approved alternate methods (40 CFR 761. 60 (e))?

____ Yes ____ No ____ NA

If yes, specify the method and state whether the facility has submitted a written request to the Regional Administrator or Assistant Administrator for an exemption from the incineration requirement:

_____
_____
_____

Revised 11-03-87

II. Waste Analysis

1. F-Solvent Wastes

a. Does the generator determine whether the F-solvent waste exceeds treatment standards?

_____ Yes _____ No _____ NA

How was this determination made?

- Knowledge of waste

_____ Yes _____ No

If yes, note how this is adequate: _____

- TCLP

_____ Yes _____ No

If yes, provide the date of last test, the frequency of testing, and note any problems. Attach test results.

_____

b. Does the F-solvent waste exceed applicable treatability group treatment standards upon generation [268.7(a)(2)]?

_____ Yes _____ No _____ NA

If yes, specify the waste stream: _____

c. Does the generator dilute the F-solvent waste as a substitute for adequate treatment [268.3]?

_____ Yes _____ No _____ NA

d. How does the generator test F-solvent waste when a process or waste stream changes?

_____

2. California List Wastes

a. Does the generator determine whether the waste is a liquid according to the Paint Filter Liquids Test (PFLT method 9095) as described by SW-846?

_____ Yes _____ No _____ NA

[illegible] If the waste is a liquid [illegible] is an absorbent added to the waste?

____ Yes ____ No ____ NA

What type of absorbent is used? _____

Check the types of waste to which absorbent is added.

___ Liquid hazardous waste having a pH less than or equal to 2

___ Liquid hazardous waste containing HOCs in concentrations greater than or equal to 1,000 mg/L, but less than 10,000 mg/L

___ Liquid hazardous waste containing metals

___ Liquid hazardous waste containing free cyanides

c. Does the generator determine whether the concentration levels (not extract or filtrate) in the waste equal or exceed the prohibition levels or whether the waste has a pH of less than or equal to 2.0 based on:

- Knowledge of wastes

____ Yes ____ No ____ NA

If yes, note how this is adequate: _____

Testing

____ Yes ____ No ____ NA

If yes, list test method used: _____

d. Does the generator determine if concentration levels in PFLT extract exceed cyanide and metals concentration levels?

____ Yes ____ No ____ NA

- If yes, list test method used and constituent and concentration levels that exceeded prohibition levels: _____

e. Does the generator dilute the waste as a substitute for adequate treatment [268.3]?

____ Yes ____ No ____ NA

C. Management

1. On-Site Management

Is waste that exceeds the treatment standards treated, stored, or disposed on-site?

_____ Yes _____ No

If yes, the TSD Checklist must be completed.

2. Off-Site Management

a. Does the generator ship any waste that exceeds the treatment standards to an off-site treatment or storage facility?

X Yes _____ No

If yes, does the generator provide notification to the treatment or storage facility [268.7(a)(1)]?

X Yes _____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	X Yes	_____ No
Applicable treatment standards	_____ Yes	X No
Manifest number	X Yes	_____ No
Waste analysis data, if available	_____ Yes	X No

Identify off-site treatment or storage facilities: Rollwood Chemical NJD 980536193

b. Does the generator ship any waste that meets the treatment standards to an off-site disposal facility?

_____ Yes _____ No

If yes, does the generator provide notification and certification to the disposal facility [268.7(a)(2)]?

_____ Yes _____ No

If yes, does notification contain the following?

EPA Hazardous waste number(s)	____ Yes	____ No
Applicable treatment standards	____ Yes	____ No
Manifest number	____ Yes	____ No
Waste analysis data, if available	____ Yes	____ No
Certification that the waste meets treatment standards	____ Yes	____ No

Identify off-site land disposal facilities: _____

c. If the waste is subject to a nationwide variance (e.g., solvent-water mixtures less than 1%), extension (268.5), or petition (268.6), does the generator provide notification to the off-site disposal facility that the waste is exempt from land disposal restrictions [268.7(a)(3)]?

____ Yes ____ No ____ NA

D. Treatment Using RCRA 264/265 Exempt Units or Processes
(i.e., boilers, furnaces, distillation units, wastewater treatment units, elementary neutralization, etc.)

Are treatment residuals generated from units or processes exempt under RCRA 264/265?

X Yes ____ No

If yes, list types of waste treatment units and processes

methylene chloride distillers for 111

SULZER METCO

Sulzer Metco (US) Inc.
325 Duffy Avenue
Hicksville, NY 11801
Phone: (516) 338-2550 • Fax: (516) 338-2575

914-737-9244

PURCHASE ORDER

PAGE OF

ORDER DATE	PO NUMBER	AMENDMENT
11/22/96	204059	

DIRECT CORRESPONDENCE TO

BUYER	TELEPHONE NUMBER
MARILYNN BLOCH	516-3381300

TO: NDL ORGANIZATION INC.
P.O. BOX 791
PEEKSKILL NY 10566
914-737-7200

INVOICE TO ADDRESS: P.O. BOX 1006., WESTBURY, N.Y. 11590

DO NOT DUPLICATE ORDER CONFIRMED TO	NAME	DATE
	PETER PASTORELL	11/22/96

SHIP TO ADDRESS: 1101 PROSPECT AVE.,WESTBURY,NY 11590

TERMS	VENDOR NO.	SHIP VIA	FOB
NET 30	50923	VEND TRUCK	SP

METCO INSPEC	TAXABLE	NOT SUBJECT TO SALES TAX (SEE PAR 21 UNDER "TERMS & COND".)	SPECIAL TERMS, CONDITIONS OR INSTRUCTIONS ATTACHED	METCO SOURCE INSPECTION	TO AVOID REJECTION OF SHIPMENT, MATERIAL MUST BE ACCOMPANIED BY THESE CERTIFICATES.	CERTIFICATE OF COMPLIANCE	MATERIAL CERTIFICATION
	X						

THESE ITEMS ARE APPLICABLE WHEN CHECKED (X)

ITEM	METCO PART NUMBER	REV	DESCRIPTION	ORDER QUANTITY	UM	SHIP TO ARRIVE MO	DAY	YR	BILLING UNIT PRICE	UM
			USHA Material Safety Sheet shall be completed as per attached instructions or Purchase Specification if required. We reserve the right to Refuse & Return collect any item under this order that is received more than one (1) week ahead of specified Delivery Date.							
1	I95000		ENVIRONMENTAL South REMOVAL AND DISPOSAL AT BARNWELL, ~~NORTH~~ CAROLINA OR WASTE THORIATED TUNGSTEN IN FIVE (5) GALLON CONTAINERS CATEGORY D, DRUM WEIGHT GREATER THAN 50 POUNDS	9	EA	12	31	96	830.0000	E
2	I95000		ENVIRONMENTAL GAS PROPORTIONAL COUNTING (WINDOWLESS) WIPES	9	EA	12	31	96	12.5000	E
3	I95000		ENVIRONMENTAL ZONE CHARGE OUTSIDE SERVICE AREA	1	EA	12	31	96	25.0000	E
			Total Order Amount						7607.50	
			REQUISITION# 10208 REQUESTOR CONNIE CONROY, PROSPECT							

INSTRUCTIONS TO VENDOR

INSURANCE

- IF TERMS ARE F.O.B. SHIPPING POINT, INSURE PARCEL POST SHIPMENTS OF $50 OR MORE AT $50.
- RELEASE OTHER SHIPMENTS TO CARRIER WITH NO VALUATION.

CERTIFICATION

- WHEN SPECIFIED ABOVE, ASSURE THAT CERTIFICATE ACCOMPANIES MATERIAL BEING SHIPPED.

INVOICES & PACKING LIST

- SHOW PURCHASE ORDER NO. ON ALL DOCUMENTS AND PACKAGES.
- ENCLOSE PACKING LIST WITH EACH SHIPMENT.
- MAIL INVOICE IN DUPLICATE TO ADDRESS SPECIFIED.

By accepting this order, you agree to comply with and be bound by the terms appearing on the face and reverse side hereof and/or attachments hereto. In the event of conflict, the term in conflict appearing on the face or attachment shall apply.

Sulzer Metco

BY Marilynn Bloch

Sign and Return Acceptance Copy Immediately and Confirm "Ship To Arrive" Date(s)

NDL001434

To PURCHASING DEPT.

Date NOVEMBER 20, 1996

To be used for WASTE REMOVAL

Date required

SULZER METCO

REQUEST FOR PURCHASE

REQUISITION NUMBER
10203

THE NDL ORGANIZATION, INC.
POST OFFICE BOX 791
PEEKSKILL, NY 10566

PURCHASE ORDER NO 204059.
CONTACT PETER PASTORELLE
TEL NO (914) 737-7200

SHIP VIA	F.O.B.	TERMS	PROMISED DELIVERY DATE
			12/5/96

GRAY AREAS FOR PURCHASING USE ONLY

ITEM	QUANTITY	DESCRIPTION	TAX	PRICE
1	9	REMOVAL AND DISPOSAL AT BARNWELL, ~~NORTH~~ South CAROLINA		$850.00/EACH
		OF WASTE THORIATED TUNGSTEN IN 5 GALLON CONTAINERS		
		CATEGORY D, DRUM WEIGHT GREATER THAN 50 POUNDS		
2	9	GAS PROPORTIONAL COUNTING (WINDOWLESS) WIPES		$12.50/EACH
3	1	ZONE CHARGE - OUTSIDE SERVICE AREA		$25.00

NOV 21

SUGGESTED SOURCE OF SUPPLY: fax 914-737-9244

TOTAL 7607.5

WORK ORDER NUMBER	CHARGE NUMBER	REQUESTED BY	APPROVED BY	APPROVED BY
	2849.00660	C.L. CONROY EMP# 121569		

BUYER Marilyn Block

DELIVER TO: PLANT DUFFY AVENUE
DEPT. FACILITIES - E,H&S
ATTN.

PURCHASING

the NDL organization, inc.

post office box 7
peekskill, new york 105
(914) 737-72
fax (914) 737-92

FAX TRANSMITTAL

Date 11/22/96

Time 11:45 AM PM

TO: Marilynn Block

Number of Pages 19 [including this one]

FROM: Peter Mastorelli

Comments:

-NEW-

THE NDL ORGANIZATION, INC.
P.O. Box 791
Peekskill, NY 10566
(914)737-7200 FAX (914)737-9244

Printed 10-28-96

RADIOACTIVE WASTE DISPOSAL PRICE LIST

Effective : November 11, 1996

DESCRIPTION	CATEGORY	ITEM	$ COST	TOTAL
SCINTILLATION MEDIA:				
(NO CREDIT GIVEN FOR NON-NDL DRUMS - IN AND OUT PRICE CHARGED ON REMOVAL .)				
30Gal Vials on Delivery	SR	DEL-30G-SR	115.00	
30Gal Vials on Removal	SR	REM-30G-SR	222.85	337.85
30Gal Vials on Delivery	SX (non-radioactive)	DEL-30G-SX	115.00	
30Gal Vials on Removal	SX (non-radioactive)	REM-30G-SX	113.50	228.50
55Gal Vials on Delivery	SR	DEL-55G-SR	195.00	
55Gal Vials on Removal	SR	REM-55G-SR	275.60	470.60
55Gal Vials on Delivery	SX (non-radioactive)	DEL-55G-SX	195.00	
55Gal Vials on Removal	SX (non-radioactive)	REM-55G-SX	114.50	309.50
FOR BETA PLATES:				
(ADDED TO ABOVE TOTAL COSTS):				
30Gal on Removal	SR	ADD-30G-SR-BETA	220.00	
30Gal on Removal	SX(non-radioactive)	ADD-30G-SX-BETA	195.00	
55Gal on Removal	SR	ADD-55G-SR-BETA	400.00	
55Gal on Removal	SX(non-radioactive)	ADD-55G-SX-BETA	350.00	
BULK LIQUIDS: (Pricing is based on outer container)				
Bulk SR Removal	SR	REM-BULK-SR	9.43/GAL	
Bulk SX Removal	SX(non-radioactive)	REM-BULK-SX	8.90/GAL	

***Peekskill Scintillation Assessment on Removal** P2SUL001437 **6.00% OF COST**

*NOTE: Costs for scintillation media (other than bulk liquids) include cost of container. **Removal costs of all scintillation media (including bulk liquid and beta plates) are subject to the 6% Peekskill Assessment** (not a sales tax).

TARIFF NOTES (NON-RADIOACTIVE & NON-HAZARDOUS RATES):

1- **Overweight shipments:** Small Vehicle: if over 70 lbs., add $0.50/lb. or fraction
Straight Truck: if over 300 lbs., add $ 0.02/lb. or fraction
Tractor Trailer: if over 42,000 lbs., add $ 0.75/CWT or fraction, to a 45,000 lb. max.

2- Mileage travelled from NDL's terminal in Peekskill, NY, to point of pick-up or delivery.

3- Mileage travelled from point of origin of shipment to point of destination

4 - **Exclusive use shipments:**
Small Vehicle: additional charge of $35.00/shipment
Straight Truck: additional charge of $ 125.00/shipment
Tractor Trailer: additional charge of $ 175.00/shipment. On truckload shipments, NDL will provide exclusive use service where requested by shipper or consignee. No special notation will be required on the shipping documents. For less that truckload, exclusive use will apply, unless otherwise specified by the shipper or consignee.

5- **Detention of vehicle & driver:**
Small Vehicle: After 30 minutes, fee is $35.00/20 minute period or part thereof
Straight Truck: After 1 hour, fee is $40.00/hour
Tractor Trailer: After 4 hours, fee is $50.00/hour.

6- **Vehicle ordered and not used:** If the shipper requests service and a vehicle is dispatched, and the order for service is cancelled after arrival of vehicle at origin point, the carrier will assess the applicable minimum charge or pick-up and delivery charge, but no line-haul rate. No charge will be assessed if the request for service is cancelled prior to the vehicle being dispatched.

7- **Re-Delivery:** When, through no fault of the carrier, a shipment cannot be delivered when tendered, or after the carrier has made reasonable efforts to effect delivery, and re-delivery is requested, charges for each additional delivery will be assessed at the rates named in the above schedules, applicable from point of origin to final destination, in addition to accrued freight and other lawful charges.

8- **Multiple Stops:** Where the shipper of consignee request to perform multiple stops, such service will be performed subject to the following:
A) The line-haul transportation rate will be assessed from the point of origin to the most distant point of destination.
B) Each stop-off will be charged as follows (excluding origin & final destination):
Small Vehicle: $25.00/stop
Straight Truck: $ 45.00/stop
Tractor Trailer: $ 60.00/stop
C) Point of origin, destination, and all intermediate stops must be listed on one bill of lading

9- **Refused or undelivered shipments:** All shipments refused by the consignee, for any reason beyond the carrier's control, will be returned to the shipper. The charge for such shipment will be the applicable rate from origin to destination, plus 2/3 of the applicable rate from the refused destination to the shipper's original point of origin. The carrier will notify the shipper within 16 normal business hours of such non-delivery for refusal to accept the shipment. Normal business hours are defined as the hours between 9:00 AM and 5:00 PM, Mon. through Fri., excluding national and carrier holidays. If re-delivery is requested, the charge will be as specified in item 7.

NDL TRANSPORT TARIFF, CONT'D
NON-RADIOACTIVE AND/OR NON-HAZARDOUS RATES

ITEM 5 - TRACTOR TRAILER - (Truckload):

MILES (see note 1)	PICK-UP & DELIVERY CHARGE (see note 2)	+	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	$ 279.65	+	$ 1.05
51 TO 100	349.65	+	1.10
101 TO 150	535.27	+	1.15
151 TO 200	722.84	+	1.20
201 TO 250	910.40	+	1.25
251 TO 300	1129.72	+	1.30
301 TO 350	1347.45	+	1.35
351 TO 400	1555.30	+	1.40
401 TO 450	1750.01	+	1.45
451 TO 500	1771.52	+	1.50
501 TO 550	1806.95	+	1.55
551 TO 600	1859.45	+	1.60
601 TO 650	1915.10	+	1.65
651 TO 700	1969.43	+	1.70
701 TO 750	2023.07	+	1.75
751 TO 800	2077.48	+	1.80
801 TO 850	2124.84	+	1.85
851 TO 900	2179.54	+	1.90
901 TO 950	2236.82	+	1.95
951 +	2294.46	+	2.00

MINIMUM CHARGE PER SHIPMENT IS $ 500.00

NDL TRANSPORT TARIFF, CONT'D
NON-RADIOACTIVE AND/OR NON-HAZARDOUS RATES

ITEM 4 - STRAIGHT TRUCK - (Less than Truckload):

MILES (see note 1)	PICK-UP & DELIVERY CHARGE (see note 2)	+	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	$ 90.25	+	$ 0.75
51 TO 100	112.86	+	0.80
101 TO 150	181.59	+	0.85
151 TO 200	233.47	+	0.90
201 TO 250	313.80	+	0.95
251 TO 300	394.32	+	1.00
301 TO 350	476.03	+	1.05
351 TO 400	555.68	+	1.10
401 TO 450	632.85	+	1.15
451 TO 500	647.31	+	1.20
501 TO 550	666.73	+	1.25
551 TO 600	686.24	+	1.30
601 TO 650	712.41	+	1.35
651 TO 700	738.54	+	1.40
701 TO 750	764.63	+	1.45
751 TO 800	791.07	+	1.50
801 TO 850	804.19	+	1.55
851 TO 900	817.30	+	1.60
901 TO 950	843.70	+	1.65
951 +	870.11	+	1.70

MINIMUM CHARGE PER SHIPMENT IS $ 275.00

NDL TRANSPORT TARIFF
Contract Carriage
NON-RADIOACTIVE AND/OR NON-HAZARDOUS RATES

ITEM 3 - SMALL VEHICLE (Maximum Weight/Shipment = 70 lbs):

MILES (see note 1)	PICK-UP & DELIVERY CHARGE (see note 2)	+	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	$ 85.92	+	$ 0.65
51 TO 100	107.99	+	0.70
101 TO 150	175.64	+	0.75
151 TO 200	226.44	+	0.80
201 TO 250	305.69	+	0.85
251 TO 300	385.13	+	0.90
301 TO 350	465.75	+	0.95
351 TO 400	544.32	+	1.00
401 TO 450	620.40	+	1.05
451 TO 500	633.80	+	1.10
501 TO 550	652.81	+	1.15
551 TO 600	679.61	+	1.20
601 TO 650	728.07	+	1.20
651 TO 700	779.26	+	1.20
701 TO 750	829.63	+	1.20
751 TO 800	877.34	+	1.20
801 TO 850	903.49	+	1.20
851 TO 900	929.60	+	1.20
901 TO 950	985.50	+	1.20
951 +	1032.38	+	1.20

MINIMUM CHARGE PER SHIPMENT IS $ 50.00 P2SUL001441

TARIFF NOTES (RADIOACTIVE & HAZARDOUS RATES):

ITEM

1- Overweight shipments:

Straight Truck: if over 300 lbs., add $ 0.10/lb. or fraction — ADD-TAR-S-301+

Tractor Trailer: if over 42,000 lbs., add $ 1.75/CWT or fraction, up to a maximum of 45,000 lbs. — ADD-TAR-T-42001

2- Mileage travelled from NDL's terminal in Peekskill, NY, to point of pick-up or delivery. *****

3- Mileage travelled from point of origin of shipment to point of destination *****

4 - **Exclusive use shipments:**

Straight Truck: additional charge of $ 125.00/shipment — ADD-TAR-S-EXCL

Tractor Trailer: additional charge of $ 300.00/shipment — ADD-TAR-T-EXCL

5- **Detention of vehicle:** after 1 hr., detention of vehicle & driver are:

Straight Truck: $ 40.00/hr. — ADD-S-DEMURAGE

Tractor Trailer: $ 50.00/hr. — ADD-T-DEMURAGE

6- **Vehicle ordered and not used:** If the shipper requests service and a vehicle is dispatched, and the order for service is cancelled after arrival of vehicle at origin point, the carrier will assess the applicable minimum charge or pick-up and delivery charge, but no line-haul rate. No charge will be assessed if the request for service is cancelled prior to the vehicle being dispatched. *****

7- **Re-Delivery:** When, through no fault of the carrier, a shipment cannot be delivered when tendered, or after the carrier has made reasonable efforts to effect delivery, and re-delivery is requested, charges for each additional delivery will be assessed at the rates named in the above schedules, applicable from point of origin to final destination, in addition to accrued freight and other lawful charges. *****

8- **Multiple Stops:** Where the shipper of consignee request to perform multiple stops, such service will be performed subject to the following:

A) The line-haul transportation rate will be assessed from the point of origin to the most distant point of destination.

B) Each stop-off will be charged as follows (excluding origin & final destination):

Straight Truck: $ 45.00/stop — ADD-S-MULTIPLE

Tractor Trailer: $ 60.00/stop — ADD-T-MULTIPLE

C) Point of origin, destination, and all intermediate stops must be listed on one bill of lading

9- **Refused or undelivered shipments:** All shipments refused by the consignee, for any reason beyond the carrier's control, will be returned to the shipper. The charge for such shipment will be the applicable rate from origin to destination, plus 2/3 of the applicable rate from the refused destination to the shipper's original point of origin. The carrier will notify the shipper within 16 normal business hours of such non-delivery for refusal to accept the shipment. Normal business hours are defined as the hours between 9:00 AM and 5:00 PM, Mon. through Fri., excluding national and carrier holidays. If re-delivery is requested, the charge will be as specified in item 7. — ADD-S-REFUSED

NDL TRANSPORT TARIFF, CONT'D
RADIOACTIVE AND/OR HAZARDOUS RATES

ITEM 2 - TRACTOR TRAILER - (Truckload):
(MAXIMUM WEIGHT PER SHIPMENT = 42,000 LBS):

MILES	ITEM	PICK-UP & DELIVERY CHARGE (see note 2)	+	ITEM	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	TAR-TPD-1-50	$ 472.88	+	TAR-TLH-1-50	$ 1.15
51 TO 100	TAR-TPD-51-100	594.09	+	TAR-TLH-51-100	1.20
101 TO 150	TAR-TPD-101-150	711.03	+	TAR-TLH-101-150	1.25
151 TO 200	TAR-TPD-151-200	820.70	+	TAR-TLH-151-200	1.30
201 TO 250	TAR-TPD-201-250	927.21	+	TAR-TLH-201-250	1.35
251 TO 300	TAR-TPD-251-300	1045.03	+	TAR-TLH-251-300	1.40
301 TO 350	TAR-TPD-301-350	1156.89	+	TAR-TLH-301-350	1.45
351 TO 400	TAR-TPD-351-400	1232.50	+	TAR-TLH-351-400	1.50
401 TO 450	TAR-TPD-401-451	1285.71	+	TAR-TLH-401-450	1.55
451 TO 500	TAR-TPD-451-500	1444.06	+	TAR-TLH-451-500	1.60
501 TO 550	TAR-TPD-501-550	1458.86	+	TAR-TLH-501-550	1.65
551 TO 600	TAR-TPD-551-600	1539.74	+	TAR-TLH-551-600	1.70
601 TO 650	TAR-TPD-601-650	1584.45	+	TAR-TLH-601-650	1.75
651 TO 700	TAR-TPD-651-700	1663.31	+	TAR-TLH-651-700	1.80
701 TO 750	TAR-TPD-701-750	1747.57	+	TAR-TLH-701-750	1.85
751 TO 800	TAR-TPD-751-800	1796.78	+	TAR-TLH-751-800	1.90
801 TO 850	TAR-TPD-801-850	1896.60	+	TAR-TLH-801-850	1.95
851 TO 900	TAR-TPD-851-900	1986.02	+	TAR-TLH-851-900	2.00
901 TO 950	TAR-TPD-901-950	2075.12	+	TAR-TLH-901-950	2.05
951 +	TAR-TPD-951+	2122.58	+	TAR-TLH-951+	2.10

MINIMUM CHARGE PER SHIPMENT IS $ 640.00

NDL TRANSPORT TARIFF
Contract Carriage
RADIOACTIVE AND/OR HAZARDOUS RATES

ITEM 1 - STRAIGHT TRUCK - (Less than Truckload):

MILES	ITEM	PICK-UP & DELIVERY CHARGE (see note 2)	+	ITEM	LINE-HAUL RATE PER MILE (see note 3)
1 TO 50	TAR-SPD-1-50	$ 97.29	+	TAR-SLH-1-50	$ 0.80
51 TO 100	TAR-SPD-51-100	121.91	+	TAR-SLH-51-100	0.85
101 TO 150	TAR-SPD-101-150	193.11	+	TAR-SLH-101-150	0.90
151 TO 200	TAR-SPD-151-200	244.74	+	TAR-SLH-151-200	0.95
201 TO 250	TAR-SPD-201-250	330.09	+	TAR-SLH-201-250	1.00
251 TO 300	TAR-SPD-251-300	413.28	+	TAR-SLH-251-300	1.05
301 TO 350	TAR-SPD-301-350	497.28	+	TAR-SLH-301-350	1.10
351 TO 400	TAR-SPD-351-400	580.25	+	TAR-SLH-351-400	1.15
401 TO 450	TAR-SPD-401-450	659.74	+	TAR-SLH-401-450	1.20
451 TO 500	TAR-SPD-451-500	675.59	+	TAR-SLH-451-500	1.25
501 TO 550	TAR-SPD-501-550	691.45	+	TAR-SLH-501-550	1.30
551 TO 600	TAR-SPD-551-600	705.29	+	TAR-SLH-551-600	1.35
601 TO 650	TAR-SPD-601-650	719.40	+	TAR-SLH-601-650	1.40
651 TO 700	TAR-SPD-651-700	733.79	+	TAR-SLH-651-700	1.45
701 TO 750	TAR-SPD-701-750	750.57	+	TAR-SLH-701-750	1.50
751 TO 800	TAR-SPD-751-800	773.09	+	TAR-SLH-751-800	1.55
801 TO 850	TAR-SPD-801-850	804.03	+	TAR-SLH-801-850	1.60
851 TO 900	TAR-SPD-851-900	836.19	+	TAR-SLH-851-900	1.65
901 TO 950	TAR-SPD-901-950	861.28	+	TAR-SLH-901-950	1.70
951 +	TAR-SPD-951+	887.12	+	TAR-SLH-951+	1.75

MINIMUM CHARGE PER SHIPMENT IS $ 340.00 P2SUL001444 TAR-S- MINIMUM

DESCRIPTION	ITEM	$ COST
MISCELLANEOUS SUPPLIES:		
5Gal Ring & Bolt	SUP-5G-RING/BLT	9.75/EACH
Slaked Lime (50 lbs)	SUP-LIME	11.55/BAG
Rad-lite (vermiculite)	SUP-RADLITE	12.40/BAG
Cement Solidification Bottles (solidifies 1 liter):		
1 - 12 Bottles	SUP-CMNT-1TO12	10.25/EACH
13 - 24 Bottles	SUP-CMNT-13TO24	9.45/EACH
25 + Bottles	SUP-CMNT-25+	8.65/EACH
5Gal 7A Steel Drum Lid	SUP-5G-LID	5.25/EACH
55Gal 7A Steel Drum Lid	SUP-55G-LID	13.15/EACH
30Gal 7A Steel Drum Lid	SUP-30G-LID	10.50/EACH
55/30 Gal Rings for 7A Steel Drums	SUP-55/30G-RING	10.50/EACH
Bolts & Nuts for 7A 55/30 rings	SUP-55/30G-N/B	0.75/EACH
5Gal Roll 4 mil Polybags	SUP-5G-POLY	VARIES
55/30Gal Roll 4 mil Polybags	SUP-55/30G-POLY	VARIES
LABELS:		
Fragile This End Up (Roll of 500)	SUP-LAB-FRAGILE	54.10/ROLL
Category SP (Roll of 500)	SUP-LAB-CATSP	68.25/ROLL
Category D (Roll of 500)	SUP-LAB-CATD	68.25/ROLL
Category R (Roll of 500)	SUP-LAB-CATR	68.25/ROLL
Radioactive Material, Low Specific Activity UN2912 (Roll of 500)	SUP-LAB-UN2912	63.00/ROLL
Radioactive Material, Instruments & Articles UN2911 (Roll of 500)	SUP-LAB-UN2911	63.00/ROLL
Radioactive Material, Limited Quantity, N.O.S. UN2910 (Roll of 500)	SUP-LAB-UN2910	63.00/ROLL
Radioactive Material, Special Form, N.O.S. UN2974 (Roll of 500)	SUP-LAB-UN2974	63.00/ROLL
Radioactive Material N.O.S. UN2982 (Roll of 500)	SUP-LAB-UN2982	63.00/ROLL
Radioactive White I Labels - UN2982 (Roll of 500)	SUP-LAB-UN2982W	63.00/ROLL
Class A Unstable (Roll of 500)	SUP-LAB-CLA	63.00/ROLL
EMPTY (Roll of 500)	SUP-LAB-EMPTY	63.00/ROLL
CAUTION-RADIOACTIVE MATERIALS (w/SYMBOL) 6" x 6"	SUP-LAB-CAUTION	0.35/EACH
CAUTION-RADIOACTIVE MATERIALS (INCIN)	SUP-LAB-INCIN	0.70/EACH
Medical Waste (Roll of 500)	SUP-LAB-MEDICAL	105.00/ROLL

DESCRIPTION	ITEM	$ COST
CONTAINERS FOR WASTE:		
B-25 Metal Box (95 cu. ft.)	DEL-B-25-BOX	675.00/EACH
SDC (Storage/Decay/Collection) Containers:		
OPEN HEAD -(can also used for liquid overpacks):		
1Gal Steel SDC Pail (Not For Disposal)	DEL-1G-SDC	10.75/EACH
5Gal Steel SDC Pail (Not For Disposal)	DEL-5G-SDC	13.50/EACH
30Gal Steel SDC Drum (Not For Disposal)	DEL-30G-SDC	61.15/EACH
55Gal Steel SDC Drum (Not For Disposal)	DEL-55G-SDC	79.75/EACH
85Gal Steel SDC Drum (Not For Disposal)	DEL-85G-SDC	109.65/EACH
CLOSED HEAD -(can also used for scintillation bulk liquids and inners for liquid overpacks):		
5Gal Steel SDC Pail with spout	DEL-5G-SDC-S	13.50/EACH
30Gal Steel SDC Drum with spout	DEL-30G-SDC-S	61.15/EACH
2R Containers:		
6" X 14"	DEL-2R-6X14	395.36/EACH
6" X 10"	DEL-2R-6X10	283.58/EACH
4 X 6"	DEL-2R-4X6	210.20/EACH
4 X 6" with 1" thick lead shield	DEL-2R-4X6X1	509.85/EACH
37.5 Gal GRT-3 Fiber Container: Category D	DEL-37.5-FIBR-D	27.30/EACH
19.5 Gal ERT Fiber Container: Category D	DEL-19.5-FIBR-D	17.05/EACH
5 Gal YRT-1 Fiber Container: Category D	DEL-5G-FIBR-D	12.80/EACH

DESCRIPTION	ITEM	$ COST
CALIBRATION SERVICES:		
Pick up or delivery of Radiation Survey Meters WITH SERVICE:		
Picked up with service	CAL-PU-N/C	NO CHARGE
Delivered with service	CAL-DEL-N/C	NO CHARGE
Pick up or delivery of Radiation Survey Meters WITH NO OTHER SERVICE: (**NOTE**: Pick up and delivery billed separately. Applicable zone charges billed extra.)		
Per meter charge - on pick up	CAL-PU	5.00/METER
Per meter charge - on delivery	CAL-DEL	5.00/METER
Minimum Charge - on pick up	CAL-PU-MIN	50.00/TRIP
Minimum Charge - on delivery	CAL-DEL-MIN	50.00/TRIP
Calibration of Radiation Survey Meters (to 4 scales, shipping and/or pick up or delivery charges extra)	CAL-RECD	65.00/METER
Calibration of Meters While Waiting (to 4 scales)	CAL-WAIT	90.00/METER
Additional Scales, after 4	ADD-SCALES	12.00/SCALE
Meter Bench Charge/Estimate Inspection (If meter is repaired, bench charge is credited to repair)	CAL-BENCH	30.00/METER
Labor Charge for Repair of Meter (Minimum labor charge is 1/2 hour)	CAL-LABOR	60.00/HOUR

CALIBRATION REPAIR PARTS:
(Parts billed extra - Cost of parts depend on manufacturer & availablilty)

DESCRIPTION	ITEM	$ COST
HEALTH PHYSICS SERVICES:		
NDL Leak Test (includes two leak tests)	HPS-LEAKTST-TO2	120.00 MINIMUM
Each additional after two leak tests	HPS-LEAKTST-ADD	60.00/TEST
Leak Test Kit	HPS-LEAKTST-KIT	25.00/KIT
Gas Proportional Counting (windowless) wipes:		
1 to 10	HPS-GAS-1TO10	12.50/SAMPLE
11 to 20	HPS-GAS-11TO20	11.50/SAMPLE
21 +	HPS-GAS-21+	10.00/SAMPLE
Gross Alpha/Beta (water and soil)	HPS-ALP/BET-WS	65.00/SAMPLE
Liquid Scintillation Spectrometry:		
1 to 5	HPS-LSS-1TO5	20.00/SAMPLE
6 to 10	HPS-LSS-6TO10	18.50/SAMPLE
11 to 15	HPS-LSS-11TO15	14.50/SAMPLE
16 to 20	HPS-LSS-16TO20	12.50/SAMPLE
21 to 30	HPS-LSS-21TO30	10.00/SAMPLE
31 to 50	HPS-LSS-31TO50	9.50/SAMPLE
51 +	HPS-LSS-51+	9.00/SAMPLE
Air Sampling Collection (plus analysis/field labor)	HPS-AIR	65.00/SAMPLE
Germanium Gamma Spectroscopy (HPGe)	HPS-GSS-NONFLD	110.00/SAMPLE
Germanium Gamma Spectroscopy (HPGe) Field Svc	HPS-GGS-FLD-1	550.00/1 SAMPLE
Additional Samples	HPS-GGS-FLD-ADD	125.00/SAMPLE
Gamma Check on Equipment	HPS-GAMMACHECK	10.00/EACH
G-M Ionization Chamber (per unit):		
Survey meter rental fee - day	HPS-METER-DAY	25.00/DAY
Survey meter rental fee- week	HPS-METER-WEEK	75.00/WEEK
Survey meter rental fee - month	HPS-METER-MONTH	195.00/MONTH
Class C or D Personal Protective Equipment	HPS-C/D-PPE	40.00/OUTFIT/DAY
*Senior Health Physicist	HPS-LABOR-SHP	110.00/HR
*Health Physicist	HPS-LABOR-HP	95.00/HR
*Senior HP Tech	HPS-LABOR-SHPT	65.00/HR
*HP Tech	HPS-LABOR-HPT	50.00/HR
*Decon Tech	HPS-LABOR-DT	40.00/HR
***NOTE:** HP Services - For Holidays, Weekends, after working hrs, or on an Emergency Basis, charges are Time plus 1/2. Hourly rates are based on portal to portal.	HPS-LABOR-ADD	TIME PLUS 1/2

DESCRIPTION	ITEM	$ COST
SURCHARGES AND OTHER CHARGES: (Surcharges and other charges may be billed separately after the container has been received by NDL)		
Additional Removal Charge on Conversion of previously purchased SDC drum:		
5Gal Converted to SR/SX	ADD-5G-TOSCINT	72.49/DRUM
5Gal Converted to D or R	ADD-5G-TOD/R	146.50/DRUM
30Gal Converted to SR/SX	ADD-30G-TOSCINT	73.85/DRUM
30Gal Converted to D or R	ADD-30G-TOD/R	308.85/DRUM
55Gal Converted to SR/SX	ADD-55G-TOSCINT	145.25/DRUM
55Gal Converted to D or R	ADD-55G-TOD/R	500.25/DRUM
85Gal Converted to D or R	ADD-85G-TOD/R	780.25/DRUM
Additional Service Charge on Non-SDC drums purchased prior to 1996:		
5Gal D or R	ADD-5G-NDLD	125.00/DRUM
30Gal D or R	ADD-30G-NDLD	260.00/DRUM
30 Gal SR/SX	ADD-30G-NDLS	20.00/DRUM
55Gal D or R	ADD-55G-NDLD	415.00/DRUM
55Gal SR/SX	ADD-55G-NDLS	40.00/DRUM
Zone Charges:		
Outside Service Area	ADD-ZONE	25.00/ZONE
Shipping & Handling Charges:		
For meters and/or NDL containers shipped via UPS or Common Carrier	ADD-SHIPPING	AS APPLICABLE
Return Drum Charge:	ADD-RETURN	50.00/DRUM
Intercompany Transfer (on site) Charge With Other Service (with no other service will be charged tariff rates):		
MAN WITH VEHICLE	ADD-TRANS	60.00/HR/MAN
MINIMUM CHARGE	ADD-TRANS-MIN	60.00/TRANSFER
Travel Expenses	ADD-TRAVEL	AS APPLICABLE

DESCRIPTION	CATEGORY	ITEM	$ COST

NARM/NORM WASTE CONT'D:

Class C, Sealed Sources:

5Gal	W	REM-5G-CS-NARM	1110.20/PAIL
2 X 5Gal	W	REM-5G-CS-NM2X	1097.75/PAIL
3 X 5Gal	W	REM-5G-CS-NM3X	1083.22/PAIL
4 X 5Gal	W	REM-5G-CS-NM4X	1070.70/PAIL
5 X 5Gal	W	REM-5G-CS-NM5X	1057.56/PAIL
>= 6 X 5Gal	W	REM-5G-CS-NM6+	1045.06/PAIL
30Gal	W	REM-30G-CS-NARM	2078.76/DRUM
2 X 30Gal	W	REM-30G-CS-NM2X	1969.50/DRUM
3 X 30Gal	W	REM-30G-CS-NM3X	1887.22/DRUM
4 X 30Gal	W	REM-30G-CS-NM4X	1832.35/DRUM
5 X 30Gal	W	REM-30G-CS-NM5X	1796.70/DRUM
>= 6 X 30Gal	W	REM-30G-CS-NM6+	1768.38/DRUM
55Gal	W	REM-55G-CS-NARM	3809.34/DRUM
2 X 55Gal	W	REM-55G-CS-NM2X	3510.85/DRUM
3 X 55Gal	W	REM-55G-CS-NM3X	3260.90/DRUM
4 X 55Gal	W	REM-55G-CS-NM4X	3089.55/DRUM
5 X 55Gal	W	REM-55G-CS-NM5X	2093.93/DRUM
>= 6 X 55Gal	W	REM-55G-CS-NM6+	1985.10/DRUM

SITE USE PERMITS:

All eligible customers utilizing the NDL Radioactive Categories of D and/or R for land burial at the Barnwell, SC site must obtain a Transport Permit from the SC Dept.of Health & Environmental Control. Permits are to be obtained directly from the permitting agencies (i.e.NDL does not bill for permits). NDL has blank applications and will provide requested assistance at no charge. The Richland, WA site is also available to out-of-compact generators for radium disposal, on a case-by-case basis.

Barnwell, SC: Permit up to a max of 75 cu.ft.	200.00
Barnwell, SC: Permit for 75+ cu.ft.	1500.00
Richland, WA: Permit for < 50 cu. ft.	375.00
Richland, WA: Permit for > 50 cu. ft. < 500 cu.ft.	750.00
Richland, WA: Permit for > 500 cu. ft. < 1000 cu.ft.	1875.00

NARM/NORM WASTE FOR DISPOSAL AT THE RICHLAND, WASHINGTON, SITE:

Class A, Unstable:

5Gal	W	REM-5G-AU-NARM	738.00/PAIL
2 X 5Gal	W	REM-5G-AU-NM2X	725.50/PAIL
3 X 5Gal	W	REM-5G-AU-NM3X	713.20/PAIL
4 X 5Gal	W	REM-5G-AU-NM4X	700.84/PAIL
5 X 5Gal	W	REM-5G-AU-NM5X	688.16/PAIL
>= 6 X 5Gal	W	REM-5G-AU-NM6+	675.45/PAIL
30Gal	W	REM-30G-AU-NARM	1333.36/DRUM
2 X 30Gal	W	REM-30G-AU-NM2X	1208.77/DRUM
3 X 30Gal	W	REM-30G-AU-NM3X	1184.50/DRUM
4 X 30Gal	W	REM-30G-AU-NM4X	1157.95/DRUM
5 X 30Gal	W	REM-30G-AU-NM5X	1124.20/DRUM
>= 6 X 30Gal	W	REM-30G-AU-NM6+	1099.78/DRUM
55Gal	W	REM-55G-AU-NARM	2288.10/DRUM
2 X 55Gal	W	REM-55G-AU-NM2X	2138.80/DRUM
3 X 55Gal	W	REM-55G-AU-NM3X	2042.55/DRUM
4 X 55Gal	W	REM-55G-AU-NM4X	1987.40/DRUM
5 X 55Gal	W	REM-55G-AU-NM5X	1933.76/DRUM
>= 6 X 55Gal	W	REM-55G-AU-NM6+	1882.40/DRUM

Class A, Sealed Sources:

5Gal	W	REM-5G-AS-NARM	873.40/PAIL
2 X 5Gal	W	REM-5G-AS-NM2X	860.91/PAIL
3 X 5Gal	W	REM-5G-AS-NM3X	848.41/PAIL
4 X 5Gal	W	REM-5G-AS-NM4X	835.75/PAIL
5 X 5Gal	W	REM-5G-AS-NM5X	823.22/PAIL
>= 6 X 5Gal	W	REM-5G-AS-NM6+	810.55/PAIL
30Gal	W	REM-30G-AS-NARM	1428.76/DRUM
2 X 30Gal	W	REM-30G-AS-NM2X	1336.02/DRUM
3 X 30Gal	W	REM-30G-AS-NM3X	1261.15/DRUM
4 X 30Gal	W	REM-30G-AS-NM4X	1112.45/DRUM
5 X 30Gal	W	REM-30G-AS-NM5X	1086.45/DRUM
>= 6 X 30Gal	W	REM-30G-AS-NM6+	1061.45/DRUM
55Gal	W	REM-55G-AS-NARM	2614.34/DRUM
2 X 55Gal	W	REM-55G-AS-NM2X	2464.25/DRUM
3 X 55Gal	W	REM-55G-AS-NM3X	2359.10/DRUM
4 X 55Gal	W	REM-55G-AS-NM4X	2284.35/DRUM
5 X 55Gal	W	REM-55G-AS-NM5X	2236.12/DRUM
>= 6 X 55Gal	W	REM-55G-AS-NM6+	2201.75/DRUM

RADIOACTIVE WASTE DISPOSAL AT BARNWELL SITE, CONT'D.:

DESCRIPTION	ITEM	$ COST

CATEGORY R:

NOTE: CATEGORY R (BIOLOGICAL WASTE) SUBJECT TO $1.25 PER POUND REMOVAL CHARGE IN ADDITION TO CATEGORY D DISPOSAL COSTS. DELIVERY PRICES ARE THE SAME AS CATEGORY D, PLUS ADDITIONAL CHARGE FOR OVERPACK KIT (SHOWN BELOW).

Category R on Delivery - SAME AS CATEGORY D PRICING, PLUS OVERPACK KITS AS FOLLOWS:

OVERPACK KITS: (NOTE: LIME MUST BE ORDERED SEPARATELY)		
5Gal Kit (1 polyliner)	*****	NO CHARGE
55Gal Kit (30Gal SDC drum, 1 bag of vermiculite, 2 polyliners)	SUP-55G-R	73.55 PER KIT
85Gal Kit (55Gal SDC drum, 2 bags of vermiculite, 2 polyliners)	SUP-85G-R	104.55 PER KIT
Category R on Removal - FOR ALL WEIGHTS:	REM-R-ADD	(SAME AS CAT D ON REMOVAL- PLUS ADDITONAL CHARGE OF $ 1.25 PER POUND)

SURCHARGES: ALL CATEGORIES:

Millicurie Surcharge - All Weights - Per Manifest	ADD-MILLI	0.45/MILLICURIE
Dose Rate Surcharge - Dose level 200 mR/hr - 1 R/hr	ADD-DOSE	0.40/LB
Asbestos - All Weights	ADD-ASBESTOS	7.50/LB

HIGH INTEGRITY CONTAINERS & DISPOSAL COSTS FOR BARNWELL SITE:	*****	CALL FOR QUOTE
BULK DAW DISPOSAL:	*****	CALL FOR QUOTE

RADIOACTIVE WASTE DISPOSAL AT BARNWELL SITE:
(NO CREDIT GIVEN FOR NON-NDL DRUMS - IN AND OUT PRICE CHARGED ON REMOVAL .)

NOTE: DISPOSAL COSTS BASED ON WEIGHT OF CONTAINER PLUS MILLICURIE SURCHARGE. TOTAL COST BASED ON CURRENT PRICING AND SUBJECT TO ADDITIONAL INCREMENTAL CHARGES FOR OLDER OR NON-NDL CONTAINERS (SEE PAGE 6 - SURCHARGES AND OTHER CHARGES).

DESCRIPTION	WEIGHT	ITEM	$ COST	$TOTAL
CATEGORY D:				
5Gal on Delivery	-----	DEL-5G-D	150.00	
5Gal on Removal:	<= 50	REM-5G-D	530.00	680.00
	> 50	REM-5G-D1	830.00	980.00
30Gal on Delivery	-----	DEL-30G-D	350.00	
30Gal on Removal:	<= 200	REM-30G-D	1515.00	1865.00
	201-400	REM-30G-D1	1980.00	2330.00
	401-600	REM-30G-D2	2810.00	3160.00
	601-800	REM-30G-D3	3850.00	4200.00
	> 800	*****	CALL FOR QUOTE	
55Gal on Delivery	-----	DEL-55G-D	550.00	
55Gal on Removal:	<= 200	REM-55G-D	2570.00	3120.00
	201-400	REM-55G-D1	2950.00	3500.00
	401-600	REM-55G-D2	3450.00	4000.00
	601-800	REM-55G-D3	3950.00	4500.00
	801-1000	REM-55G-D4	4700.00	5250.00
	> 1000	ADD-55G-D-1000+	$ 5.20/LB OVER 1000 (REMOVAL OF $4700.00 PLUS ADDITONAL CHARGE OF $ 5.20 PER POUND OVER 1000 LIMIT)	
85Gal on Delivery	-----	DEL-85G-D	850.00	
85Gal on Removal:	ALL	REM-85G-D	4000.00	4850.00

DESCRIPTION	CATEGORY	ITEM	$ COST
OIL & AQUEOUS LIQUIDS FOR INCINERATION: **(Must be double walled. Pricing based on gross weight of contianers and includes metal melt of inner & outer container):**		REM-OIL REM-AQL	7.75/LB 7.75/LB
METAL MELT		MELT-METAL	6.25/LB
DRY & BIOLOGICAL WASTE FOR INCINERATION / STEAM REFORMING & DISPOSAL :			
Dry Waste for Incineration & Disposal (fiber boxes, based on gross weight of package)	D	REM-D-INCIN/D	10.80/LB
Dry Waste for Steam Reforming & Disposal (metal containers, based on net weight of material, cost of metal melt of container additional)	D	REM-D-STEAM/D	25.00/LB
Biological Waste for Steam Reforming & Disposal (metal containers, based on net weight of material, cost of metal melt of container additional)	R	REM-R-STEAM/D	42.00/LB
LEAD DECON: < 20K dpm and/or < 25 mR/hr: Higher levels:		REM-LEAD *****	6.00/LB CALL FOR QUOTE

WASTE STORAGE:

Generators utilizing NDL's waste storage services must be pre-approved and have a signed contract in place

Monthly Charge	STORAGE	13.90/CU.FT/MO.
Minimum Charge	STORAGE-MIN	10.00/MO.

SULZER METCO

Sulzer Metco (US) Inc.
325 Duffy Avenue
Hicksville, NY 11801
Phone: (516) 338-2572
Fax: (516) 338-2590

Telefax

Place, date: 11/25/96

To: Peter Pastorelli

From: Marilynn Block

Total pages:

Subject: PO 204059

Please forward item 2 (wipes) attn: C. Conroy at address listed on P.O.

Contact Ms Conroy 516-338-2337 to arrange for drum pick up -

MATERIAL SAFETY DATA SHEET
MSDS No. 96.35.159

TRADE NAME: Deglazing Solvent DATE: May, 1987

I. Name/Synonym: Ink/Glaze Remover Part Number: 83-0-105532 83-9-105533

Manufactured/Distributed by: MULTIGRAPHICS DIVISION
AM INTERNATIONAL, INC.
1800 West Central Road
Mt. Prospect, Illinois 60056

Emergency Phone - Day - (312) 870-5121
Night - (312) 398-1900

Shipping Information: DOT Class: Not for air shipment DOT Hazard Class: ORM-A
Label Req: methyl chloroform DOT Packaging: 14. UN2831

II. INGREDIENTS - Confidential Information for Safety/Health Use Only
(ALL EXPOSURE LIMITS ARE PPM UNLESS OTHERWISE NOTED)

Chemical Name	CAS#	OSHA PEL	ACGIH, NIOSH TLV, EXPOSURE TWA	STEL	NTP,IARC OSHA Carcinogen	WT %
1,1,1-trichloroethane	71-55-6	350	350	450	No	96

II. PHYSICAL PROPERTIES

Boiling Point (F): 154F Specific Gravity (H20 = 1): 1.31

Vapor Pressure (mm Hg.): 120 @ 25C Melting Point: N/A
Vapor Density (Air = 1): 4.54 Evaporation Rate:
Solubility in Water: negligible (ethyl ether = 1) 0.35
Appearance/Odor: clear, colorless liquid with ethereal odor pH: N/A

IV. FIRE AND EXPLOSION HAZARD

Flash Point (Method): none (TAG cc) Flammable Limits: * LEL:7% UEL:15%

Extinguishing Media: water, dry chemical or CO2

Special Fire Fighting Procedure: Fire fighters should wear NIOSH/MSHA approved self-contained breathing apparatus for possible exposure to hydrogen chloride and possible traces of phosgene.

* Unusual Fire/Explosion Hazards: Vapors concentrated in a confined or poorly ventilated area can be ignited upon contact with a high energy spark, flame or high intensity source of heat. Decomposition or burning can produce hydrogen chloride or possible traces of phosgene.

MATERIAL SAFETY DATA SHEET
deglazing Solvent 83-0-105532, 83-9-105533

V. REACTIVITY DATA

Stability: Stable Conditions to Avoid: Open flames, hot glowing surfaces or electric arcs.

Incompatibility, Materials to Avoid: caustics, oxidizers and aluminum.

Hazardous Decomposition Products: Hydrogen chloride and possible trace of phosgene.

Hazardous Polymerization: Will not occur.

VI. SPILL OR LEAK PROCEDURE/WASTE DISPOSAL Small spills - wipe with rags or towels; large spills - wear suitable mask - evaporates rapidly. Disposal: Hazardous waste - dispose of as per EPA regulations. DO NOT pour down drain.

II. HEALTH HAZARD DATA

A) Routes of entry, sign and symptoms of overexposure, acute and chemicals effects.

Eye: Eye irritant

Skin: Mildly irritating to skin, will defat skin.

Inhalation: Slightly toxic, anestethic effects may occur in ranges of 1000ppm.

Ingestion: Not significantly toxic.

Target Organs: Skin, CNS, CVS, eyes.

B) Carcinogenicity: No

C) Medical conditions generally aggravated by normal exposure: Increased sensitivity to adrenalin may be caused by overexposure.

D) Emergency and First Aid

Eye: Flush immediately with copious amounts of water.

Skin: Wash with soap and water promptly.

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician

Ingestion: DO NOT induce vomiting; give milk or USP mineral oil; take to hospital emergency room for further treatment.

III. SPECIAL PROTECTION INFORMATION

Respiration Protection: In high vapor area, use respirator with organic vapor cartridge.

Ventilation - Local Exhaust: Only to remain below 50% of TLV.

Protective Gloves: Neoprene Eye Protection: safety glasses

Other Protection: apron to prevent absorption on to clothing.

(. SPECIAL PRECAUTIONS

Handling and Storage: Store in a cool place. Keep containers closed when not in use. Do not use with aluminum.

Other: Read and follow directions on label. Do not reuse container.

U.S. ENVIRONMENTAL PROTECTION AGENCY
TRI PROGRAM DIVISION
WASHINGTON, DC 20460

11590PRKNL1101P
MICHAEL LYDON
OR CURRENT ENVIRONMENTAL MANAGER
SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

TOXICS RELEASE INVENTORY
FACILITY DATA PROFILE

This notice is in regards to information submitted in your facility's most recent Form R or Form A submission(s), or corrections included in a response to a previous Facility Data Profile (FDP) that we have entered into the Toxics Release Inventory database. FDPs are sent in response to any new information that you send us. Hence, if you returned a marked-up FDP with corrections, you will receive a new FDP reflecting those changes for your review.

EPA wishes to accurately represent the data reported by your facility. We believe our data capture process is of high quality. However, as a final quality measure, please verify the data presented in the enclosed FDP. This FDP serves two primary purposes. First, we want to give you the opportunity to confirm that we have entered your data correctly into our national computer system. If we have not, please advise us so we can make corrections. Second, if we identify potential errors in the submission(s) you have submitted, we indicate what these errors are and request that you provide us with corrections.

Within this FDP notice there may be up to three different types of errors identified:

(1) A Non-Technical Data Change (NDC) notifies you of simple, clerical errors that EPA has corrected for you. It is not necessary to respond to a NDC.

(2) A Notice of Technical Error (NOTE) highlights to you inconsistencies or miscalculations that may distort your facility's information in EPA's public data products or skew analyses. You should respond to NOTE level errors as soon as possible. Depending upon when your changes are received, there may or may not be sufficient time to incorporate them into our database in time for public data release.

(3) A Notice of Significant Error (NOSE) identifies errors that prevent your submission from being entered into our database or identify missing critical information such as a chemical identifier or submission certification. You will find NOSE-level errors on a separate page to highlight their importance. **Please respond within 21 days of receipt of this notice. Failure to correct NOSE level errors will result in the issuance of a formal Notice of Noncompliance (NON) by EPA.**

INSTRUCTIONS FOR RESPONDING TO TRI FACILITY DATA PROFILE

1. This Facility Data Profile (FDP) presents the information you have submitted on the Form R and/or Form A submissions that EPA has entered into the Toxics Release Inventory database. The specific chemicals covered by this FDP are shown in the Chemical Summary section.

2. Please review this FDP to make sure that EPA has accurately entered your submitted information. If any of the data are incorrect, or you have discovered an error in your submitted data, please circle the incorrect information and indicate the correct information next to it. If you believe that an error we have identified is really not an error, please provide a brief explanation where we have identified the error. Please print clearly and use blue ink.

3. If you are making any corrections pursuant to the instruction in step 2 above, you must sign the certification statement below. Mail this signed page plus all pages on which you have marked corrections. Please do not return pages on which you have neither marked changes nor provided explanations.

4. For NOSE level errors, **please mail your response within 21 days of receipt of this FDP.** For NOTE level errors, please respond as soon as possible so any necessary changes may be incorporated into the database.

5. All corrections should be mailed to the address indicated at the bottom of this page. Also, send a duplicate copy to the same State organization to which you sent a copy of your original submission. EPA recommends that Government-Owned-Contractor-Operated (GOCO) facilities also send copies of their responses to their associated Federal facilities.

6. If you identify no errors in the data presented here and we have identified no errors, no response is necessary.

7. The FDP does not serve as a means to withdraw a Form R and/or Form A. Withdrawal requests should be mailed to the EPCRA Reporting Center. For additional information regarding withdrawal procedures, go to www.epa.gov/tri.

CERTIFICATION STATEMENT
I hereby certify that I have reviewed the attached pages from the Facility Data Profile, and to the best of my knowledge and belief, the submitted information and any corrections I have made to it are true and complete and that the amounts and values presented are accurate based on reasonable estimates using data available to the preparers of this response.

Joseph Reardon EHS Manager
Name and official Title of Owner/Operator or Senior Management Official (Print)

Joseph D. Reardon 11/6/2001
Signature Date

RESPONSE ADDRESSES	
Regular Mail: The EPCRA Reporting Center Attn: Facility Data Profile Response P.O. Box 3348 Merrifield, VA 22116-3348	**Certified Mail, Overnight Delivery, Hand Delivery:** EPCRA Reporting Center (Tel: 703-816-4445*) Attn: Facility Data Profile Response C/O Computer Based Systems Inc. 4600 North Fairfax Drive Suite 300 Arlington, VA 22203 * for delivery purposes only
Remember: Send a copy to your State.	

SUMMARY OF NOTICES OF SIGNIFICANT ERRORS (NOSEs)

There are no NOSE level errors contained in this FDP. However, there may be other potential errors identified (i.e., a Notice of Technical Errors (NOTE) or a Notice of Data Change (NDC)) at the end of each chemical report.

FACILITY INFORMATION:

TRI Facility Identification No: 11590PRKNL1101P

Facility No: 28882

Primary Facility Name and Address:

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY (COUNTY: NASSAU) NY 11590

Mailing Address:

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

Technical Contact Name: MICHAEL LYDON

Telephone No: 516-338-2337

Public Contact Name: JOSEPH REARDON

Telephone No: 516-338-2316

Latitude: 040-45-50

Longitude: 073-33-10

Facility Type (Federal/GOCO/Commercial): COMMERCIAL

Name of Parent Company: SULZER INC.

Parent Company Dun & Bradstreet No: 001826957

SIC Code	Facility Dun & Bradstreet No.	EPA ID No. (RCRA No.)	Facility NPDES No.	Underground Injection Well Code(ID No.)
3542	011272254	NYD131318651	NA	NA
NA	NA	NA		

Reporting Year: 2000
Chemical Name: COPPER
Document Control Number: 13-00-140-68449-1
File Number: DD-01-00017219-3

Postmark Date: 08-14-2001
Received Date: 08-16-2001

CHEMICAL REPORT FOR THIS FACILITY OR ESTABLISHMENT:

PART I:

1.0 Reporting Year: 2000

2.0 Trade Secret Information: **2.1 Trade Secret:** NO **2.2 Sanitized:** NO

3.0 Certification: **Official Name:** JOSEPH REARDON **Title:** MANAGER OF GLOBAL QUALITY

Date Signed: 08-17-2001

4.2 This Report Contains Information for:

a. An entire facility: YES
b. Part of a facility: NO
c. A Federal Facility: NO **GOCO:** NO

4.5 SIC Code(s): 3542 - Primary SIC

PART II:

1.0. Toxic Chemical Identity:

1.1 CAS Number or Chemical Category Code: 7440508

1.2. Toxic Chemical or Chemical Category Name: COPPER

1.3 Generic Chemical Name: NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category: NA
1: 2: 3: 4: 5: 6: 7: 8: 9: 10:
11: 12: 13: 14: 15: 16: 17:

2.0 Mixture Component Identity:

2.1 Generic Chemical Name Provided By Supplier: NA

3.0 Activities and Uses of the Toxic Chemical at the Facility:

3.1 Manufacture the toxic chemical:

A. Produce: NO

B. Import: NO

If Produce or Import:

C. For on-site use/processing: NO
D. For sale/distribution: NO
E. As a byproduct: NO
F. As an impurity: NO

3.2 Process the toxic chemical:

A. As a reactant: NO
B. As a formulation component: YES
C. As an article component: NO
D. Repackaging: NO
E. As an impurity: NO

3.3 Otherwise use the toxic chemical:

A. As a chemical processing aid: NO
B. As a manufacture aid: NO
C. Ancillary or other use: NO

4.1 Maximum Amount of the Toxic Chemical On-Site at any Time During the Year: 03 Range from 1,000 To 9,999 (lb)

5.0 Quantity of the Toxic Chemical Entering Each Environmental Medium On-site

Air Emissions	A. Total Release	B. Basis of Estimate
5.1 Fugitive Or Non-Point Air Emissions	NA	
5.2 Stack Or Point Air Emissions	NA	

Reporting Year: 2000
Chemical Name: COPPER
Document Control Number: 13-00-140-68449-1
File Number: DD-01-00017219-3

Postmark Date: 08-14-2001
Received Date: 08-16-2001

8.0 Source Reduction & Recycling Activities *

*Note: All values are in Pounds

		Col. A Prior Year	Col. B Current Year	Col. C Following Year	Col. D Second Following Year
8.1	Quantity Released	24000	27395	27395	27395
8.2	Quantity Used For Energy Recovery On-Site	NA	NA	NA	NA
8.3	Quantity Used For Energy Recovery Off-Site	NA	NA	NA	NA
8.4	Quantity Recycled On-Site	NA	NA	NA	NA
8.5	Quantity Recycled Off-Site	24000	27395	24000	24000
8.6	Quantity Treated On-Site	NA	NA	NA	NA
8.7	Quantity Treated Off-Site	NA	NA	NA	NA

8.8 Quantity Released as a Result of Remedial, Catastrophic, or One Time Events: 0

8.9 Production Ratio or Activity Index: 1.15

8.10 Source Reduction Activities: Method A Method B Method C

8.10.1 NA

8.11 Additional Information Included: NO

Reporting Year: 1999
Chemical Name: COPPER
Document Control Number: 13-99-130-68412-1
File Number: DD-01-0001 7613-9

Postmark Date: 09-12-2001
Received Date: 09-17-2001

CHEMICAL REPORT FOR THIS FACILITY OR ESTABLISHMENT:

PART I:

1.0 Reporting Year: 1999

2.0 Trade Secret Information: **2.1 Trade Secret:** NO **2.2 Sanitized:** NO

3.0 Certification: **Official Name:** JOSEPH REARDON **Title:** MANAGER OF GLOBAL QUALITY

Date Signed: 08-17-2001

4.2 This Report Contains Information for:

a. An entire facility: YES
b. Part of a facility: NO
c. A Federal Facility: NO **GOCO:** NO

4.5 SIC Code(s): 3542 - Primary SIC

PART II:

1.0. Toxic Chemical Identity:

1.1 CAS Number or Chemical Category Code: 7440508

1.2. Toxic Chemical or Chemical Category Name: COPPER

1.3 Generic Chemical Name: NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category: NA
1: 2: 3: 4: 5: 6: 7: 8: 9: 10:
11: 12: 13: 14: 15: 16: 17:

2.0 Mixture Component Identity:

2.1 Generic Chemical Name Provided By Supplier: NA

3.0 Activities and Uses of the Toxic Chemical at the Facility:

3.1 Manufacture the toxic chemical:

A. Produce: NO

B. Import: NO

If Produce or Import:

C. For on-site use/processing: NO
D. For sale/distribution: NO
E. As a byproduct: NO
F. As an impurity: NO

3.2 Process the toxic chemical:

A. As a reactant: NO
B. As a formulation component: YES
C. As an article component: NO
D. Repackaging: NO
E. As an impurity: NO

3.3 Otherwise use the toxic chemical:

A. As a chemical processing aid: NO
B. As a manufacture aid: NO
C. Ancillary or other use: NO

4.1 Maximum Amount of the Toxic Chemical On-Site at any Time During the Year: 03 Range from 1,000 To 9,999 (lb)

5.0 Quantity of the Toxic Chemical Entering Each Environmental Medium On-site

Air Emissions	A. Total Release	B. Basis of Estimate
5.1 Fugitive Or Non-Point Air Emissions	NA	
5.2 Stack Or Point Air Emissions	NA	

Reporting Year: 1999
Chemical Name: COPPER
Document Control Number: 13-99-130-68412-1
File Number: DD-01-00017613-9
Postmark Date: 09-12-2001
Received Date: 09-17-2001

8.0 Source Reduction & Recycling Activities *

*Note: All values are in Pounds

		Col. A Prior Year	Col. B Current Year	Col. C Following Year	Col. D Second Following Year
8.1	Quantity Released	24000	25125	27395	27395
8.2	Quantity Used For Energy Recovery On-Site	NA	NA	NA	NA
8.3	Quantity Used For Energy Recovery Off-Site	NA	NA	NA	NA
8.4	Quantity Recycled On-Site	NA	NA	NA	NA
8.5	Quantity Recycled Off-Site	24000	25125	27395	27395
8.6	Quantity Treated On-Site	NA	NA	NA	NA
8.7	Quantity Treated Off-Site	NA	NA	NA	NA

8.8 Quantity Released as a Result of Remedial, Catastrophic, or One Time Events: 0

8.9 Production Ratio or Activity Index: 1.17

8.10 Source Reduction Activities: Method A Method B Method C

8.10.1 NA

8.11 Additional Information Included: NO

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number
2. Page 1 of 1
3. Emergency Response Phone 410-377-3742
4. Manifest Tracking Number 001251037 JJK

5. Generator's Name and Mailing Address
SULZER METCO (US)
1101 PROSPECT AVE
WESTBURY, NY 11590
Generator's Phone: 516-338-2331

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
BEDROCK DBA, TRI-STATE MOTOR TRANSIT CO.
U.S. EPA ID Number MOD 095038998

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
WASTE CONTROL SPECIALISTS
9998 W. STATE HWY 176
ANDREWS, TX 79714
Facility's Phone: 888-789-2783

U.S. EPA ID Number

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, LIMITED QUANTITY OF MATERIAL, 7, UN2910	54	DM	7003	K	NONE
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
WP-019353

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: MATTHEW GOLD
Signature:
Month 10 Day 11 Year 07

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Ray Hochstedler
Signature:
Month 10 Day 11 Year 07

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Form Approved OMB No.: 2070-0093
Approval Expires: 01/91

(Important: Type or print; read instructions before completing form.)

EPA U.S. Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

Public reporting burden for this collection of information is estimated to vary from 30 to 34 hours per response, with an average of 32 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (PM-223), US EPA, 401 M St., SW, Washington, D.C. 20460 Attn: TRI Burden and to the Office of Information and Regulatory Affairs, Office of Management and Budget Paperwork Reduction Project (2070-0093), Washington, D.C. 20603.

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for your optional use.)

1. 1.1 Are you claiming the chemical identity on page 3 trade secret?
[ ] Yes (Answer question 1.2; Attach substantiation forms.) [X] No (Do not answer 1.2; Go to question 1.3.)

1.2 If "Yes" in 1.1, is this copy: [ ] Sanitized [ ] Unsanitized

1.3 Reporting Year 19 89

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official
Patrick A. Tighe Superintendent, Facilities

Signature: Patrick A. Tighe

Date signed: June 29, 1990

3. FACILITY IDENTIFICATION

3.1
Facility or Establishment Name: METCO DIVISION PERKIN-ELMER CORPORATION
Street Address: 220 Miller Place
City: Hicksville
County: Nassau
State: New York
Zip Code: 11801
TRI Facility Identification Number: 11801PRKNL220MI

WHERE TO SEND COMPLETED FORMS:

1. EPCRA REPORTING CENTER
P.O. BOX 23779
WASHINGTON, DC 20026-3779
ATTN: TOXIC CHEMICAL RELEASE INVENTORY

2. APPROPRIATE STATE OFFICE (See instructions in Appendix G)

3.2 This report contains information for (Check only one): a. [ ] An entire facility b. [X] Part of a facility.

3.3 Technical Contact: Patrick A. Tighe — Telephone Number (include area code): 516 334-1300

3.4 Public Contact: Same as 3.4 — Telephone Number (include area code):

3.5 SIC Code (4 digit): a. 3399 b. c. d. e. f.

3.6

Latitude Degrees	Latitude Minutes	Latitude Seconds	Longitude Degrees	Longitude Minutes	Longitude Seconds
	08	61300		00	34700

3.7 Dun & Bradstreet Number(s): a. 05-773-1663 b.

3.8 EPA Identification Number(s) (RCRA I.D. No.): a. NYD981558570 b.

3.9 NPDES Permit Number(s): a. b.

3.10 Receiving Streams or Water Bodies (enter one name per box): a. N/A b. c. d. e. f.

3.11 Underground Injection Well Code (UIC) Identification Number(s): a. N/A b.

4. PARENT COMPANY INFORMATION

4.1 Name of Parent Company: Perkin-Elmer Corporation

4.2 Parent Company's Dun & Bradstreet Number: 00-118-4480

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

(This space for your optional use.)

1. PUBLICLY OWNED TREATMENT WORKS (POTWs)

1.1 POTW name		1.2 POTW name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip

2. OTHER OFF-SITE LOCATIONS (DO NOT REPORT LOCATIONS TO WHICH WASTES ARE SENT ONLY FOR RECYCLING OR REUSE).

2.1 Off-site location name		2.2 Off-site location name	
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

2.3 Off-site location name		2.4 Off-site location name	
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

2.5 Off-site location name		2.6 Off-site location name	
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

[ ] Check if additional pages of Part II are attached. How many? _____

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART III. CHEMICAL-SPECIFIC INFORMATION

(This space for your optional use.)

1. CHEMICAL IDENTITY (Do not complete this section if you complete Section 2.)

1.1	[Reserved]
1.2	CAS Number (Enter only one number exactly as it appears on the 313 list. Enter NA if reporting a chemical category.) 7429-90-5
1.3	Chemical or Chemical Category Name (Enter only one name exactly as it appears on the 313 list.) ALUMINUM
1.4	Generic Chemical Name (Complete only if Part I, Section 1.1 is checked "Yes." Generic name must be structurally descriptive.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you complete Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation).)

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture the chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing e. [ ] As a byproduct	d. [ ] For sale/distribution f. [ ] As an impurity
3.2	Process the chemical:	a. [ ] As a reactant d. [ ] Repackaging only	b. [ ] As a formulation component	c. [X] As an article component
3.3	Otherwise use the chemical:	a. [ ] As a chemical processing aid	b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

[0 | 4] (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)		A. Total Release (pounds/year) A.1 Reporting Ranges 0 / 1-499 / 500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a	[X] [ ] [ ]		5.1b [ ]	
5.2 Stack or point air emissions	5.2a	[ ] [ ] [ ]	1700	5.2b [C]	
5.3 Discharges to receiving streams or water bodies (Enter letter code for stream from Part I Section 3.10 in the box provided.) 5.3.1 [ ]	5.3.1a	[N/A] [ ] [ ]		5.3.1b [ ]	5.3.1c %
5.3.2 [ ]	5.3.2a	[N/A] [ ] [ ]		5.3.2b [ ]	5.3.2c %
5.3.3 [ ]	5.3.3a	[N/A] [ ] [ ]		5.3.3b [ ]	5.3.3c %
5.4 Underground injection on-site	5.4a	[N/A] [ ] [ ]		5.4b [ ]	
5.5 Releases to land on-site 5.5.1 Landfill	5.5.1a	[N/A] [ ] [ ]		5.5.1b [ ]	
5.5.2 Land treatment/application farming	5.5.2a	[N/A] [ ] [ ]		5.5.2b [ ]	
5.5.3 Surface impoundment	5.5.3a	[N/A] [ ] [ ]		5.5.3b [ ]	
5.5.4 Other disposal	5.5.4a	[N/A] [ ] [ ]		5.5.4b [ ]	

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R

PART III. CHEMICAL-SPECIFIC INFORMATION (continued)

(This space for your optional use.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)	A. Total Transfers (pounds/year) A.1 Reporting Ranges 0 / 1-499 / 500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1.1 Discharge to POTW (enter location number from Part II, Section 1.) 1 .	[N/A] [ ] [ ]		6.1.1b	
6.2.1 Other off-site location (enter location number from Part II, Section 2.) 2 .	[N/A] [ ] [ ]		6.2.1b	6.2.1c M
6.2.2 Other off-site location (enter location number from Part II, Section 2.) 2 .	[N/A] [ ] [ ]		6.2.2b	6.2.2c M
6.2.3 Other off-site location (enter location number from Part II, Section 2.) 2 .	[N/A] [ ] [ ]		6.2.3b	6.2.3c M

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

7. WASTE TREATMENT METHODS AND EFFICIENCY

[N/A] Not Applicable (NA) - Check if no on-site treatment is applied to any wastestream containing the chemical or chemical category.

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes / No
7.1a	7.1b	7.1c	7.1d [ ]	7.1e %	7.1f [ ] [ ]
7.2a	7.2b	7.2c	7.2d [ ]	7.2e %	7.2f [ ] [ ]
7.3a	7.3b	7.3c	7.3d [ ]	7.3e %	7.3f [ ] [ ]
7.4a	7.4b	7.4c	7.4d [ ]	7.4e %	7.4f [ ] [ ]
7.5a	7.5b	7.5c	7.5d [ ]	7.5e %	7.5f [ ] [ ]
7.6a	7.6b	7.6c	7.6d [ ]	7.6e %	7.6f [ ] [ ]
7.7a	7.7b	7.7c	7.7d [ ]	7.7e %	7.7f [ ] [ ]
7.8a	7.8b	7.8c	7.8d [ ]	7.8e %	7.8f [ ] [ ]
7.9a	7.9b	7.9c	7.9d [ ]	7.9e %	7.9f [ ] [ ]
7.10a	7.10b	7.10c	7.10d [ ]	7.10e %	7.10f [ ] [ ]

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

8. POLLUTION PREVENTION: OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of Modification (enter code)	B. Quantity of the Chemical in Wastes Prior to Treatment or Disposal: Current reporting year (pounds/year)	Prior year (pounds/year)	Or percent change (Check (+) or (-))	C. Index	D. Reason for Action (enter code)
M 7	_____	_____	[ ] + [ ] - _____ %	[ ] . [ ]	R

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Part III. Number the lines used sequentially from lines in prior sections (e.g., 5.3.4, 6.1.2, 7.11)

(This space for your optional use.)

ADDITIONAL INFORMATION ON RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE (Part III, Section 5.3)

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)			A. Total Release (pounds/year) A.1 Reporting Ranges 0 / 1–499 / 500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C. % From Stormwater
5.3 Discharges to receiving streams or water bodies	5.3.___ ☐	5.3.___a	[ ] [ ] [ ]		5.3.___b ☐	5.3.___c %
(Enter letter code for stream from Part I Section 3.10 in the box provided.)	5.3.___ ☐	5.3.___a	[ ] [ ] [ ]		5.3.___b ☐	5.3.___c %
	5.3.___ ☐	5.3.___a	[ ] [ ] [ ]		5.3.___b ☐	5.3.___c %

ADDITIONAL INFORMATION ON TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS (Part III, Section 6)

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)		A. Total Transfers (pounds/year) A.1 Reporting Ranges 0 / 1–499 / 500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C. Type of Treatment/ Disposal (enter code in box provided)
6.1.___ Discharge to POTW (enter location number from Part II, Section 1.)	1 ☐	[ ] [ ] [ ]		6.1.___b ☐	
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ] [ ] [ ]		6.2.___b ☐	6.2.___c M ☐ ☐
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ] [ ] [ ]		6.2.___b ☐	6.2.___c M ☐ ☐
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ] [ ] [ ]		6.2.___b ☐	6.2.___c M ☐ ☐

ADDITIONAL INFORMATION ON WASTE TREATMENT METHODS AND EFFICIENCY (Part III, Section 7)

A. General Wastestream (enter code in box provided)	B. Treatment Method (enter code in box provided)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes / No
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ] [ ]

Material Safety Data Sheet

Date Prepared: 06/20/90 Prepared By: J SCARBALIS

SECTION I

MANUFACTURER'S NAME: Dexter Coatings
STREET ADDRESS : One East Water Street Waukegan, Illinois 60085
TELEPHONE : (708) 623-4200 Night: (708) 831-3961
MANUFACTURER'S CODE: 0910A01M
TRADE NAME : LACQUER THINNER [redacted]

SECTION II - HAZARDOUS INGREDIENTS

Ingredient(s)	Weight Percent	Vapor Press. mm Hg @ 20C
TOLUENE	40 - 50%	22.0

CAS: 108-88-3

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 100 (ppm)	TLV/TWA: 100 (ppm)
STEL: 150 (ppm)	TLV/STEL: 150 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

METHYL ISOBUTYL KETONE	40 - 50%	15.0

CAS: 108-10-1

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 50 (ppm)	TLV/TWA: 50 (ppm)
STEL: 75 (ppm)	TLV/STEL: 75 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

DIISOBUTYL KETONE	< 10%	1.0

CAS: 108-83-8

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 25 (ppm)	TLV/TWA: 25 (ppm)
STEL: UK	TLV/STEL: UK
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

ISOPROPYL ALCOHOL	< 10%	33.0

CAS: 67-63-0

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 400 (ppm)	TLV/TWA: 400 (ppm)
STEL: 500 (ppm)	TLV/STEL: 500 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

SECTION III - PHYSICAL PROPERTIES + FIRE AND EXPLOSION HAZARDS

FLASHPOINT FOR 0910A01M = 42 Deg. F Setaflash CC LEL: .80
BOILING RANGE = 180 to 338 Deg. F.
DOT CATEGORY = Flammable Liquid
OSHA Classification = Flammable Liquid - Class IB
VAPOR DENSITY: Heavier than air.
EXTINGUISHING MEDIA: Use water fog, foam, dry chemical, or carbon dioxide.
VOLATILE ORGANIC CONTENT: 6.9 pounds per gallon less water.

SECTION IV - HEALTH INFORMATION

ACUTE: Over exposure by inhalation may cause irritation of the respiratory tract, headache, dizziness, or drowsiness.
SKIN OR EYE CONTACT: Irritant to the eyes and skin.
EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Remove from exposure. EYE CONTACT: Flush immediately with large amounts of running water for at least 15 minutes. SKIN CONTACT: Remove contaminated clothing and wash skin with soap and water. INGESTION: Drink water.
If necessary, consult a physician for any of these conditions.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Unknown at this time.
CHRONIC HEALTH EFFECTS: Those hazardous materials listed in Section II may affect the following organs: KIDNEYS-RESPIRATORY TRACT-LIVER-CENTRAL NERVOUS SYSTEM-CARDIAC SENSITIZATION-

SECTION V - REACTIVITY DATA

STABILITY: Stable. HAZARDOUS DECOMPOSITION BY-PRODUCTS: Fumes may contain carbon monoxide and oxides of nitrogen. May produce hazardous fumes when heated to decomposition as in welding.

SECTION VI - SPILL OR LEAK PROCEDURES

Remove all sources of ignition, avoid breathing vapors, ventilate area, and remove with inert absorbant and non-sparking tools. Dispose of in accordance with local, state, and federal regulations. Before attempting to clean up, see Section II.

SECTION VII - PRECAUTIONS IN HANDLING

VENTILATION: Provide general dilution or local exhaust ventilation to keep TWA and LEL below acceptable limits and to remove decomposition products.

RESPIRATORY PROTECTION: Where general dilution or local exhaust fails to adequately dilute the TWA/PEL of the material, then respiratory protection should be used as follows: In accord with 29CFR 1910.134, use NIOSH/MSHA approved air line type respirators or hoods for enclosed and confined areas. Air purifying respirators may be used for other areas.

PROTECTIVE EQUIPMENT: Chemical resistant gloves are required for prolonged or repeated contact. Use safety eyeware designed to protect against splash of liquids.

Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Make sure the drum is completely empty before attempting to weld or braze. The drum should be industrially cleaned prior to reuse. Do not flame cut, braze, or weld without a NIOSH approved respirator or appropriate ventilation.

SECTION VIII - ENVIRONMENTAL DATA

SARA Title III Information and Proposition 65

CAS Number	Chemical Name	SARA 302 % by Wt. (1)	SARA 313 % by Wt. (2)	Prop. 65 % by Wt. (3)
108-88-3	TOLUENE	---	43	---
71-43-2	BENZENE	---	---	.00860

108-10-1 METHYL ISOBUTYL KETONE --- 44 ---

FOOTNOTES

(1) Extremely hazardous substance, Sec. 302
(2) Toxic Chemical, Sec. 313
(3) State of California Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65 (Prop. 65)

SECTION IX - ADDITIONAL INFORMATION

Those materials listed in Section II with an asterisk have been listed by one of the following testing agencies: National Toxicology Program, International Agency for Research and Cancer, or OSHA.

KEEP CONTAINER CLOSED WHEN NOT IN USE!

NFCA HMIS CLASSIFICATION: Health- 3 Flammability- 3 Reactivity- 0

See Section VII for personal protection equipment.

****
* The information and recommendations contained herein are based *
* upon data believed to be correct. However, since much of the *
* information has been received from sources outside our company, *
* we cannot guarantee its accuracy or completeness. Health and *
* safety precautions contained within this data sheet may not be *
* adequate for all individuals and/or situations. It is the user's *
* obligation to evaluate and use this data in order to comply with *
* all applicable laws and regulations. Additionally, no guarantee *
* or warranty of any kind, expressed or implied, is made with *
* respect to the information contained herein. *
****

Date: January 7, 1992

To: J.M. Macri

From: C.L. Conroy

Subject: USEPA Toxic Chemical Release Inventory Reporting Form

On December 30, 1991 we received correspondence from the United States Environmental Protection Agency concerning the information we submitted on the USEPA Toxic Chemical Release Inventory Reporting Form, Form R, Reporting Year 1990, for the Miller Place and Prospect Avenue facilities. They request as a final control measure that we verify the critical release value information listed on their report against the Form R information in our files. A reply is requested within 21 days if any data errors are found. A response is not necessary if no errors are found.

I have reviewed the EPA report and found the information to be correct, therefore no response is necessary.

Please call me if you require any further information.

CLConroy
C.L. Conroy

CLC:
Enclosure
cc: A. B. Mazzone

PWPlus - Memocl22.Pwp

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

Dear Toxic Release Inventory (EPA Form R) Reporter:

Attached is a report, produced by EPA, which lists the chemical identities and corresponding release values for the Form R's EPA received from the facility listed above for Toxic Release Inventory (TRI) Reporting Year 1990 (RY90).

It is EPA's intention to represent all data reported by your facility as accurately as possible. In order to do this, EPA has implemented a variety of quality control procedures. We believe our data entry is of good quality. However, as a final quality control measure, we ask that you verify the critical release value information listed on this report against your Form R files. If you find any data entry errors, please let us know by following these simple instructions:

- On the attached report, use a red pen to mark through the erroneous value, and write the corrected value next to it.

- Return the corrected report to:

  The EPCRA Reporting Center
  P.O. Box 23779
  Washington, DC 20026-3779
  Attn: TRI 100%

We request that you do this within 21 calendar days of receipt, so that we may correct your data before we make it publicly available in the Spring, 1992. If you do not find any errors in this report, no response is necessary.

Please DO NOT use this report to make changes to release values or any other data which you reported incorrectly. Those changes should be submitted to EPA by making a photocopy of your Form R, writing 'REVISION' in red ink in the space labeled 'For Your Optional Use Only' on page one of the form, marking through the original data and writing in the revised data in red ink. The certification signature block on the revised form must contain an original signature. Mark through the photocopied signature and re-sign the revised form. Return the revised form to the address above. The attention line on the envelope should read: 'Attn: RY90 Revision'.

Please keep these facts in mind when reviewing the accuracy and completeness of this report:

1) The report lists only those Form R's which have passed our internal data quality checks. If one or more forms submitted by your facility is not listed here, you will be receiving additional correspondence from us soon.

2) The data represented here may not reflect any voluntary revisions submitted by your facility, if those revisions were not processed by the time we produced this report.

3) We have applied certain naming conventions to the way in which your facility's name is represented. For example, we always list the main company name first, followed by the division name. In addition, we use standard abbreviations for certain words such as Corporation (Corp.) and Highway (Hwy.). Please correct this information only if the actual data is incorrect.

If you have any questions about the information on this report, please call the EPCRA Reporting Center:

202-488-1501

Let the receptionist know that you are calling about the 'TRI 100% Industry Review'. The receptionist will connect you with a person who can answer your questions.

Thank you for your efforts in helping us to make Toxic Release Inventory data as accurate as possible.

Steven D. Newburg-Rinn

Steven D. Newburg-Rinn, Chief
Public Data Branch
Information Management Division
Office of Toxic Substances
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557597-6-NY	ALUMINUM (FUME OR DU	007429-90-5	FUG. AIR	NA
			STACK AIR	1,700
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557598-8-NY	CHROMIUM	007440-47-3	FUG. AIR	NA
			STACK AIR	1,400
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557599-0-NY	COBALT	007440-48-4	FUG. AIR	NA
			STACK AIR	1,180
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557600-4-NY	NICKEL	007440-02-0	FUG. AIR	NA
			STACK AIR	5,100
			WATER A	NA

TRI FACILITY ID: 11801PRKNL220MI

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557600-4-NY	NICKEL	007440-02-0	WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA

TRI FACILITY ID: 11590PRKNL1101P

PERKIN-ELMER CORP. METCO DIV.
1101 PROSPECT AVE.
WESTBURY, NY 11590

Dear Toxic Release Inventory (EPA Form R) Reporter:

Attached is a report, produced by EPA, which lists the chemical identities and corresponding release values for the Form R's EPA received from the facility listed above for Toxic Release Inventory (TRI) Reporting Year 1990 (RY90).

It is EPA's intention to represent all data reported by your facility as accurately as possible. In order to do this, EPA has implemented a variety of quality control procedures. We believe our data entry is of good quality. However, as a final quality control measure, we ask that you verify the critical release value information listed on this report against your Form R files. If you find any data entry errors, please let us know by following these simple instructions:

- On the attached report, use a red pen to mark through the erroneous value, and write the corrected value next to it.

- Return the corrected report to:

  The EPCRA Reporting Center
  P.O. Box 23779
  Washington, DC 20026-3779
  Attn: TRI 100%

We request that you do this within 21 calendar days of receipt, so that we may correct your data before we make it publicly available in the Spring, 1992. If you do not find any errors in this report, no response is necessary.

Please DO NOT use this report to make changes to release values or any other data which you reported incorrectly. Those changes should be submitted to EPA by making a photocopy of your Form R, writing 'REVISION' in red ink in the space labeled 'For Your Optional Use Only' on page one of the form, marking through the original data and writing in the revised data in red ink. The certification signature block on the revised form must contain an original signature. Mark through the photocopied signature and re-sign the revised form. Return the revised form to the address above. The attention line on the envelope should read: 'Attn: RY90 Revision'.

Please keep these facts in mind when reviewing the accuracy and completeness of this report:

1) The report lists only those Form R's which have passed our internal data quality checks. If one or more forms submitted by your facility is not listed here, you will be receiving additional correspondence from us soon.

2) The data represented here may not reflect any voluntary revisions submitted by your facility, if those revisions were not processed by the time we produced this report.

3) We have applied certain naming conventions to the way in which your facility's name is represented. For example, we always list the main company name first, followed by the division name. In addition, we use standard abbreviations for certain words such as Corporation (Corp.) and Highway (Hwy.). Please correct this information only if the actual data is incorrect.

If you have any questions about the information on this report, please call the EPCRA Reporting Center:

202-488-1501

Let the receptionist know that you are calling about the 'TRI 100% Industry Review'. The receptionist will connect you with a person who can answer your questions.

Thank you for your efforts in helping us to make Toxic Release Inventory data as accurate as possible.

Steven D. Newburg-Rinn

Steven D. Newburg-Rinn, Chief
Public Data Branch
Information Management Division
Office of Toxic Substances
Office of Pesticides and Toxic Substances
U.S. Environmental Protection Agency

TRI FACILITY ID: 11590PRKNL1101P

PERKIN-ELMER CORP. METCO DIV.
1101 PROSPECT AVE.
WESTBURY, NY 11590

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557601-6-NY	CHROMIUM	007440-47-3	FUG. AIR	NA
			STACK AIR	NA
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557602-8-NY	COPPER	007440-50-8	FUG. AIR	NA
			STACK AIR	NA
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557603-0-NY	COBALT	007440-48-4	FUG. AIR	NA
			STACK AIR	NA
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557604-2-NY	NICKEL	007440-02-0	FUG. AIR	NA
			STACK AIR	NA
			WATER A	NA

TRI FACILITY ID: 11590PRKNL1101P

PERKIN-ELMER CORP. METCO DIV.
1101 PROSPECT AVE.
WESTBURY, NY 11590

R E L E A S E V A L U E R E P O R T

DOCUMENT CONTROL # (FOR EPA REFERENCE)	CHEMICAL	CAS NUMBER	RELEASE ESTIMATES IN POUNDS	
13-90-04557604-2-NY	NICKEL	007440-02-0	WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA
13-90-04557605-5-NY	ALUMINUM (FUME OR DU	007429-90-5	FUG. AIR	NA
			STACK AIR	NA
			WATER A	NA
			WATER B	NA
			WATER C	NA
			U. INJ.	NA
			LAND FILL	NA
			LAND TREAT	NA
			LAND SURF.	NA
			LAND OTHER	NA
			POTW 1	NA
			OFF SITE 1	NA
			OFF SITE 2	NA
			OFF SITE 3	NA

Facility Reporting: Notifying Under Section 302

POLICY GUIDE

Facilities that use extremely hazardous substances or chemicals may be subject to Section 302 of the Emergency Planning and Community Right-To-Know Act. The EHS chemical list includes a threshold planning quantity for each substance. If this amount is present at any manufacturing plant, warehouse, hospital, farm, small business, or other facility, the owner or operator must notify the state emergency response commission. This lets planners know what hazardous chemicals are being used and stored in your community.

Failure to comply with this provision could lead to penalties of up to $25,000 a day for each day the violation continues.

With the exception of federal facilities, businesses were required to provide Section 302 notifications **by May 17, 1987, or within 60 days** after the facility first begins handling an extremely hazardous substance in excess of its TPQ.

APPLICATION OF POLICY

How To Notify

Notification should be in writing, and should specify the name and an accurate street address (not post office box number) of the facility. (See p. 591:1001 for the names and addresses of the state emergency response commissioners.) You do not have to notify the Environmental Protection Agency or the local committee. This initial notification is required to be made only to the state emergency response commission. EPA, however, has requested that the state commissions notify the appropriate EPA federal regional offices of the names and addresses of the facilities providing notification.

Following that initial notification, however, if EPA makes additions to the EHS list, companies must notify the SERC and the local emergency planning if they have a reportable quantity of the newly listed substance. That notification must be made within 60 days of EPA's listing.

Businesses also must provide dual-notification within 60 days after they first begin handling the EHS in excess of its threshold planning quantity.

Facilities that are covered by the law, because they have a listed chemical in sufficient quantity, but fail to notify their state commission face the possibility of substantial fines (See p. 551:4001 for a rundown of the penalties for non-compliance.)

Calculating the Threshold Planning Quantity

To determine whether a facility has a reportable amount of an extremely hazardous substance that equals or exceeds the threshold planning quantity, the facility owner or operator must determine the total amount of the substance present **at any one time.**

Storage of the substance at several different areas of the same facility, the method of storage of the substance, or the number of containers the substance is stored in does not matter in making this determination. **The factor that determines whether the threshold planning quantity is met is the total amount of the substance present.**

Calculating TPQs for Mixtures

Note: EPA says that if a facility that produces, uses, or stores mixtures "knows or reasonably should know" the components of a mixture (and at least one of those components is covered), they must notify the state commission and participate in local emergency planning. However, EPA says the facility is not obligated to ask the manufacturer about a mixture's components.

To determine whether a sufficient amount to meet or exceed the TPQ for a listed substance is present, special attention should be given to mixtures. EPA adopted the so-called **1 percent de minimis limit** of the extremely hazardous substance in mixtures, solutions, or formulations for determining quantities applicable to the threshold planning quantities.

What this means is that at concentrations of less than 1 percent in a mixture, calculations are not necessary to determine if the total amount of the hazardous substance meets the emergency planning TPQ.

EXAMPLE: If the threshold planning quantity for a chemical on the list is 100 pounds and that chemical is 2 percent by weight of a mixture, notification would be necessary if 5,000 pounds or more of that mixture is present at a facility.

Note: *Alloys, amalgams, or polymers are not considered mixtures by EPA for the purpose of TPQ*

Copyright © 1992 by The Bureau of National Affairs, Inc.
0-87179-939-1/92/$0+.50

calculation to determine emergency planning eligibility. Also do not to confuse the emergency planning notification requirements with the emergency release notification requirement. There is no de minimis quantity under either Section 103 of the Superfund law (CERCLA) or EPCRA Section 304 (emergency release notification). When determining if notification is required for a release of mixtures and solutions containing extremely hazardous substances or hazardous substances, EPA applies the weight percent calculations as illustrated in the example in this section. See p. 511:1151 of this guide for mixture rule under Section 103 of the Superfund law.

Calculating the TPQ for Solids

Extremely hazardous substances that are solids are subject to either of two threshold planning quantities, 10,000 pounds or 500 pounds as shown in the table of substances found in **Section 531:3001** of this guide. The lower quantity applies only if the solid exists in powdered form, and has a particle size of less than 100 microns; or is handled in solution or in molten form; or meets the criteria for a National Fire Protection Association (NFPA) rating of 2, 3, or 4 for reactivity. If the solid does not meet any of the above criteria, it is subject to the 10,000 pound threshold.

You can determine the 100 micron level by multiplying the weight percent of solid with a particle size less than 100 microns in a particular container by the quantity (weight) of solid in the container.

You can determine the amount of solid in solution by multiplying the weight percent of solid in solution in a particular container by the quantity (weight) of solution in the container.

The amount of solid (weight) in molten form must be multiplied by 0.3 to find out if the lower threshold planning quantity is met.

Facility Emergency Coordinator

Facilities that meet the criteria outlined above, in addition to informing the state emergency response commission of this fact, also must designate a facility representative to work with the local emergency planning committee. The company must notify the local planning committee of the designation of the facility representative.

Providing Information To The Committees

The law gives broad information gathering powers to the local committees. The owner or operator of a facility is responsible for informing the local planning committee of any changes occurring at the site that might be relevant to emergency planning. The determination of what is relevant rests with the facility owner or operator. Furthermore, the owner or operator, at the request of the local emergency planning committee, must promptly provide the local committee with any information necessary to develop or carry out the local emergency plan.

0-87179-939-1/92/$0+.50

NYC 6665703

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 12/00)

Please print or type. DO NOT STAPLE.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No. | Manifest Document No.

2. Page 1 of

Information within heavy bold line is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Telephone ( )

A. State Manifest Document Number: NYC 6665703

B. Generator's ID

5. Transporter 1 (Company Name) | 6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Telephone ( )

7. Transporter 2 (Company Name) | 8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address | 10. US EPA ID Number

G. State Facility ID

H. Facility's Telephone ( )

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	00		00013		EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above

a. | c.

b. | d.

K. Handling Codes for Wastes Listed Above

a. | c.

b. | d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name | Signature | Mo. Day Year

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name | Signature | Mo. Day Year

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name | Signature | Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name | Signature | Mo. Day Year

In case of emergency or spill, immediately call the National Response Center (800) 424-8802 or the State Spill Hotline (800) 457-7362

COPY 5 - GENERATOR - MAILED BY TSD FACILITY

P2SUL007161

NYC 6546003

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. DO NOT STAPLE.

(Hazardous Waste Manifest 12/00)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.
Manifest Document No.
2. Page 1 of

Information within heavy bold line is not required by Federal law.

3. Generator's Name and Mailing Address

4. Generator's Telephone ( )

A. State Manifest Document Number: NYC 6546003

B. Generator's ID

5. Transporter 1 (Company Name)
6. US EPA ID Number

C. State Transporter's ID

D. Transporter's Telephone ( )

7. Transporter 2 (Company Name)
8. US EPA ID Number

E. State Transporter's ID

F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address
10. US EPA ID Number

G. State Facility ID

H. Facility's Telephone ( )

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	001		00018		EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above

a. c.

b. d.

K. Handling Codes for Wastes Listed Above

a. c.

b. d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: DAN [illegible] | Signature | Mo. 1 Day 1 Year 01

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)

Printed/Typed Name: John Walsh | Signature | Mo. 1 Day 1 Year 01

18. Transporter 2 (Acknowledgement of Receipt of Materials)

Printed/Typed Name | Signature | Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name | Signature | Mo. Day Year

COPY 5-Generator-Mailed by TSD facility

P2SUL007162

NYC 6546003

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

Please print or type. DO NOT STAPLE.

(Hazardous Waste Manifest 12/00)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.: NYD1[illegible]
Manifest Document No.: [illegible]
2. Page 1 of 1

Information within heavy bold line is not required by Federal law.

3. Generator's Name and Mailing Address
[illegible] METCO INC
1101 PROSPECT AVE
WESTBURY NY 11590

4. Generator's Telephone (516)334-1400

A. State Manifest Document Number: NYC 6546003
B. Generator's ID: NAME

5. Transporter 1 (Company Name): SAFETY KLEEN SYSTEMS INC
6. US EPA ID Number: SCD000075150
C. State Transporter's ID: [illegible]
D. Transporter's Telephone (631)842-6311

7. Transporter 2 (Company Name)
8. US EPA ID Number
E. State Transporter's ID
F. Transporter's Telephone ( )

9. Designated Facility Name and Site Address: 211909
SAFETY-KLEEN SYSTEMS INC
RO DEARBO
FOX ASHVILLE, NY 1760
10. US EPA ID Number: NYSQ000788198
G. State Facility ID
H. Facility's Telephone (631)842-6311

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. HAZARDOUS WASTE, LIQUID, N.O.S. 9 NA3082 PG III (D009)(D001) AQUEOUS PARTS WASHER SOLUTION (B.38/GAL)	001	DM	00018	G	EPA D009 / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above
a. c.
b. d.

K. Handling Codes for Wastes Listed Above
a. T c.
b. d.

15. Special Handling Instructions and Additional Information
EMERGENCY RESP#1-800-468-1760 24HR
0144 1013266957 0019121966 0002160417 21

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: DAVID ALZAR
Signature:
Mo. Day Year: 11 10 12 01

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name: John Malone
Signature:
Mo. Day Year: 11 10 12 01

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.
Printed/Typed Name
Signature
Mo. Day Year

COPY 4-Generator State-mailed by generator

NYC 6546003

STATE OF NEW YORK
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
DIVISION OF SOLID & HAZARDOUS MATERIALS

HAZARDOUS WASTE MANIFEST

P.O. Box 12820, Albany, New York 12212

(Hazardous Waste Manifest 12/00)

Please print or type. DO NOT STAPLE.

Information within heavy bold line is not required by Federal law.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA No.
Manifest Document No.
2. Page 1 of

3. Generator's Name and Mailing Address

4. Generator's Telephone ( )

5. Transporter 1 (Company Name)
6. US EPA ID Number

7. Transporter 2 (Company Name)
8. US EPA ID Number

9. Designated Facility Name and Site Address
10. US EPA ID Number

A. State Manifest Document Number
NYC 6546003
B. Generator's ID
C. State Transporter's ID
D. Transporter's Telephone ( )
E. State Transporter's ID
F. Transporter's Telephone ( )
G. State Facility ID
H. Facility's Telephone ( )

GENERATOR

11. US DOT Description (Including Proper Shipping Name, Hazard Class and ID Number)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA STATE
b.					EPA STATE
c.					EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
a. c.
b. d.

K. Handling Codes for Wastes Listed Above
a. c.
b. d.

15. Special Handling Instructions and Additional Information

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations and state laws and regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name
Signature
Mo. Day Year

TRANSPORTER

17. Transporter 1 (Acknowledgement of Receipt of Materials)
Printed/Typed Name
Signature
Mo. Day Year

18. Transporter 2 (Acknowledgement of Receipt of Materials)
Printed/Typed Name
Signature
Mo. Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in item 19.

Printed/Typed Name
Signature
Mo. Day Year

COPY 8-Generator-retained by generator

Spills immediately call the National Response Center (800) 424-8802 and the NYS Department of Environmental Conservation (518) 457-7362.

P2SUL007164

K54474-R5732
LOCATION: 211808

SAFETY-KLEEN
LDR NOTIFICATION FORM

10/06/01 PAGE: 1
07:06:59

GENERATOR NAME: SULZER METCO INC

MANIFEST NO.: NYL6546003
OR SALES SERVICE NO.: 19121966

CUST#: 0002-1604-17

PURSUANT TO 40 CFR 268.7(A), I HEREBY NOTIFY THAT THIS SHIPMENT CONTAINS WASTE RESTRICTED UNDER 40 CFR PART 268 LAND DISPOSAL RESTRICTIONS (LDR).

A. GENERAL WASTE NOTIFICATION

LDR FORM LINE NO.: 1 MANIFEST PAGE/LINE# 01A SK PROFILE NO.: 0000
SKDOT#: 0010070

EPA WASTE CODES & LDR SUBCATEGORIES (IF ANY):
D039

TREATABILITY GROUP: NONWASTEWATERS

WASTE CONSITITUENT NOTIFICATION:
100 O-CRESOL
211 PENTACHLOROPHENOL
229 TETRACHLOROETHYLENE
250 CADMIUM
255 LEAD
257 MERCURY - ALL OTHERS
260 SILVER

NOTES

(P NOTICE: THIS LDR EXPIRES ON 12/31/2001.

GENERATOR'S AUTHORIZED SIGNATURE

DAVID WALZAH FAC. SPEC. III
NAME & TITLE (PRINTED OR TYPED)

10 / 02 / 01
DATE

:Q#: 402 LOC: 211808

TERR: 21 REF#: 19121966 SW: 0144

TOP COPY: GENERATOR MIDDLE COPY: FACILITY BOTTOM COPY: TRANSFE

Site Address:
SAME

PPW 09222004
WORK ORDER NO. 03859932

DOCUMENT NO. 62855

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Env Services Inc — VEHICLE ID # 5182

EPA ID # MAD039322250 — TRANS. 1 PHONE (781) 849-1800

TRANSPORTER 2 — VEHICLE ID #

EPA ID # — TRANS. 2 PHONE

DESIGNATED FACILITY	SHIPPER
Spring Grove Resource Recovery	Sulzer Metco US Inc
FACILITY EPA ID # OHD000816629	SHIPPER EPA ID # NYD131318651
ADDRESS 4579 Spring Grove Avenue	ADDRESS 1101 Prospect Avenue
CITY Cincinnati STATE OH ZIP 45232	CITY Westbury STATE NY ZIP 11590

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
1 x 55	DM		A. NON DOT REGULATED MATERIAL, (ABSORBENT PADS, OIL FILTERS), NON DOT HAZARDOUS, NONE	173	P
7 x 55	DM		B. NON DOT REGULATED MATERIAL, (MAGNESIUM OXIDE, TITANIUM OXIDE), NON DOT HAZARDOUS, NONE	2,646	P
1 x 55	DM		C. NON DOT REGULATED MATERIAL, (KITCHEN GREASE), NON DOT HAZARDOUS, NONE	489	P
1 x 55	DM		D. NON DOT REGULATED MATERIAL, (PETROLEUM OIL), NON DOT HAZARDOUS, NONE NYLON TURNINGS	152	P
1 x 55	DM		E. NON DOT REGULATED MATERIAL, NON DOT HAZARDOUS, NONE	589	P
1 x 55	DM		F. NON DOT REGULATED MATERIAL, (ALUMINIUM OXIDE), NON DOT HAZARDOUS, NONE	725	P
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS EMERGENCY PHONE #: (800) 483-3718
A: CH189102 B: CH189107 C: CH189105 D: CH189144 E: CH189134 F: CH189110 A-C,E,F:NYDEC:L D:NYDEC:R
NJDEP#07258 Decal# 007643

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

SHIPPER	PRINT DAVID WALSH	SIGN	DATE 10/18/04
TRANSPORTER 1	PRINT FRANK RICCIARDELLI	SIGN	DATE 10/18/04
TRANSPORTER 2	PRINT	SIGN	DATE
RECEIVED BY	PRINT	SIGN	DATE

CHI 107

STATE OF CONNECTICUT

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) (Form designed for use on elite (12-pitch) typewriter.)

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N Y D 1 3 1 3 1 8 6 5 1
Manifest Document No.: 02-4 84
2. Page 1 of 1
Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address
Sulzer Metco US Inc
1101 Prospect Avenue
Westbury, NY 11590

4. Generator's Phone (516) 338-2316

A. State Manifest Document Number: CT F1002484

B. G.S.I. (Gen. Site Address): SAME

5. Transporter 1 Company Name: Clean Harbors Env Services Inc
6. US EPA ID Number: M A D 0 3 9 3 2 2 5 0

7. Transporter 2 Company Name:
8. US EPA ID Number:

9. Designated Facility Name and Site Address
Clean Harbors Of Conn Inc
51 Broderick Road
Bristol, CT 06010
10. US EPA ID Number: C T D 0 0 0 6 0 4 4 8 8

C. S.T.I. (Trans. Lic. Plate #)
D. Tran. Phone ( )
E. S.T.I. (Trans. Lic. Plate #) 049-1000
F. Tran. Phone ( )
G. State Facility's ID (Not Required)
H. Facility's Phone 860 583 8917

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE CHROMIC ACID SOLUTION , 8, UN1755, II					EPA D002 STATE
b. HAZARDOUS WASTE SOLID, N.O.S. (CHROMIUM), 9, NA3077, III	002	DF	00110	G	EPA D007 STATE
c.	003	DM	01744	P	EPA STATE
d.					EPA STATE

J. Additional Descriptions for Materials Listed Above
a. (L), (C,E), (ERG#:151)
b. (S), (E), (ERG#:171)
c.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.	501 B	T24	c.		
b.	801 B	T80	d.		

15. Special Handling Instructions and Additional Information
11a CH169142 D006, D007, D003 2x55
11b CH169108 3x55
IN EMERGENCY, CALL CHES 1-800-645-8005
WO# D3369199

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: DAVID WALZAC
Signature:
Month Day Year: 1 0 2 0 0 1

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: FRANK RICCIARDELLI
Signature:
Month Day Year: 1 0 2 0 0 1

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name:
Signature:
Month Day Year:

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19
Printed/Typed Name:
Signature:
Month Day Year:

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No. 2050-0039.

Clean Harbors has appropriate permits to accept the waste the EPA prior is shipping

GENERATOR

FOR SPILLS WITHIN CONNECTICUT CONTACT DEP 860-424-3338 AND CHEMICAL SPILL RESPONSE AT (860) 424-8332

U.S. COAST GUARD NATIONAL RESPONSE CENTER

COPY 3: FACILITY TO GENERATOR

CT F 1002484

DEPARTMENT OF ENVIRONMENTAL PROTECTION

Hazardous Waste MANIFEST PROGRAM
79 Elm St., Hartford, CT 06106-5127

Please type (or print) *(Form designed for use on elite (12 pitch) typewriter.)*

FOR STATE USE ONLY

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.
Manifest Document No.
2. Page 1 of 1

Information in the shaded areas is not required by Federal law, but may be required by State law.

3. Generator's Name and Mailing Address

4. Generator's Phone ( )
5. Transporter 1 Company Name
6. US EPA ID Number
7. Transporter 2 Company Name
8. US EPA ID Number
9. Designated Facility Name and Site Address
10. US EPA ID Number

A. State Manifest Document Number
CT F1002484
B. G.S.I. (Gen. Site Address)
C. S.T.I. (Trans. Lic. Plate #)
D. Tran. Phone ( )
E. S.T.I. (Trans. Lic. Plate #)
F. Tran. Phone ( )
G. State Facility's ID (Not Required)
H. Facility's Phone

11. US DOT Description *(Including Proper Shipping Name, Hazard Class, and ID Number)*	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.					EPA / STATE
b.					EPA / STATE
c.					EPA / STATE
d.					EPA / STATE

J. Additional Descriptions for Materials Listed Above
a.
b.
c.
d.

K. Handling Codes for Wastes Listed Above

	Interim	Final		Interim	Final
a.			c.		
b.			d.		

15. Special Handling Instructions and Additional Information

Point of Departure:

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, and all applicable State laws and regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name — Signature — Month Day Year

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 9/91) Form Approved OMB No 2050-0039.

GENERATOR

FOR SPILLS WITHIN CONNECTICUT CONTACT DEP - OIL AND CHEMICAL SPILL RESPONSE AT (860) 424-3338
IN EVENT OF A SPILL CONTACT THE NATIONAL RESPONSE CENTER U.S. COAST GUARD 1-800-424-8802

COPY 8: GENERATOR RETAINS

CT F 1002484

COPY 8: GENERATOR RETAINS

P2SUL007168

INSTRUCTIONS
FOR COMPLETING THE CONNECTICUT UNIFORM HAZARDOUS WASTE MANIFEST

IMPORTANT: READ ALL INSTRUCTIONS BEFORE COMPLETING THIS FORM. ALL 8 COPIES MUST BE TOTALLY LEGIBLE.

GENERAL INFORMATION

The Hazardous Waste Manifest is designed to track waste from the point of generation to final disposal ("cradle to grave"). In order to accomplish this goal, it is essential that all items on the manifest be completed correctly.

Incomplete, incorrect or illegible manifests are violations of the law, and could subject you to civil or criminal liabilities as specified in Connecticut Hazardous Waste Regulations.

The Connecticut manifest contains 8 copies. ALL COPIES MUST BE LEGIBLE! (Illegible manifests submitted to the State will be returned to the Generator for proper completion). This form is designed for use on a 12 pitch (elite) typewriter. A ball point pen may also be used only if you press down **HARD.** The eight copies must be filed with the appropriate parties as they are completed.

* Be aware that hazardous wastes manifested into or out of Connecticut are subject to a hazardous waste assessment per C.G.S 22a-132. Please contact the Dept. of Revenue Services at (860) 541-3225 for more information.

USE OF THE MANIFEST

This manifest must be used for RCRA regulated hazardous wastes. It may also be used for state regulated hazardous wastes, or for other state regulated special wastes for which state regulations **Require** the use of this manifest.

Wastes which are not federally or state regulated may only appear on a manifest in a mixed shipment. RCRA regulated hazardous wastes should be listed first, then the state regulated wastes, then non-hazardous wastes. (Non-hazardous non-regulated wastes, like empty drums which are regulated by DOT, may also be listed under Item 15).

Copy Distribution Instructions are found on the back of the form along with tables and instructions for the transporter and facility.

GENERATOR SECTION

Item 1: GENERATOR'S US EPA ID NO-MANIFEST DOCUMENT NO. - Enter U.S. EPA 12 digit identification number (CT Conditionally Exempt Small Quantity Generators who have not obtained an EPA ID number should enter the letters "CESQG" here). Then enter a UNIQUE 5 digit number you assign to this manifest. Use of serially increasing numbers (eg. 00001, 00002, etc.) is recommended.

Item 2: PAGE 1 of - Enter the total number of pages used to complete this manifest. If you use more than one manifest for a shipment make sure to cross-reference each of the manifests in Item 15, by state manifest document numbers.

Item A: STATE MANIFEST DOCUMENT NUMBER - Number preprinted by CT.

Item 3: GENERATOR'S NAME & MAILING ADDRESS - Enter the name (as notified to EPA) & mailing address of the Generator. This address should be the location that will manage the returned manifest forms. (However, a manifest copy must be kept at the actual site).

Item 4: GENERATOR'S PHONE NUMBER - Enter the phone number of someone who is knowledgeable about this shipment, and who can respond to questions regarding the information on this manifest, or in case of an emergency (24 hrs).

Item B: G.S.I. (Gen. Site Address) - Enter the location address of the Generator - street, city (and state if different) where the waste is being picked up. Enter "same" if the mailing address and location address are identical.

Item 5: TRANSPORTER 1 COMPANY NAME - Enter the company name (as notified to EPA) of the first transporter who will transport the waste.

Item 6: US EPA ID NUMBER - Enter the US EPA 12 digit identification number of the first transporter identified in Item 5.

Item C: S.T.I. (Tran. Lic. Plate #) - Enter the state of registration and then the license plate number of the waste carrying portion of the vehicle. (e.g., NY 14235). NOTE: ALL HAZARDOUS WASTE TRANSPORTERS OPERATING IN CONNECTICUT MUST HAVE A VALID CONNECTICUT TRANSPORTERS PERMIT.

Item D: TRANSPORTER'S PHONE - Enter a telephone number with area code where an authorized agent of the transporter can be reached.

Item 7: TRANSPORTER 2 COMPANY NAME - If applicable enter the company name (as notified to EPA) of the 2nd transporter who will transport the waste. Whenever more than two transporters or four waste streams are involved in a shipment, the Generator shall fully complete additional manifests, listing the additional information.

Item 8: US EPA ID NUMBER - If applicable, enter the US EPA 12 digit identification number of the 2nd transporter identified in Item 7.

Item E: S.T.I. (Tran. Lic. Plate #) - If applicable, enter the 2nd transporter's state of registration & license plate number for the waste carrying portion of the vehicle being used to make the pick-up.

Item F: TRANSPORTER'S PHONE - If applicable, enter the 2nd transporter's telephone number with area code where an authorized agent of the transporter can be reached.

Item 9: DESIGNATED FACILITY NAME & SITE ADDRESS - Enter the company name (as notified to EPA) of the Treatment, Storage, or Disposal Facility designated to receive the waste listed on the manifest. The address must be the site address, which may differ from the mailing address.

Item 10: US EPA ID NUMBER - Enter the U.S. EPA 12 digit identification number of the designated Facility identified in Item 9.

Item G: STATE FACILITY ID - No entry required by Connecticut.

Item H: FACILITY PHONE - Enter the telephone number with area code for the Facility designated to receive the waste on the manifest.

Item 11: US DOT DESCRIPTION - All the following information must be entered: The correct US DOT (Dept. of Transportation) name for the waste as identified in 49 CFR Parts 171-177 (usually found in Column 2 of Section 172.101), the assigned DOT Hazard Class (usually found in Column 3) & the 4 digit UN/NA ID number (Column 3A). (Example: Waste acetone, flammable liquid, UN 1090 (F003) RQ.) US DOT requires the word "waste" before or in the shipping name of all hazardous waste.

Item 12: CONTAINERS (NO. & TYPE) - Enter the number of containers for each waste and the appropriate abbreviation from TABLE I (below) for the type of container used.

TABLE I - CONTAINER TYPE

DM = Metal drums, barrels, kegs
DW = Wooden drums, barrels, kegs
DF = Fiberboard or plastic drums, barrels, kegs
CY = Cylinders

TP = Tanks, Portable
TT = Cargo Tanks (tank trucks)
TC = Tank Cars
DT = Dump Trucks

CM = Metal boxes, cartons, cases (incl. roll-offs)
CW = Wooden boxes, cartons, cases
CF = Fiber or plastic boxes, cartons, cases
BA = Burlap, cloth, paper, plastic bags

LAND DISPOSAL RESTRICTION NOTIFICATION FORM LDR-1 Manifest No. CYP 1002464

THE HAZARDOUS WASTES IDENTIFIED ON THE HAZARDOUS WASTE MANIFEST IDENTIFIED ABOVE AND BEARING THE EPA HAZARDOUS WASTE CODES LISTED BELOW ARE RESTRICTED WASTES WHICH ARE PROHIBITED FROM LAND DISPOSAL WITHOUT FURTHER TREATMENT UNDER THE LAND DISPOSAL RESTRICTIONS, 40 CFR PART 268 AND RCRA SECTION 3004(D). IN ACCORDANCE WITH 40 CFR 268.7(a)(2), THE EPA WASTE CODE, WASTE SUBCATEGORY, AND TREATABILITY GROUPS, AS APPLICABLE, ARE INCLUDED BELOW.

INSTRUCTIONS -- COMPLETE ALL SECTIONS. REFER TO PAGE 3 OF THIS FORM FOR KEY TERMS/DEFINITIONS.

Column 1 - Line Item: Enter the manifest line item number (e.g., 11a) that corresponds to the waste code(s).

Column 2 - Waste Codes/Subcategory: Check off all applicable waste codes. For D001 through D043, also check applicable subcategory; for F001 through F005, check applicable constituents.

Column 3 - Wastewater/Non-wastewater: Check off "WW" for wastewater and "Non-WW" for non-wastewaters.

Column 4 - LDR Handling Code: Circle the appropriate handling code, as follows:

1 - The waste is a characteristic hazardous waste D001, D002, D003, D004-D011, or D018-43 which is intended for treatment/disposal in a CWA system, CWA-equivalent system, or Class I SDWA system. Underlying Hazardous Constituents (UHC's) are NOT required to be identified.

1A - The waste is a characteristic hazardous waste D001 High TOC Ignitable Liquids Subcategory (i.e., greater than or equal to 10% TOC). Pursuant to 40 CFR 268.40, the waste must be treated using organic recovery (RORGS) or combustion (CMBST) technology. UHC's are NOT required to be identified.

2 - The waste is a characteristic hazardous waste D001 (other than High TOC Ignitable Liquids), D002, D003 Explosive, Water Reactive or Other Reactive subcategory, D004-D011, D012-17 non-wastewater, or D018-43 which is intended for treatment/disposal in a non-CWA system, non-CWA-equivalent system, or non-Class I SDWA system located in the United States. All UHC's which are reasonably expected to be present must be identified, except for D001 waste that is intended to be treated using organic recovery (RORGS) or combustion (CMBST) technologies. Identify UHC's by completing Sections I and IV of CHI Form LDR-1 Addendum and attach completed Addendum to this form.

3 - The waste is a characteristic (i.e., D-code) or listed (i.e., F-, K-, U-, or P-code) hazardous waste which is intended for export and treatment/disposal at a facility located outside the United States. LDR treatment standards do not apply to hazardous waste treated/disposed in a foreign country, and per USEPA guidance, the identification of UHC's (if applicable) is not required for hazardous waste that is intended to be exported. Note however that if the exported waste is subsequently returned for treatment/disposal in the United States, all applicable LDR regulations would apply and a revised LDR notification would be required.

4 - The waste meets the definition of hazardous debris pursuant to 40 CFR 268.2(h) and is intended for treatment/disposal in compliance with the alternate debris treatment technologies of 40 CFR 268.45. In accordance with the requirements of 40 CFR 268.7(a)(2): the contaminants subject to treatment (CSTT's) must be identified as part of this notification. Identify CSTT's by completing Sections III and IV of CHI Form LDR-1 Addendum and attach completed Addendum to this form. These constituents are being treated to comply with 40 CFR 268.45.

5 - The waste is a characteristic waste D003 Reactive Sulfide, Reactive Cyanide, or Unexploded Ordnance subcategory, a characteristic waste D012-17 wastewater, or a listed (i.e., F-, K-, U-, or P-code) hazardous waste. UHC's are NOT required to be identified.

6 - The waste is a lab pack that is intended for incineration using the alternative lab pack treatment standard under 40 CFR 268.42(c). UHC's are NOT required to be identified; however, the generator must complete and attach the lab pack certification statement on CHI Form LDR-LP. Note that in accordance with 40 CFR Part 268 Appendix IV, lab packs which contain waste codes D009, F019, K003, K004, K005, K006, K062, K071, K100, K106, P010, P011, P012, P076, P078, U134, and U151 are not eligible for alternative lab pack treatment standard.

*** NOTE: IF THE WASTE IS A SOIL CONTAMINATED WITH A LISTED OR CHARACTERISTIC WASTE AND THE GENERATOR WANTS TO USE THE ALTERNATE TREATMENT STANDARD FOR SOILS, CONTACT CORPORATE COMPLIANCE FOR THE APPROPRIATE LDR NOTIFICATION FORM.

SECTION I. CHARACTERISTIC WASTES D001 THROUGH D043

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY			COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
	[ ]	D001	Ignitables, except High TOC Subcategory	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ]	D001	High TOC Ignitable Liquids Subcategory (Greater than or equal to 10% TOC)	[ ] Non-WW only	1A 3 6
11a	[✓]	D002	Corrosives	[ ] WW [✓] Non-WW	1 (2) 3 4 6
	[ ]	D003			
		[ ]	Reactive Sulfide, per 261.23(a)(5)	[ ] WW [ ] Non-WW	1 3 4 5 6
		[ ]	Reactive Cyanide, per 261.23(a)(5)	[ ] WW [ ] Non-WW	1 3 4 5 6
		[ ]	Explosive, per 261.23(a)(6), (7) & (8)	[ ] WW [ ] Non-WW	1 2 3 4 6
		[ ]	Water Reactive, per 261.23(a)(2), (3) & (4)	[ ] Non-WW only	1 2 3 4 6
		[ ]	Other Reactive, per 261.23(a)(1)	[ ] WW [ ] Non-WW	1 2 3 4 6
		[ ]	Unexploded Ordnance, Emergency Response	[ ] WW [ ] Non-WW	1 3 4 5 6
	[ ]	D004	Arsenic	[ ] WW [ ] Non-WW	1 2 3 4 6
	[ ]	D005	Barium	[ ] WW [ ] Non-WW	1 2 3 4 6
11a	[✓]	D006			
		[✓]	Cadmium	[ ] WW [✓] Non-WW	1 (2) 3 4 6
		[ ]	Cadmium Containing Batteries	[ ] Non-WW only	2 3 6
11a 11b	[✓]	D007	Chromium	[ ] WW [✓] Non-WW	1 (2) 3 4 6
11a	[✓]	D008			
		[✓]	Lead	[ ] WW [✓] Non-WW	1 (2) 3 4 6
		[ ]	Lead Acid Batteries	[ ] Non-WW only	2 3 6

01-Oct-30 08:26am From-CLEAN HARBORS ENVIRONMENTAL SERV., INC 7322484414 T-301 P.01/06 F-996

P2SUL007170

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
LAND DISPOSAL RESTRICTION NOTIFICATION FORM LDR-1

Manifest No. CTF1002484

SECTION I. CHARACTERISTIC WASTES D001-43 (CONTINUED)

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / NAME	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
_____	[ ] D009		
	[ ] Low Mercury, less than 260 mg/kg Mercury	[ ] WW [ ] Non-WW	1 2 3 4
	[ ] High Mercury Organic Subcategory	[ ] Non-WW only	2 3 4
	[ ] High Mercury Inorganic Subcategory	[ ] Non-WW only	2 3 4
_____	[ ] D010 Selenium	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D011 Silver	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D012 Endrin	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D013 Lindane	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D014 Methoxychlor	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D015 Toxaphene	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D016 2,4-D	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D017 2,4,5-TP (Silvex)	[ ] WW [ ] Non-WW	2 3 4 5 6
_____	[ ] D018 Benzene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D019 Carbon tetrachloride	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D020 Chlordane	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D021 Chlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D022 Chloroform	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D023 o-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D024 m-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D025 p-Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D026 Cresol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D027 1,4-Dichlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D028 1,2-Dichloroethane	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D029 1,1-Dichloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D030 2,4-Dinitrotoluene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D031 Heptachlor (and its epoxide)	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D032 Hexachlorobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D033 Hexachlorobutadiene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D034 Hexachloroethane	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D035 Methyl ethyl ketone	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D036 Nitrobenzene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D037 Pentachlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D038 Pyridine	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D039 Tetrachloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D040 Trichloroethylene	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D041 2,4,5-Trichlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D042 2,4,6-Trichlorophenol	[ ] WW [ ] Non-WW	1 2 3 4 6
_____	[ ] D043 Vinyl Chloride	[ ] WW [ ] Non-WW	1 2 3 4 6

SECTION II. SPENT SOLVENT WASTES F001 THROUGH F005

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / CONSTITUENTS	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
_____	[ ] F001 [ ] F002 [ ] F003 [ ] F004 [ ] F005	[ ] WW [ ] Non-WW	3 4 5 6

_____ [ ]	1. ALL F001-F005	_____ [ ]	12. Cyclohexanone
_____ [ ]	2. Acetone	_____ [ ]	13. o-Dichlorobenzene
_____ [ ]	3. Benzene	_____ [ ]	14. 2-Ethoxyethanol (F005 only)
_____ [ ]	4. n-Butyl alcohol	_____ [ ]	15. Ethyl acetate
_____ [ ]	5. Carbon disulfide	_____ [ ]	16. Ethyl benzene
_____ [ ]	6. Carbon tetrachloride	_____ [ ]	17. Ethyl ether
_____ [ ]	7. Chlorobenzene	_____ [ ]	18. Isobutyl alcohol
_____ [ ]	8. o-Cresol	_____ [ ]	19. Methanol
_____ [ ]	9. m-Cresol (difficult to distinguish from p-cresol)	_____ [ ]	20. Methylene chloride
_____ [ ]	10. p-Cresol (difficult to distinguish from m-cresol)	_____ [ ]	21. Methyl ethyl ketone
_____ [ ]	11. Cresol - mixed isomers (sum of o-, m- and p-cresol)	_____ [ ]	22. Methyl isobutyl ketone
		_____ [ ]	23. Nitrobenzene
		_____ [ ]	24. 2-Nitropropane (F005 only)
		_____ [ ]	25. Pyridine
		_____ [ ]	26. Tetrachloroethylene
		_____ [ ]	27. Toluene
		_____ [ ]	28. 1,1,1-Trichloroethane
		_____ [ ]	29. 1,1,2-Trichloroethane
		_____ [ ]	30. Trichloroethylene
		_____ [ ]	31. 1,1,2-Trichloro-1,2,2-trifluoroethane
		_____ [ ]	32. Trichloromonofluoromethane
		_____ [ ]	33. Xylene - mixed isomers (sum of o-, m-, and p-xylene)

01-Oct-30 08:27am From-CLEAN HARBORS ENVIRONMENTAL SERV. INC. 7322484414 T-301 P.02/06 F-996

SECTION III. CALIFORNIA LIST WASTES

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
_____	Hazardous waste containing one or more of the following California List constituents:	[ ] WW [ ] Non-WW	1 2 3 4 5 6

[ ] ALL CALIFORNIA LIST CONSTITUENTS
[ ] Liquids with nickel greater than or equal to 134 mg/l
[ ] Liquids with thallium greater than or equal to 130 mg/l
[ ] Liquids with PCB's > or = 50 ppm
[ ] Waste containing HOC's > or = 1,000 mg/kg

SECTION IV. OTHER LISTED WASTES (F006-12, F019-F020, F037-38, F039, K-, U-, AND P-CODES)

COLUMN 1: LINE ITEM SEE MANIFEST	COLUMN 2: WASTE CODE / SUBCATEGORY	COLUMN 3: WASTEWATER/ NON-WASTEWATER	COLUMN 4: HANDLING CODE
_____	_____	[ ] WW [ ] Non-WW	3 4 5 6
_____	_____	[ ] WW [ ] Non-WW	3 4 5 6
_____	_____	[ ] WW [ ] Non-WW	3 4 5 6
_____	_____	[ ] WW [ ] Non-WW	3 4 5 6
_____	_____	[ ] WW [ ] Non-WW	3 4 5 6

[ ] CHECK HERE IF ADDITIONAL LISTED WASTE CODES ARE PRESENT. COMPLETE AND ATTACH LDR-1 CONTINUATION SHEET.
[ ] CHECK HERE IF WASTE CODE F039 (MULTISOURCE LEACHATE) IS PRESENT. IDENTIFY F039 CONSTITUENTS BY COMPLETING SECTIONS II AND IV OF CHI FORM LDR-1 ADDENDUM AND ATTACH COMPLETED ADDENDUM TO THIS FORM.

SECTION V. CONTACT NAME AND DATE

Print Name: DAVID WALZAK Date: 10/30/01

KEY TERMS/DEFINITIONS

CLASS I SDWA SYSTEM means a Class I deep well facility regulated under the Safe Drinking Water Act (SDWA).

CWA SYSTEM means a centralized wastewater treatment facility discharging under a Clean Water Act (CWA) permit. For example, a CWA facility would treat organic or inorganic aqueous wastes and discharge the treated effluent to the local sewer system. Examples of CWA treatment systems owned and operated by Clean Harbors include the wastewater treatment operations at Baltimore (including the CES system), Bristol, Chicago, Cincinnati and Cleveland.

CWA-EQUIVALENT SYSTEM means a "zero discharge system" that engages in "CWA-equivalent" treatment before land disposal. Zero-discharge facilities treat hazardous wastes using "CWA-equivalent" treatment methods, but do not discharge the treatment effluent to a sewer or water body (e.g., spray irrigation land farm). "CWA-equivalent" treatment methods means biological treatment for organics, alkaline chlorination, or ferrous sulfate precipitation for cyanide, precipitation/ sedimentation for metals, reduction of hexavalent chromium, or other treatment technology that can be demonstrated to perform equally or greater than these technologies.

HIGH TOC IGNITABLE LIQUIDS SUBCATEGORY means an ignitable liquid hazardous waste (waste code D001) which contains greater than or equal to 10% total organic carbon (TOC). Pursuant to 40 CFR 268.40, such wastes must be treated using organic recovery (RORGS) or combustion (CMBST) technology. Examples of RORGS technologies include the CES unit at Clean Harbors of Baltimore. Examples of CMBST technologies include hazardous waste fuel blending and subsequent reuse at a cement kiln, or destruction at a RCRA incinerator.

WASTEWATERS are wastes that contain less than 1% by weight total organic carbon (TOC) and less than 1% by weight total suspended solids (TSS). [See 40 CFR 268.2(f)]

01-OCT-30 08:28am From-CLEAN HARBORS ENVIRONMENTAL SERV., INC. 7322484414 T-301 P.03/06 F-996

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
LAND DISPOSAL RESTRICTION NOTIFICATION FORM LDR-1 ADDENDUM

Manifest No. CTF 1002464

SECTION I. UNDERLYING HAZARDOUS CONSTITUENTS (UHC'S)

[ ] Check here if one or more of the constituents listed in Section IV below are reasonably expected to be present as an "Underlying Hazardous Constituent" in the waste. Then in Section IV, check off each constituent. Note that per the definition of UHC in 40 CFR 268.2, fluoride, selenium, sulfides, vanadium and zinc are NOT regulated as UHC's.

[ ] Check here if NONE of the UHC constituents listed in Section IV are expected to be present in the waste.

SECTION II. MULTI-SOURCE LEACHATE (WASTE CODE F039)

[ ] Check here if one or more of the constituents listed in Section IV are present as a constituent in the multi-source leachate (F039) waste. Then in Section IV below, check off each constituent. Note that constituents which are identified by an asterisk (*) are NOT regulated as F039 constituents.

[ ] Check here if NONE of the F039 constituents listed in Section IV are present in the waste.

SECTION III. HAZARDOUS DEBRIS CONTAMINANTS SUBJECT TO TREATMENT (CSTT)

[ ] Check here if one or more of the constituents listed in Section IV is a CSTT for hazardous debris that is intended for treatment using the alternate treatment technologies in 40 CFR 268.45. To identify CSTT's, refer to the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40. Then, in Section IV below, check off the constituents that appear for each waste code used to identify the debris.

[ ] Check here if the entry in the "Regulated Hazardous Constituent" column in the Treatment Standard Table in 40 CFR 268.40 is "Not Applicable", i.e. D001, D002, and D003 (non-cyanides subcategories only).

SECTION IV. LIST OF CONSTITUENTS - INCLUDE MANIFEST LINE ITEM

34. _____ [ ] Acenaphthylene
35. _____ [ ] Acenaphthene
36. _____ [ ] Acetone
37. _____ [ ] Acetonitrile
38. _____ [ ] Acetophenone
39. _____ [ ] 2-Acetylaminofluorene
40. _____ [ ] Acrolein
41. _____ [ ] Acrylamide (*)
42. _____ [ ] Acrylonitrile
251. _____ [ ] Aldicarb sulfone (*)
43. _____ [ ] Aldrin
44. _____ [ ] 4-Aminobiphenyl
45. _____ [ ] Aniline
46. _____ [ ] Anthracene
47. _____ [ ] Antimony
48. _____ [ ] Aramite
49. _____ [ ] Arsenic
50. _____ [ ] alpha-BHC
51. _____ [ ] beta-BHC
52. _____ [ ] delta-BHC
53. _____ [ ] gamma-BHC
252. _____ [ ] Barban (*)
54. _____ [ ] Barium
253. _____ [ ] Bendiocarb (*)
255. _____ [ ] Benomyl (*)
55. _____ [ ] Benzene
56. _____ [ ] Benz(a)anthracene
57. _____ [ ] Benzal chloride (*)
58. _____ [ ] Benzo(b)fluoranthene (difficult to distinguish from Benzo(k)fluoranthene)
59. _____ [ ] Benzo(k)fluoranthene (difficult to distinguish from Benzo(b)fluoranthene)
60. _____ [ ] Benzo(g,h,i)perylene
61. _____ [ ] Benzo(a)pyrene
62. _____ [ ] Beryllium
63. _____ [ ] Bromodichloromethane
64. _____ [ ] Bromomethane (Methyl bromide)
65. _____ [ ] 4-Bromophenyl phenyl ether
66. _____ [ ] n-Butyl alcohol
256. _____ [ ] Butylate (*)
67. _____ [ ] Butyl benzyl phthalate
68. _____ [ ] 2-sec-Butyl-4,6-dinitrophenol (Dinoseb)
69. _____ [ ] Cadmium
257. _____ [ ] Carbaryl (*)
258. _____ [ ] Carbendazim (*)
259. _____ [ ] Carbofuran (*)
260. _____ [ ] Carbofuran phenol (*)
70. _____ [ ] Carbon disulfide
71. _____ [ ] Carbon tetrachloride
261. _____ [ ] Carbosulfan (*)
72. _____ [ ] Chlordane (alpha and gamma isomers)
73. _____ [ ] p-Chloroaniline
74. _____ [ ] Chlorobenzene
75. _____ [ ] Chlorobenzilate
76. _____ [ ] 2-Chloro-1,3-butadiene
77. _____ [ ] Chlorodibromomethane
78. _____ [ ] Chloroethane
79. _____ [ ] bis(2-Chloroethoxy)methane
80. _____ [ ] bis(2-Chloroethyl)ether
81. _____ [ ] Chloroform
82. _____ [ ] bis(2-Chloroisopropyl)ether
83. _____ [ ] p-Chloro-m-cresol
84. _____ [ ] 2-Chloroethyl vinyl ether (*)
85. _____ [ ] Chloromethane (Methyl Chloride)
86. _____ [ ] 2-Chloronaphthalene
87. _____ [ ] 2-Chlorophenol
88. _____ [ ] 3-Chloropropylene
89. _____ [ ] Chromium (Total)
90. _____ [ ] Chrysene
91. _____ [ ] o-Cresol
92. _____ [ ] m-Cresol (difficult to distinguish from p-Cresol)
93. _____ [ ] p-Cresol (difficult to distinguish from o-Cresol)
262. _____ [ ] m-Cumenyl methylcarbamate (*)
94. _____ [ ] Cyanides (Total)
95. _____ [ ] Cyanides (Amenable)
263. _____ [ ] Cycloate (*)
96. _____ [ ] Cyclohexanone
97. _____ [ ] 1,2-Dibromo-3-chloropropane
98. _____ [ ] 1,2-Dibromoethane (Ethylene dibromide)
99. _____ [ ] Dibromomethane
100. _____ [ ] 2,4-Dichlorophenoxyacetic acid (2,4-D)
101. _____ [ ] o,p'-DDD
102. _____ [ ] p,p'-DDD
103. _____ [ ] o,p'-DDE
104. _____ [ ] p,p'-DDE
105. _____ [ ] o,p'-DDT
106. _____ [ ] p,p'-DDT
107. _____ [ ] Dibenz(a,h)anthracene
108. _____ [ ] Dibenzo(a,e)pyrene
109. _____ [ ] m-Dichlorobenzene
110. _____ [ ] o-Dichlorobenzene
111. _____ [ ] p-Dichlorobenzene
112. _____ [ ] Dichlorodifluoromethane
113. _____ [ ] 1,1-Dichloroethane
114. _____ [ ] 1,2-Dichloroethane
115. _____ [ ] 1,1-Dichloroethylene
116. _____ [ ] trans-1,2-Dichloroethylene
117. _____ [ ] 2,4-Dichlorophenol
118. _____ [ ] 2,6-Dichlorophenol
119. _____ [ ] 1,2-Dichloropropane
120. _____ [ ] cis-1,3-Dichloropropylene
121. _____ [ ] trans-1,3-Dichloropropylene

01-Oct-30 08:29am From-CLEAN HARBORS ENVIRONMENTAL SERV., INC 7322484414 T-301 P.04/06 F-996

122. _____ [ ] Dieldrin
123. _____ [ ] Diethyl phthalate
124. _____ [ ] 2,4-Dimethyl phenol
125. _____ [ ] Dimethyl phthalate
126. _____ [ ] Di-n-butyl phthalate
127. _____ [ ] 1,4-Dinitrobenzene
128. _____ [ ] 4,6-Dinitro-o-cresol
129. _____ [ ] 2,4-Dinitrophenol
130. _____ [ ] 2,4-Dinitrotoluene
131. _____ [ ] 2,6-Dinitrotoluene
132. _____ [ ] Di-n-octyl phthalate
133. _____ [ ] p-Dimethylaminoazobenzene (*)
134. _____ [ ] Di-n-propylnitrosamine
135. _____ [ ] 1,4-Dioxane (*)
136. _____ [ ] Diphenylamine (difficult to distinguish from diphenylnitrosamine)
137. _____ [ ] Diphenylnitrosamine (difficult to distinguish from diphenylamine)
138. _____ [ ] 1,2-Diphenylhydrazine
139. _____ [ ] Disulfoton
266. _____ [ ] Dithiocarbamates (Total) (*)
140. _____ [ ] Endosulfan I
141. _____ [ ] Endosulfan II
142. _____ [ ] Endosulfan sulfate
143. _____ [ ] Endrin
144. _____ [ ] Endrin aldehyde
267. _____ [ ] EPTC (*)
145. _____ [ ] Ethyl acetate
146. _____ [ ] Ethyl cyanide (propanenitrile)
147. _____ [ ] Ethyl benzene
148. _____ [ ] Ethyl ether
149. _____ [ ] bis(2-Ethylhexyl)phthalate
150. _____ [ ] Ethyl methacrylate
151. _____ [ ] Ethylene oxide
152. _____ [ ] Famphur
153. _____ [ ] Fluoranthene
154. _____ [ ] Fluorene
155. _____ [ ] Fluoride
268. _____ [ ] Formetanate hydrochloride (*)
156. _____ [ ] Heptachlor
157. _____ [ ] Heptachlor epoxide
158. _____ [ ] Hexachlorobenzene
159. _____ [ ] Hexachlorobutadiene
160. _____ [ ] Hexachlorocyclopentadiene
161. _____ [ ] HxCDDs (All hexachlorodibenzo-p-dioxins)
162. _____ [ ] HxCDFs (All hexachlorodibenzo-furans)
163. _____ [ ] Hexachloroethane
164. _____ [ ] Hexachloropropylene
165. _____ [ ] Indeno (1,2,3-c,d)pyrene
270. _____ [ ] 3-Iodo-2-propynyl n-butylcarbamate (*)
166. _____ [ ] Iodomethane
167. _____ [ ] Isobutyl alcohol
168. _____ [ ] Isodrin
169. _____ [ ] Isosafrole
170. _____ [ ] Kepone
171. _____ [ ] Lead
172. _____ [ ] Mercury--Nonwastewater from Retort
173. _____ [ ] Mercury--All others
174. _____ [ ] Methacrylonitrile
175. _____ [ ] Methanol
176. _____ [ ] Methapyrilene
272. _____ [ ] Methiocarb (*)
273. _____ [ ] Methomyl (*)
177. _____ [ ] Methoxychlor
178. _____ [ ] 3-Methylcholanthrene
179. _____ [ ] 4,4-Methylene-bis(2-chloroaniline)
180. _____ [ ] Methylene chloride
181. _____ [ ] Methyl ethyl ketone
182. _____ [ ] Methyl isobutyl ketone
183. _____ [ ] Methyl methacrylate
184. _____ [ ] Methyl methanesulfonate
185. _____ [ ] Methyl parathion
274. _____ [ ] Metolcarb (*)
275. _____ [ ] Mexacarbate (*)
276. _____ [ ] Molinate (*)
186. _____ [ ] Naphthalene
187. _____ [ ] 2-Naphthylamine
188. _____ [ ] Nickel
189. _____ [ ] o-Nitroaniline (*)
190. _____ [ ] p-Nitroaniline
191. _____ [ ] Nitrobenzene
192. _____ [ ] 5-Nitro-o-toluidine
193. _____ [ ] o-Nitrophenol (*)
194. _____ [ ] p-Nitrophenol
195. _____ [ ] N-Nitrosodiethylamine
196. _____ [ ] N-Nitrosodimethylamine
197. _____ [ ] N-Nitroso-di-n-butylamine
198. _____ [ ] N-Nitrosomethylethylamine
199. _____ [ ] N-Nitrosomorpholine
200. _____ [ ] N-Nitrosopiperidine
201. _____ [ ] N-Nitrosopyrrolidine
277. _____ [ ] Oxamyl (*)
202. _____ [ ] Parathion
203. _____ [ ] Total PCBs (sum of all PCB isomers, or all Arochlors)
278. _____ [ ] Pebulate (*)
204. _____ [ ] Pentachlorobenzene
205. _____ [ ] PeCDDs (All pentachlorodibenzo-p-dioxins)
206. _____ [ ] PeCDFs (All pentachlorodibenzofurans)
207. _____ [ ] Pentachloroethane (*)
208. _____ [ ] Pentachloronitrobenzene
209. _____ [ ] Pentachlorophenol
210. _____ [ ] Phenacetin
211. _____ [ ] Phenanthrene
212. _____ [ ] Phenol
213. _____ [ ] Phorate
214. _____ [ ] Phthalic acid (*)
215. _____ [ ] Phthalic anhydride
280. _____ [ ] Physostigmine (*)
281. _____ [ ] Physostigmine salicylate (*)
282. _____ [ ] Promecarb (*)
216. _____ [ ] Pronamide
283. _____ [ ] Propham (*)
284. _____ [ ] Propoxur (*)
285. _____ [ ] Prosulfocarb (*)
217. _____ [ ] Pyrene
218. _____ [ ] Pyridine
219. _____ [ ] Safrole
220. _____ [ ] Selenium
221. _____ [ ] Silver
222. _____ [ ] Silvex (2,4,5-TP)
223. _____ [ ] Sulfide
224. _____ [ ] 2,4,5-T (2,4,5-Trichlorophenoxyacetic acid)
225. _____ [ ] 1,2,4,5-Tetrachlorobenzene
226. _____ [ ] TCDDs (All tetrachlorodibenzo-p-dioxins)
227. _____ [ ] TCDFs (All tetrachlorodibenzofurans)
228. _____ [ ] 1,1,1,2-Tetrachloroethane
229. _____ [ ] 1,1,2,2-Tetrachloroethane
230. _____ [ ] Tetrachloroethylene
231. _____ [ ] 2,3,4,6-Tetrachlorophenol
232. _____ [ ] Thallium
286. _____ [ ] Thiodicarb (*)
287. _____ [ ] Thiophanate-methyl (*)
233. _____ [ ] Toluene
234. _____ [ ] Toxaphene
289. _____ [ ] Triallate (*)
235. _____ [ ] Tribromomethane (Bromoform)

01-Oct-30 08:29am From-CLEAN HARBORS ENVIRONMENTAL SERV. INC 7322484414 T-301 P.05/06 F-996

CLEAN HARBORS ENVIRONMENTAL SERVICES, INC.
LAND DISPOSAL RESTRICTION NOTIFICATION FORM LDR-1 ADDENDUM

Manifest No. _____

236. _____ [ ] 1,2,4-Trichlorobenzene
237. _____ [ ] 1,1,1-Trichloroethane
238. _____ [ ] 1,1,2-Trichloroethane
239. _____ [ ] Trichloroethylene
240. _____ [ ] Trichloromonofluoromethane
241. _____ [ ] 2,4,5-Trichlorophenol
242. _____ [ ] 2,4,6-Trichlorophenol
243. _____ [ ] 1,2,3-Trichloropropane
244. _____ [ ] 1,1,2-Trichloro-1,2,2-trifluoroethane
290. _____ [ ] Triethylamine (*)
245. _____ [ ] tris-(2,3-Dibromopropyl)phosphate
246. _____ [ ] Vanadium (*)
291. _____ [ ] Vernolate (*)
247. _____ [ ] Vinyl chloride
248. _____ [ ] Xylenes--mixed isomers (sum of o-, m-, and p-xylene concentrations)
249. _____ [ ] Zinc (*)

KEY TERMS/DEFINITIONS

CONTAMINANTS SUBJECT TO TREATMENT (CSTT) are the specific constituents listed by waste code number in the Treatment Standard Table in §268.40. CSTT's must be identified for all hazardous debris wastes that are intended for treatment using one of the hazardous debris alternate treatment technologies described in §268.45.

REASONABLY EXPECTED TO BE PRESENT means that the generator is relying on knowledge of the raw materials used, the process, and potential reaction products, or on the results of a one-time analysis for the entire list of UHC's that may be present in the untreated hazardous waste. If a one-time analysis of the entire list of UHC's is conducted, subsequent analyses are required for only those pollutants which would reasonably be expected to be present in the waste as generated, based on the previous sampling and analysis results.

UNDERLYING HAZARDOUS CONSTITUENT (UHC) means any constituent listed in §268.48 Table UTS - Universal Treatment Standards (except fluoride, selenium, sulfides, vanadium and zinc) which can reasonably be expected to be present at the point of generation of the hazardous waste, at a concentration above the constituent-specific UTS treatment standard. (See 40 CFR 268.2)

01-Oct-30 08:30am From-CLEAN HARBORS ENVIRONMENTAL SERV., INC. 7322484414 T-301 P.06/06 F-996

DOCUMENT NO. 66030

WORK ORDER NO. D3X9187

STRAIGHT BILL OF LADING

TRANSPORTER 1 Clean Harbors Env. Services, Inc.

VEHICLE ID # 5182

EPA ID # MAD039322250

TRANS. 1 PHONE 781-849-1800

TRANSPORTER 2

VEHICLE ID #

EPA ID #

TRANS. 2 PHONE

Attn:

DESIGNATED FACILITY	SHIPPER
Clean Harbors of Baltimore, Inc.	Sulzer Metco US Inc
FACILITY EPA ID # MDD980555189	SHIPPER EPA ID # NYD131318651
ADDRESS 1910 Russell Street	ADDRESS 1101 Prospect Avenue
CITY Baltimore STATE MD ZIP 21230	CITY Westbury STATE NY ZIP 11590

CONTAINERS NO. & SIZE	TYPE	HM	DESCRIPTION OF MATERIALS	TOTAL QUANTITY	UNIT WT/VOL
6x55	DM		A NON DOT REGULATED MATERIAL (oily debris)	600	P
5x55	DM		B NON DOT REGULATED MATERIAL (meta/ceramic powder)	3,521	P
1x55	DM		C NON DOT REGULATED MATERIAL (grit blast)	500	P
4x55	DM		D NON DOT REGULATED MATERIAL (compressor oil)	220	G
1x55	DM		E NON DOT REGULATED MATERIAL (water soluble oil)	55	G
6x55	DM		F NON DOT REGULATED MATERIAL (NYLON TURNINGS)	1,800	P
			G.		
			H.		

SPECIAL HANDLING INSTRUCTIONS
A. CH189102
B. CH189107
C. CH189110
In case of Emergency, call: 1-800-645-8265.
In case of spill, dike and contain.
D. CH189111
E. CH189141
F. CH189144

SHIPPERS CERTIFICATION: This is to certify that the above named materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation.

	PRINT	SIGN	DATE
SHIPPER	DAN WALZAK		10/30/01
TRANSPORTER 1	FRANK RICCIARDELLI		10/30/01
TRANSPORTER 2			
RECEIVED BY			

CHI 107

4

WASTE DRUM INVENTORY

DATE: 10/19/01

DRUM #	PROFILE #	DESCRIPTION	DEPARTMENT	CHARGE #	
0429	CH189108	RCRA metal & Ceramic Powder / 884 lbs	APP LAB / Assembly	834 lbs → 952 / 50 lbs →	
0444	CH189142	Copper cleaner / Chromic Acid / 496 lbs	Shop		PL
0445	CH189142	Copper cleaner chromic Acid / 497 lbs	Shop		PL
0446	CH189108	RCRA metal & ceramic Powder / 432 lbs	APPL LAB / Unit B		PL
0447	CH189108	RCRA metal & Ceramic Powder / 428 lbs	APPL LAB / Unit E		PL
0450	CH189	ACTREL	Shop		
0451	CH189	ACTREL	DeGreaser		
0424	CH189110	GRIT BLAST MAT'L (WASTE)	APP LAB	952	
0430	CH189107	Ceramic Pwdr	APP LAB	952	
0431	CH189107	Ceramic Pwdr	APP LAB	952	
0432	CH189107	Ceramic Pwdr	APP LAB	952	
0433	CH189111	WASTE mixed OIL	Shop		PL
0434	CH189111	WASTE mixed OIL	Shop		PL
0435	CH189141	WATER Soluble OIL	Shop		PL
0436	CH189144	NYLON TURNINGS	Shop		
0437	CH189102	OIL SPILL clean up / Filters	Shop		
0438	CH189102	OIL SPILL cleanup / Filters	Shop		
0439	CH189102	OIL SPILL Cleanup / Filters	Shop		
0440	CH189102	OIL SPILL cleanup / Filters	Shop		
0441	CH189144	NYLON TURNINGS	Shop		
0442	CH189144	NYLON TURNINGS	Shop - (model shop)		
0449	CH189111	WASTE mixed OIL	Shop		PL
0448	CH189111	WASTE mixed OIL	Shop		PL
0452	CH189102	OIL SPILL clean up w/Filters	Shop		
0453	CH189144	NYLON TURNINGS	Shop		
0454	CH189144	NYLON TURNINGS	Shop		
0455	CH189102	OIL SPILL cleanup w/Filters	Shop		
0456	CH189144	NYLON TURNINGS	Shop		
0457	CH189107	Ceramic Powder	APPL LAB		

WASTE DRUM INVENTORY

DATE: 10/19/01 7:30 am (DW)

DRUM #	PROFILE #	DESCRIPTION	DEPARTMENT	CHARGE #
N/A 0458	CH189107	Ceramic powder	APPL LAB	

Date Prepared: 8/01/91 Prepared By: J SCARBALIS METCOSEAL ST-1

SECTION I

MANUFACTURER'S NAME: Dexter Specialty Coatings
STREET ADDRESS : One East Water Street Waukegan, Illinois 60085
TELEPHONE : (708) 623-4200 Night: (708) 831-3961
MANUFACTURER'S CODE: 0910A01M
TRADE NAME : LACQUER THINNER S511G

SECTION II - HAZARDOUS INGREDIENTS

Ingredient(s)	Weight Percent	Vapor Press. mm Hg @ 20C
TOLUENE		
CAS: 108-88-3	40 - 50%	22.0

OSHA Exposure Limits		ACGIH Exposure Limits
PEL/TWA: 100 (ppm)	43%	TLV/TWA: 100 (ppm)
STEL: 150 (ppm)		TLV/STEL: 150 (ppm)
PEL/Ceiling: UK		TWA-C: UK
Peak: UK		Mfr's: UK

METHYL ISOBUTYL KETONE		
CAS: 108-10-1	40 - 50%	15.0

OSHA Exposure Limits		ACGIH Exposure Limits
PEL/TWA: 50 (ppm)		TLV/TWA: 50 (ppm)
: 75 (ppm)	44%	TLV/STEL: 75 (ppm)
PEL/Ceiling: UK		TWA-C: UK
Peak: UK		Mfr's: UK

DIISOBUTYL KETONE		
CAS: 108-83-8	< 10%	1.0

OSHA Exposure Limits		ACGIH Exposure Limits
PEL/TWA: 25 (ppm)	8%	TLV/TWA: 25 (ppm)
STEL: UK		TLV/STEL: UK
PEL/Ceiling: UK		TWA-C: UK
Peak: UK		Mfr's: UK

ISOPROPYL ALCOHOL		
CAS: 67-63-0	< 10%	33.0

OSHA Exposure Limits		ACGIH Exposure Limits
PEL/TWA: 400 (ppm)	4%	TLV/TWA: 400 (ppm)
STEL: 500 (ppm)		TLV/STEL: 500 (ppm)
PEL/Ceiling: UK		TWA-C: UK
Peak: UK		Mfr's: UK

SECTION III - PHYSICAL PROPERTIES + FIRE AND EXPLOSION HAZARDS

FLASHPOINT FOR 0910A01M = 42 Deg. F Setaflash CC LEL: .80
BOILING RANGE = 180 to 338 Deg. F.
OSHA Classification = Flammable Liquid - Class IB
VAPOR DENSITY: Heavier than air.
EXTINGUISHING MEDIA: Use water fog, foam, dry chemical, or carbon dioxide.
SPECIFIC GRAVITY: 6.919 pounds per gallon
VOLATILE ORGANIC CONTENT: 6.9 pounds per gallon less water.

SECTION IV - HEALTH INFORMATION

ACUTE: Over exposure by inhalation may cause irritation of the respiratory tract, headache, dizziness, or drowsiness.
SKIN OR EYE CONTACT: Irritant to the eyes and skin.
EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Remove from exposure. EYE CONTACT: Flush immediately with large amounts of running water for at least 15 minutes. SKIN CONTACT: Remove contaminated clothing and wash skin with soap and water. INGESTION: Drink water.
If necessary, consult a physician for any of these conditions.
ROUTES OF ENTRY: Product may be absorbed thru the following ways: eyes, inhalation, skin, & ingestion.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Unknown at this time.
CHRONIC HEALTH EFFECTS: Those hazardous materials listed in Section II may affect the following organs: KIDNEYS- RESPIRATORY TRACT- LIVER- REPRODUCTIVE SYSTEM- CENTRAL NERVOUS SYSTEM- CARDIAC SENSITIZATION.

SECTION V - REACTIVITY DATA

STABILITY: Stable. HAZARDOUS DECOMPOSITION BY-PRODUCTS: Fumes may contain carbon monoxide and oxides of nitrogen. May produce hazardous fumes when heated to decomposition as in welding.

SECTION VI - SPILL OR LEAK PROCEDURES

Remove all sources of ignition, avoid breathing vapors, ventilate area, and remove with inert absorbant and non-sparking tools. Dispose of in accordance with local, state, and federal regulations. Before attempting to clean up, see Section II.

SECTION VII - PRECAUTIONS IN HANDLING

VENTILATION: Provide general dilution or local exhaust ventilation to keep TWA and LEL below acceptable limits and to remove decomposition products.

RESPIRATORY PROTECTION: Where general dilution or local exhaust fails to adequately dilute the TWA/PEL of the material, then respiratory protection should be used as follows: In accord with 29CFR 1910.134, use NIOSH/MSHA approved air line type respirators or hoods for enclosed and confined areas. Air purifying respirators may be used for other areas.

PROTECTIVE EQUIPMENT: Chemical resistant gloves are required for prolonged or repeated contact. Use safety eyeware designed to protect against splash of liquids.

Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. Make sure the drum is completely empty before attempting to weld or braze. The drum should be industrially cleaned prior to reuse. Do not flame cut, braze, or weld without a NIOSH approved respirator or appropriate ventilation.

SECTION VIII - SHIPPING INFORMATION

DOT Reportable Quantity - 5000 gallons or greater of product:
TOLUENE
5000 gallons or greater of product:
METHYL ISOBUTYL KETONE
DOT Proper Shipping Name - Paint-Related Material
DOT Hazard Class - Flammable Liquid
DOT ID Number - UN 1263

SECTION IX - RIGHT-TO-KNOW

SARA Title III Information and Proposition 65

Chemical Name/CAS Number	SARA 302 % by Wt. (1)	SARA 313 % by Wt. (2)	Prop. 65 % by Wt. (3)
TOLUENE 108-88-3	---	43	43.00467
BENZENE 71-43-2	---	---	.00860
METHYL ISOBUTYL KETONE 108-10-1	---	44	---

FOOTNOTES
(1) Extremely hazardous substance, Sec. 302
(2) Toxic Chemical, Sec. 313
(3) State of California Safe Drinking Water and Toxic Enforcement Act of 1986, Proposition 65 (Prop. 65)

IN COMPLIANCE WITH THE NEW JERSEY RIGHT TO KNOW LAW INGREDIENTS:
TOLUENE 108-88-3, METHYL ISOBUTYL KETONE 108-10-1, DIISOBUTYL KETONE 108-83-8, ISOPROPYL ALCOHOL 67-63-0.
COMPOSITION IS PARTIALLY UNKNOWN.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA inventory.

SECTION X - ADDITIONAL INFORMATION

Those materials listed in Section II with an asterisk have been listed by one of the following testing agencies: National Toxicology Program, International Agency for Research and Cancer, or OSHA.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

NPCA HMIS CLASSIFICATION: Health- 3 Flammability- 3 Reactivity- 0
See Section VII for personal protection equipment.

HAZARD RATING INDEX
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

****
* The information and recommendations contained herein are based *
* upon data believed to be correct. However, since much of the *
* information has been received from sources outside our company, *
* we cannot guarantee its accuracy or completeness. Health and *
* safety precautions contained within this data sheet may not be *
* adequate for all individuals and/or situations. It is the user's *
* obligation to evaluate and use this data in order to comply with *
* all applicable laws and regulations. Additionally, no guarantee *
* or warranty of any kind, expressed or implied, is made with *
* respect to the information contained herein. *
****

Minnesota
Mr. Lee Tischler, Director
Minnesota Emergency Response Commission
290 Bigelow Building
450 North Syndicate
St Paul, MN 55155
(612) 643-3000

Mississippi
Mr. J.E. Maher, Chairman
Mississippi Emergency Response Commission
Mississippi Emergency Management Agency
P.O. Box 4501
Fondren Station
Jackson, MS 39296-4501
(601) 960-9973

Missouri
Mr. Dean Martin, Coordinator
Missouri Emergency Response Commission
Missouri Department of Natural Resources
P.O. Box 3133
Jefferson City, MO 65102
(314) 751-7929

Montana
Mr. Tom Ellerhoff, Co-Chairman
Montana Emergency Response Commission
Environmental Sciences Division
Department of Health & Environmental Sciences
Cogswell Building A-107
Helena, MT 59620
(406) 444-6911

Nebraska
Mr. Clark Smith, Coordinator
Nebraska Emergency Response Commission
Nebraska Department of Environmental Control
P.O. Box 98922
State House Station
Lincoln, NE 68509-8922
(402) 471-2186

Nevada
Mr. Bob King, Director
Division of Emergency Management
2525 South Carson Street
Carson City, NV 89710
(702) 885-4240

New Hampshire
Mr. George L. Iverson, Director
State Emergency Management Agency
Title III Program
State Office Park South
107 Pleasant Street
Concord, NH 03301
(603) 271-2231

New Jersey
New Jersey Emergency Response Commission
SARA Title III Section 313
Department of Environmental Protection
Division of Environmental Quality
Bureau of Hazardous Substances Information
CN-405
Trenton, NJ 08625
(609) 292-6714

New Mexico
Mr. Samuel Larcombe
New Mexico Emergency Response Commission
New Mexico Department of Public Safety
P.O. Box 1628
Santa Fe, NM 87504-1628
(505) 827-9222

1989 report year

New York
New York Emergency Response Commission
New York State Department Of Environmental Conservation
Bureau of Spill Response
50 Wolf Road/Room 326
Albany, NY 12233-3510
(518)457-4107

North Carolina
North Carolina Emergency Response Commission
North Carolina Division of Emergency Management
116 West Jones Street
Raleigh, NC 27603-1335
(919) 733-3867

North Dakota
SARA Title III Coordinator
North Dakota State Department of Health and Consolidated Laboratories
1200 Missouri Avenue
P.O. Box 5520
Bismarck, ND 58502-5520
(701) 224-2374

Ohio
Ms. Cindy Sferra-DeWulf
Division of Air Pollution Control
1800 Watermark Drive
Columbus, OH 43215
(614) 644-2266

Oklahoma
Emergency Response Commission
Office of Civil Defense
P.O. Box 53365
Oklahoma City, OK 73152
(405) 521-2481

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD131310651
2. Page 1 of: 1
3. Emergency Response Phone: (908) 354-0210
4. Manifest Tracking Number: 003536655 JJK

GENERATOR

5. Generator's Name and Mailing Address: SULZER METCO US INC.
1101 PROSPECT AVE
WESTBURY, NY 11590
Generator's Phone: (516) 338-2417

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: CLEAN VENTURE INC.
U.S. EPA ID Number: NJ0000022193

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Cycle Chem Inc.
217 South First Street
Elizabeth, NJ 07206
Facility's Phone: (908) 355-5800
U.S. EPA ID Number: NJD002200046

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
X	1. Waste Corrosive Liquids, n.o.s., 9 UN1760 PG II (D002 D006 D007 D008) T) UN01 154	1	DF 61	498	P	D002 D008	D006 T	D007
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: LDR On File 9-99483/-1790A02/2266/1 (1)SUPER-11 CUPRIP
CLEANER-FH 12.5

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Tim Kowalski
Signature:
Month 09 Day 24 Year 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Kevin Howard
Signature:
Month 09 Day 24 Year 08

Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name
Signature
Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD131318651
2. Page 1 of 1
3. Emergency Response Phone: (908) 354-0210
4. Manifest Tracking Number: 003536655 JJK

5. Generator's Name and Mailing Address: SULZER METCO US INC
1101 PROSPECT AVE
WESTBURY, NY 11590
Generator's Phone: (516) 338-2417

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: CLEAN VENTURE INC.
U.S. EPA ID Number: NJ0000027193

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Cycle Chem Inc.
217 South First Street
Elizabeth, NJ 07206
Facility's Phone: (908) 355-5800
U.S. EPA ID Number: NJD002200046

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Waste Corrosive liquids, n.o.s. 8 UN1760 PG II (D002 D006 D007 D008 T) ERG# 154	1	~~DM~~ DF 01	498	~~G~~ P	D002 D006 D007 D008 T
	2.					
	3.					
	4.					

SULZER METCO (US) INC.
OCT 06 2008
EHS DEPARTMENT

14. Special Handling Instructions and Additional Information: LDR On File 945948/-1/90702/236671 (1)STCR3-11 COPPER
CLEANER-PH 12.5

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jim Kouremelis
Signature:
Month 09 Day 24 Year 08

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: Kevin Howard
Signature:
Month 09 Day 24 Year 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H141 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Mylene Gonzalez
Signature: Mylene Gonzalez
Month 09 Day 24 Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

New York State Department of Environmental Conservation
Pollution Prevention Unit
50 Wolf Road, Room 298
Albany, NY 12233-8010

Pre Printed Facility Information (PPFI)

Please review this Pre Printed Facility Information (PPFI), make appropriate changes, additions, and return to the above address with your New York State 1997 TRI submissions.

NYS TRI Facility ID: 281200 (SORTKEY)		Facility Public Contact	MICHAEL S. LYDON
Facility Name: SULZER METCO (US) INC.		Phone	(516) 338-2337
Address	1101 PROSPECT AVE. WESTBURY NY 11590	Receiving Water Bodies	ATLANTIC OCEAN
County	NASSAU	SIC Code	3542
EPA TRI ID	11590PRKNL1101P	EPA/RCRA ID (last 9 digits)	131318651
Latitude	40 | 45 | 50	POTW Used	0026859
Longitude	73 | 33 | 10	SPDES Permit #	
1996 State TRI (Section 313) submission status (number of forms submitted): 5			
Comments:			

New York State Department of Environmental Conservation
Pollution Prevention Unit

State TRI Submission Guidance (STSG)

1. The SARA 313 -TRI FORM R and FORM A's (both hard-copy and magnetic media) only should be submitted to the address below.

   Attention: Sitansu Ghosh
   New York State Department of Environmental Conservation
   Pollution Prevention Unit
   50 Wolf Road, Room 298
   Albany, NY 12233-8010
   Telephone: (518) 457-2553, FAX : (518) 457-2570

2. MSDS Sheet - Section 311 and Hazardous Substance Tire I and II Inventory Reports-Section 312 please contact:

   System Management Section
   NYSDEC, Room 360
   50 Wolf Road
   Albany, NY 12233-3750
   Telephone:(518) 457-9412

   Please direct general question on SARA to:
   Lee Battes
   State Emergency Management Office
   1220 Washington Avenue, Suit 101
   Albany, NY 12226
   Telephone: (518) 457-9957

3. Submission Schedule and Forms

   The State will follow USEPA submission schedule including any extension of last date of submission.

   The New York State will accept the USEPA TRI forms for both hard-copy and magnetic media. The facilities may use copies of paper forms and magnetic diskette prepared for EPA submission for state submission.

4. Magnetic Medium Submission Guidance

Installing AFR97 for DOS

IMPORTANT: If you have used an earlier version of AFR, please copy your current data onto a diskette *before* installing AFR97 for DOS. Use the "Create Diskette" function of the older version of AFR. This is particularly important if you have used AFR for Windows. If you would like to upgrade to the latest version of AFR for Windows, contact Technical Support at (703) 816-4434.

1. Insert the Installation Disk in your disk drive.
2. Exit all open programs. If you are using Windows™, start the MS-DOS prompt.
3. Type `A:install A: C:` (where A: is the disk drive and C: is the hard drive).
4. Follow any directions on the message screens.
5. When the *Installation is Complete* message appears, exit the installer.

To Start AFR97 for DOS:

DOS

1. Type `formr` at the prompt and press return.
2. Verify the date.
3. Choose an option from the Main Menu.

Windows™

Although there is an icon-based version of AFR that will run on the Windows platform, AFR97 for DOS is not a true Windows program. We suggest that Windows users either run AFR97 for DOS from the MS-DOS Prompt or contact (703) 816-4434 for a copy of AFR for Windows. See the front of this brochure for the Hotline numbers.

Labeling Diskettes

Each AFR97 submission diskette must be clearly labeled with the information in the sample below. We prefer typed labels, but legibly handwritten labels will be accepted.

TRIS Report					
Company Name					
Date	6/29/98		**Density**	HD	
Rept Yr.	97	**Num.**	1	**of**	1
Contact	Contact Name (505) 555-5369				

Mailing Diskettes

Mail diskettes and cover letters to:

EPCRA Reporting Center
P.O. Box 3348
Merrifield, VA 22116-3348
ATTN: TRI Magnetic Media Submission

ADVISORY

The enclosed Automated Form R software, although reviewed for quality assurance, should be used with the understanding that all possible variations in the conditions of hardware and software configurations, as well as the data entered, cannot always be anticipated and may consequently have an effect on software use. Moreover, in an ongoing effort to keep pace with the advent of technological advances, development of new software may, on occasion, result in technical errors affecting use. Therefore, we recommend that *software users thoroughly review their TRI submissions to ensure accuracy prior to sending them to EPA and the designated State Agency.* Any problems, concerns or questions should be referred immediately to Technical Support at (703) 816-4434.

STATEMENT ON LIMITATIONS OF WARRANTY AND LIABILITY

To the maximum extent permitted by applicable law, the U.S. Environmental Protection Agency makes no warranty, express or implied, and accepts no liability for any damages, consequential or other (including without limitation, direct or indirect damages for personal injury, loss of business profits, business interruption, loss of business information, or any other pecuniary loss), concerning the use, attempted use, or application of the enclosed EPCRA Section 313 Automated Form R software.

AFR97

Quick Reference

Thank you for using Automated Form R (AFR97) for DOS. This program will help you submit your TRI data to the EPA quickly and accurately.

AFR97 can:

- Create TRI submissions in both electronic and print formats
- Validate submission information
- Automatically print the required Cover Letter to accompany a submission diskette
- Let you enter part of a submission, save the data, then complete the submission later
- Reduce your work by automatically filling in repeated information
- Create a diskette with all your submission information that can be imported into another database, sent to EPA or State authorities, or used in a different version of AFR

AFR97 cannot:

- Be used to submit trade secret information

Hotline Numbers

For help with AFR97 for DOS, contact:

Technical Support

phone	(703) 816-4434
fax	(703) 816-4466
e-mail	tris.user.support@epcra.org

For help with TRI submissions, contact:

EPCRA Information Hotline*

toll-free	(800) 535-0202
local	(703) 412-9810
TDD	(800) 553-7672

*Please note that the EPCRA HOTLINE cannot respond to questions concerning software use.

NOTICE : Joint EPA and NYS TRI Submission Information Packet

Dear TRI Facility Contact :

EPA Region II has been notified that the 1997 TRI Reporting Package will be mailed to your facilities from EPA Headquarters in mid-April. This package will include a DOS version of the 1997 Automated Form R Software (AFR 97). In preparation for the July 1, 1998 Toxic Release Inventory reporting deadline, enclosed please find information that includes a Pre-Printed Facility Information (PPFI) page, State TRI Submission Guidance (STSG), and the AFR97 Quick Reference Guide. This is being mailed to New York State facilities that submitted TRI forms for the year 1993 thru 1996. The information is applicable to all facilities required to submit TRI forms to New York State for the year 1997.

The PPFI contains the facility information available in the state database. Please review this information and make appropriate changes and send it back to the State of New York with your 1997 TRI submission. This will help the State to save data entry time, reduce the number of follow up calls, and maintain the most current facility information.

The State TRI Submission Guidance has been prepared to help you avoid the common problems associated with both hard-copy and magnetic media preparation and shipping. Please review this guidance and use it for your State TRI submissions. Using this guidance will reduce shipping and handling time and cost for the facilities, reduce data entry time for the state, reduce errors, and ensure high data quality.

We encourage you to use the Automated Form R (AFR) software and submit TRI forms by computer diskettes. There are many benefits of using magnetic media submission. Some of these benefits and an overview of the AFR have been presented in the 'AFR Quick Reference Guide'. A copy of this guide has been included in this packet. The software is available on the Internet at www.epa.gov/opptintr/tri/. You can call (800) 490-9198 to obtain the latest AFR for WINDOWS 95/NT version (refer to EPA 745-C-98-003).

Thank you for your cooperation. If you should have any questions please contact :

Sitansu Ghosh, P.E.,Env. Engineer
New York State TRI Contact
(518) 457-2553.

or

Nora Lopez, M.P.H.
USEPA TRI Regional Coordinator
(732) 906-6890

New York State Department of Environmental Conservation

United States Environmental Protection Agency, Region II

Decide with Confidence

Company Reports

To save report(s) to your PC, click here for instructions

Print this Report

Business Information Report: Radiac Research Corp

COPYRIGHT 2002 DUN & BRADSTREET INC. - PROVIDED UNDER CONTRACT
FOR THE EXCLUSIVE USE OF SUBSCRIBER 021-011981L.

ATTN: S. BODGER

IN DATE

DUNS: 04-917-8296 RADIAC RESEARCH CORP +RADIAC ENVIRONMENTAL SERVICE 259 KENT AVE # 261 AND BRANCH(ES) OR DIVISION(S) BROOKLYN NY 11211 TEL: 718 963-2233	DATE PRINTED MAY 14 2002 COLLECTING & DISPOSAL OF WASTE CHEMICALS & RADIOACTIVE MATERIALS SIC NO. 49 53	SUMMARY RATING 1R3 STARTED 1969 EMPLOYS 45(15 HERE) HISTORY CLEAR

CHIEF EXECUTIVE: JOHN TEKIN SR, PRES

==========

* * * CUSTOMER SERVICE * * *

==========

If you have questions about this report, please call our Customer Resource Center at 1-800-234-3867 from anywhere within the U.S. If you are outside the U.S., contact your local D&B office.

*** Additional Decision Support Available ***

Additional D&B products, monitoring services and specialized investigations are available to help you evaluate this company or its industry.
Call Dun & Bradstreet's Customer Resource Center at 1-800-234-3867 from anywhere within the U.S. or visit our website at www.dnb.com.

==========

* * * SUMMARY ANALYSIS * * *

==========

The Summary Analysis section reflects information in D&B's file as of May 13, 2002.

RATING SUMMARY . . . .

The "1R" portion of the Rating (the Rating Classification) indicates business size of 10 or more employees for this company. The "3" on the right (Composite Credit Appraisal) indicates an overall "fair" credit appraisal. This credit appraisal was assigned because the payment information in D&B's file on this company indicates slowness in meeting trade obligations and the open suits, liens or judgments in D&B's file.

Below is an overview of the company's D&B Rating(s) since 01/01/91:

RATING	DATE APPLIED
1R3	07/21/95
--	12/14/91
3A1	01/01/91

* * * PAYMENT SUMMARY * * *

The Payment Summary section reflects payment information in D&B's file as of the date of this report.

The PAYDEX for this company is 78.

This PAYDEX score indicates that payments to suppliers average 3 days beyond terms, weighted by dollar amounts. When dollar amounts are not considered, approximately 69% of the company's payments are within terms.

Below is an overview of the company's dollar-weighted payments, segmented by its suppliers' primary industries:

	TOTAL RCV'D	TOTAL DOLLAR AMOUNTS	LARGEST HIGH CREDIT	% W/IN TERMS	DAYS SLOW <31	31-60	61-90	91+
	#	$	$	%	%	%	%	%
Total in D&B's file	30	115,250	50,000					
Top 10 Industries:								
1 Short-trm busn credit	4	97,500	50,000	100	-	-	-	-
2 Data processing svcs	3	6,050	5,000	92	8	-	-	-
3 Radiotelephone commun	3	2,250	1,000	100	-	-	-	-
4 Telephone communictns	2	1,250	1,000	100	-	-	-	-
5 Whol industrial equip	2	1,100	1,000	95	-	5	-	-
6 Trucking non-local	2	1,000	500	-	50	50	-	-
7 Air courier service	2	550	500	55	45	-	-	-
8 Whol office supplies	1	1,000	1,000	50	-	50	-	-
9 Whol electrical equip	1	1,000	1,000	-	100	-	-	-
10 Mfg surgical supplies	1	750	750	-	100	-	-	-
11 OTHER INDUSTRIES	8	2,300	500	51	16	-	11	22
Other Payment Categories:								
Cash experiences	0	0	0					
Payment record unknown	1	500	500					
Unfavorable comments	0	0	0					
Placed for collection								

with D&B	0	0
other	0	N/A

The highest "Now Owes" on file is $45,000
The highest "Past Due" on file is $750

D&B receives over 315 million payment experiences each year. We enter these new and updated experiences into D&B Reports as this information is received.

==========

PAYMENTS (Amounts may be rounded to nearest figure in prescribed ranges)

Antic - Anticipated (Payments received prior to date of invoice)
Disc - Discounted (Payments received within trade discount period)
Ppt - Prompt (Payments received within terms granted)

REPORTED	PAYING RECORD	HIGH CREDIT	NOW OWES	PAST DUE	SELLING TERMS	LAST SALE WITHIN
04/02	Ppt	15000	7500	-0-	Sell by note	1 Mo
	Ppt	5000	1000	500		1 Mo
	Ppt	2500	2500	-0-		
	Ppt	250	250	-0-		1 Mo
	Ppt	50	-0-	-0-		4-5 Mos
	Ppt-Slow 15	500	500	100		1 Mo
	Ppt-Slow 30	1000	1000	750		1 Mo
	Ppt-Slow 30	250	-0-	-0-	N30	2-3 Mos
	Ppt-Slow 60	1000	1000	-0-	N60	1 Mo
	Slow 30	750	-0-	-0-		2-3 Mos
03/02	Ppt	50000	45000	-0-		1 Mo
	Ppt	30000	25000	-0-		1 Mo
	Ppt	500	-0-	-0-		1 Mo
	Ppt	250	100	-0-		1 Mo
	Ppt	50	50	-0-	N30	1 Mo
	Ppt	50	-0-	-0-		4-5 Mos
	Slow 30-90	500	50	-0-		1 Mo
	(018)	500	-0-	-0-		6-12 Mos
02/02	Ppt	1000	1000			
	Ppt	250	250			
	Ppt	250	250	-0-		1 Mo
01/02	Ppt	1000	1000	-0-	N30	1 Mo
12/01	Ppt	1000	-0-	-0-	N30	4-5 Mos
10/01	Ppt	1000	1000	-0-	N30	1 Mo
	Slow 30	500	-0-	-0-	N30	6-12 Mos
	Slow 60	500	-0-	-0-	N30	6-12 Mos
08/01	Slow 120	250	250	250		
	Slow 120	250	250	250		
04/01	Ppt-Slow 60	100	-0-	-0-		6-12 Mos
03/01	Slow 30	1000	-0-	-0-	N30	4-5 Mos

* Payment experiences reflect how bills are met in relation to the terms granted. In some instances payment beyond terms can be the result of disputes over merchandise, skipped invoices etc.

* Each experience shown represents a separate account reported by a supplier. Updated trade experiences replace those previously reported.

==========

FINANCE

10/02/01 On Oct 2 2001 attempts to contact the management of this business have been unsuccessful. Outside sources confirmed operation and location.

==========

PUBLIC FILINGS

The following data is for information purposes only and is not the official record. Certified copies can only be obtained from the official source.

---

* * * JUDGMENT(S) * * *

DOCKET/WARRANT: DB83112
JDGMT AWARD: $1,138 STATUS: Unsatisfied
JDGMT TYPE: Judgment DATE STATUS ATTAINED: 10/23/1995
AGAINST: RADIAC RESEARCH CORP DATE ENTERED: 10/23/1995
IN FAVOR OF: NYC DEPT OF FINANCE LATEST INFO RECEIVED: 11/28/1995
WHERE FILED: KINGS COUNTY SUPREME COURT, BROOKLYN, NY

DOCKET/WARRANT: 001345050
JDGMT AWARD: $1,138 STATUS: Satisfied
JDGMT TYPE: Judgment DATE STATUS ATTAINED: 03/26/1999
AGAINST: RADIAC RESEARCH CORP DATE ENTERED: 10/23/1995
IN FAVOR OF: NYC DEPARTMENT OF FINANCE LATEST INFO RECEIVED: 04/07/1999
WHERE FILED: KINGS COUNTY SUPREME COURT, BROOKLYN, NY

---

* * * UCC FILING(S) * * *

COLLATERAL: All Inventory including proceeds and products - All Account(s) including proceeds and products - All Fixtures including proceeds and products - All Equipment including proceeds and products - and OTHERS
FILING NO: 95192612 DATE FILED: 09/25/1995
TYPE: Original LATEST INFO RECEIVED: 10/23/1995
SEC. PARTY: H & H MACK SALES, INC., ROCKAWAY NJ
ORIX CREDIT ALLIANCE, INC., PARAMUS, NJ
FILED WITH: SECRETARY OF STATE/UCC DIVISION, NY
DEBTOR: RADIAC RESEARCH CORP.

COLLATERAL: Account(s) including proceeds and products - General intangibles(s) including proceeds and products - Contract rights including proceeds and products - Chattel paper including proceeds and products - and OTHERS
FILING NO: 98072858 DATE FILED: 04/06/1998
TYPE: Original LATEST INFO RECEIVED: 04/24/1998
SEC. PARTY: NEWCOURT FINANCIAL USA INC., INDIANAPOLIS, IN
FILED WITH: SECRETARY OF STATE/UCC DIVISION, NY
DEBTOR: RADIAC RESEARCH CORP.

COLLATERAL: Equipment and proceeds - Vehicles and proceeds
FILING NO: 1767558 DATE FILED: 05/19/1997
TYPE: Original LATEST INFO RECEIVED: 06/24/1997
SEC. PARTY: EVERGREEN LEASING, INC., CHESTER CT
FILED WITH: SECRETARY OF STATE/UCC DIVISION,

ASSIGNEE: PNC BANK, N.A., PITTSBURGH, PA NJ
DEBTOR: RADIAC RESEARCH CORP.

COLLATERAL: Equipment and proceeds
FILING NO: 1629239 DATE FILED: 04/11/1995
TYPE: Original LATEST INFO RECEIVED: 06/21/1995
SEC. PARTY: LANGARD MACHINERY CO., INC., SO. PLFLD, NJ FILED WITH: SECRETARY OF STATE/UCC DIVISION, NJ
DEBTOR: RADIAC RESEARCH CORP.

COLLATERAL: Equipment
FILING NO: 33300889 DATE FILED: 11/16/2000
TYPE: Original LATEST INFO RECEIVED: 02/02/2001
ASSIGNEE: TOYOTA MOTOR CREDIT CORP, TORRANCE, CA FILED WITH: SECRETARY OF STATE/UCC DIVISION, PA
DEBTOR: RADIAC RESEARCH CORP, EASTON, PA

This data is for informational purposes only and is not an official record. Certified copies may be obtained from the Pennsylvania Department of State.

COLLATERAL: Vehicles
FILING NO: 97055442 DATE FILED: 03/19/1997
TYPE: Original LATEST INFO RECEIVED: 04/14/1997
SEC. PARTY: ORIX CREDIT ALLIANCE, INC., PARAMUS, NJ FILED WITH: SECRETARY OF STATE/UCC DIVISION, NY
DEBTOR: RADIAC RESEARCH CORP.

COLLATERAL: Leased Equipment and proceeds
FILING NO: 96058684 DATE FILED: 03/25/1996
TYPE: Original LATEST INFO RECEIVED: 04/26/1996
SEC. PARTY: ATEL BUSINESS CREDIT, INC., SAN FRANCISCO, CA FILED WITH: SECRETARY OF STATE/UCC DIVISION, NY
DEBTOR: RADIAC RESEARCH CORPORATION

COLLATERAL: Leased Equipment
FILING NO: 00131973 DATE FILED: 07/06/2000
TYPE: Original LATEST INFO RECEIVED: 07/21/2000
SEC. PARTY: PATRIOT-COMMERCIAL LEASING CO., INC., EXTON, PA FILED WITH: SECRETARY OF STATE/UCC DIVISION, NY
DEBTOR: RADIAC RESEARCH CORPORATION

The public record items contained in this report may have been paid, terminated, vacated or released prior to the date this report was printed.

==========

HISTORY
10/02/01

JOHN TEKIN SR, PRES KEITH FOLEY, V PRES
ARTHUR GREEN, SEC-TREAS
DIRECTOR(S): THE OFFICER(S)

---

* * * CORPORATE AND BUSINESS REGISTRATIONS * * *
REPORTED BY THE SECRETARY OF STATE
OR OTHER OFFICIAL SOURCE AS OF 05/03/2002

The following data is not an official record of the Department of

State or the State of New York and Dun & Bradstreet is not an employee or agent thereof.

REGISTERED NAME: RADIAC RESEARCH CORP.

CORPORATION TYPE: PROFIT FILING DATE: 11/06/1969
BUSINESS TYPE: CORPORATION DURATION: PERPETUAL
REGISTRATION ID #: 284478

STATE OF ORGANIZATION (INCORPORATION): NEW YORK
DATE OF ORGANIZATION (INCORPORATION) : 11/06/1969

STATUS: ACTIVE

WHERE FILED: SECRETARY OF STATE/CORPORATION DIVISION, ALBANY, NY

PRINCIPALS: JOHN V. TEKIN, SR., CHAIRMAN OF THE BOARD, 261 KENT AVENUE
BROOKLYN, NY 11211

Business started 1969 by the officers. 100% of capital stock is owned by the officers equally.

JOHN TEKIN SR born 1939. Officer in the subject from its inception. 1960 to 1969 employed in same line of business by Teledyne Isotopes, Westwood, NJ.

KEITH FOLEY born 1935. 1954 to 1965 served in the United States Air Force Strategic Air Command, Special Nuclear Weapons Group. 1965 to 1969 manager of Radiological Services, Isotopers and Mine Company, Westwood, NJ. 1969 to present active as officer in subject.

ARTHUR GREEN born 1942. Not active in day to day operations. Officer in the subject from its inception. 1962 to 1969 employed by Teledyne Isotopes, Westwood, NJ.

==========

OPERATION
10/02/01 Operates in the collection and disposal of waste chemicals and radioactive materials (100%).
Terms are net 30 days. Has 300 account(s). Sells to industrial firms, colleges and hospitals. Territory : North Eastern United States.
Nonseasonal.

EMPLOYEES: 45 which includes officer(s). 15 employed here.
FACILITIES: Owns 9,200 sq. ft. in a one story brick building.
LOCATION: Industrial section on well traveled street.
BRANCHES: Subject maintains warehouse facilities at 33 South 1st Street, Brooklyn, NY. Subject rents 2,000 sq. ft. at this location.

05-14(395 /395) 00400 001110110 H
BANK: Manufacturers Hanover Trust, Brooklyn, NY

FULL DISPLAY COMPLETE

© 2002 Dun & Bradstreet Inc.
January 11, 2002 - GTO

AETC.
ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION

Credit Application (New Accounts)

- **Name of Business** METCO INC. **Phone No.** 334-1300
  Address 1101 Prospect Ave.
  City Westbury **State** NY **Zip Code** 11714

- **Billing Address** Same

- **Accts. Payable/Financial Contact** P. Tighe
  Title Facility Administration **Phone No.** 334-1300

- **Corporation** X **Partnership** ____ **Individual** ____

- **Sales Tax #** 11-2238391

- **How long in business** ____

- **Principal owner(s)** ____
  Address(s) ____
  Phone #(s) ____

- **Expected monthly credit requirement** ____

- **First order amount** ____

- **Trade references (major suppliers):**
  1) Teledyne - Wah Chang
     7300 Highway 20 West, Huntsville, AL 35806 205-837-1311
  2) The Platt Bros. & Co.
     Box 1030, Waterbury, CT 06730 203-753-4194
  3) Al Tech Specialty Steel Corp.
     Willowbrook Ave., Dunkirk, NY 14048 800-462-8120

- **Name of bank** Manufacturers Hanover Trust Company
  Address 7600 Jericho Tpke.
  City Woodbury **State** NY **Zip Code** 11787
  Checking Account # ____ **Savings Account #** ____

- **Sales Rep** ____ **Date** ____
  Authorized signature Patrick O'Tighe **Date** 2/3/89

PERKIN-ELMER

METCO

1101 Prospect Avenue
Westbury, NY 11590
(516) 334-1300
FAX NO. (516) 334-1938

TO TELEFAX NO:

TO: AETC

ATTN: Tom DiBernard

FROM: Pat Tigne

DATE:

PAGE 1 **OF** 2

METCO INC.

1101 PROSPECT AVENUE
WESTBURY, NEW YORK 11590
TELEPHONE: (516) 334-1300
CABLE: METCO
TELEX: 96-7759 METCO INC. WERY

March 12, 1984

CREDIT REFERENCES

Manufacturers Hanover Trust Company
7600 Jericho Turnpike
Woodbury, N.Y. 11787
516 364-3300

Teledyne - Wah Chang
7300 Highway 20 West
Huntsville, AL 35806
205 837-1311

The Platt Bros. & Co.
Box 1030
Waterbury, CT 06720
203 753-4194

Al Tech Specialty Steel Corp.
Willowbrook Avenue
Dunkirk, New York 14048
800 462-8120

Technical Fact Sheet — Chemical Waste Management (CWM) Chemical Services, Inc. Chicago, Illinois

Site Information

- Company Name: Chemical Waste Management (CWM) Chemical Services, Inc.
- Location: Chicago, Illinois
- Introduction to facility: CWM Chemical Services, Inc. a subsidiary of Chemical Waste Management, Inc. is an incineration facility located in the Lake Calumet section of southeast Chicago. Until early in 1970, the 30-acre site was owned [and operated as a hazardous waste facility] by Hyon, Inc. and Envirotherm, Inc. In 1978, SCA Chemical Services, Inc. purchased the permit and retrofitted the incinerator. SCA's first RCRA trial burn took place in 1982. Chemical Waste Management purchased SCA in 1984 and changed the name of the facility to CWM Chemical Services, Inc. in September, 1988. CWM Chemical Services currently has 110 employees. The facility handles approximately 35,000 tons of hazardous waste annually.

CWM Chicago incineration facility.

Incinerator Statistics

- Type: Rotary kiln followed by a secondary combustion chamber
- Designed capacity of unit: 120 million BTU's/hour
- Operating temperature in primary chamber: 1800° F
- Operating temperature range secondary combustion chamber: Minimum 2200° F — Maximum 2350° F
- Type and operation of solid feed: A conveyor pulls the solid waste into the hopper. Hopper feeds kiln via a hydraulic ram feed. The hopper's dimensions are 3'x3'x3'.
- Type and operation liquid feed: Steam atomization of liquids; a fixed nozzle injects the liquids into the secondary chamber.
- Type and operation sludge feed: Sludge lance feeds the sludge material into the rotary kiln.
- Feed rate cycle: Solid waste delivery is cycled for a burn approximately every 2 to 10 minutes.

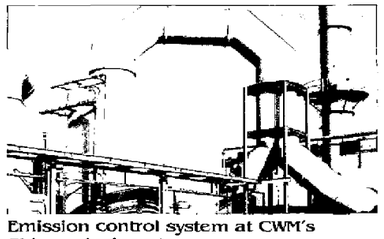
Retention Time: (The amount of time a material resides in a combustion chamber during incineration)

- Retention time primary chamber: At least 20 minutes for solids.
- Retention time secondary chamber. At least 2 seconds for off-gases.

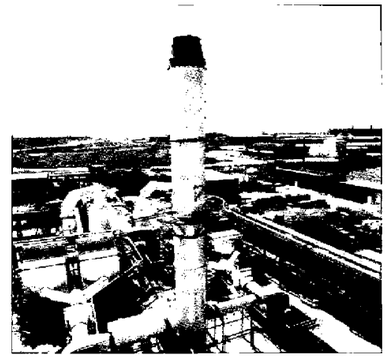
Incinerator Controls: State and federal regulations mandate an efficiency rating of 99.99% for incineration of hazardous waste, 99.9999% for PCB's. Continual monitoring of stack gases takes place in the incinerator's control room. A total of 46 interlock control mechanisms assure all standards are met. Should any one of the 46 controls fail to operate, an automatic shutdown of waste feed would occur.

Air Pollution Elimination System (scrubber):

- Efficiency rating: 99%
- Operation: Two (2) packed tower scrubbers (which absorb acidic gases) followed by four (4) electrostatic precipitators. The scrubbers operate on a countercurrent where gases are pulled from bottom to top



Emission control system at CWM's Chicago incinerator.



CWM's incinerator has a rotary kiln with a secondary chamber.

and the water wash falls from top to bottom. The towers are packed with plastic Telaretts which increase exposure of the gases to the water flow. Approximately 2,000 gallons of water/min cleanse the gases in the system. Acids are neutralized in the scrubbing towers. Four (4) electrostatic precipitators remove particulate matter.

- Emergency controls: Integrated with the 46 interlock control system of the entire facility. Should an electrostatic precipitator fail to operate properly, automatic shutdown would occur.
- Emission controls: An air pollution monitoring system detects emissions from the stack. A second system is used as a back-up should the primary system fail. The stack is continuously monitored for O_2, CO, HC, CO_2 and combustion efficiency.
- Scrubber water disposal process: Neutralized with caustic, clarified and sent to water treatment tanks where solids are collected and filter pressed. An average of 300 gal/water/min is discharged following filtering and sampling.

Ash Disposal Process: Ash is collected in a rolloff box, sampled and tested for PCB's and organic compounds. Following testing, the approved ash is disposed of in a permitted hazardous waste landfill.

Acceptable Waste Types and Approval Procedures

- Authorized waste types: Flammable liquids and solids, organic acids, organic amines, inorganic bases,

Continued on page 3

Technical Fact Sheet
Continued from page 2

consumer commodities, prescription and non-prescription drugs, aqueous wastes, inorganic salts, PCB's, non-infectious pathological waste, and non-NRC and DOT regulated scintillation vials. Bulk and drum disposal is also available.

- Generally, any listed hazardous waste is acceptable with the exception of radioactive, dioxin and explosive wastes. Liquid waste is unloaded into nitrogen blanketed tanks. Steel drums are repacked into burnable containers.
- Quality Assurance: Generators must submit a waste profile form and a certificate of representative sample before wastes are approved for disposal at the facility by CWM's laboratory and technical managers. On-site laboratory operates 16 hours a day analyzing and testing samples for (among other things) heat of combustion, metals content, water content, density and viscosity.
- Quality Control: Drum tracking is completed with the use of the work order number. COD's are issued for all shipments. An environmental compliance auditor is also on staff. The facility's technical and laboratory managers check that all incoming loads conform with the results of the original samples.

Permits

RCRA Part B (under interim status)
Illinois EPA Air Permit
Illinois EPA Water Permit
USEPA TSCA Permit

Container Storage Area

Capable of storing 2,500 drums on-site.

Tank Storage Area

Tank storage capacity of 150,000 gallons. Twelve storage tanks on-site that are completely contained by a five foot concrete wall. There is no underground piping.

Shredder for PCB's

Shredder on-site which is presently used only for PCB's.

Bulk Unloading Area

Bulk liquid wastes are unloaded into one of two completely contained bay areas, which are outfitted with nitrogen blanketed tanks and fire protection devices. ■

Comprehensive *Continued from page 1*

and overflow prevention devices, such as spill catchment basins, overfill alarms and automatic shut-off mechanisms, must also be in place.

The entire system (including the delivery piping) must be adequately protected against corrosion. Cathodic protection devices effectively arm against corrosion by preventing electrical charges (which encourage corrosion) from being attracted to the bare steel. Installation of non-corrodible tanks and pipes made of fiberglass-reinforced plastic (FRP) is another option.

The regulation also requires the installation of an approved monitoring system. The EPA has approved several hundred leak detection methods. With such a broad market, owners and operators must assure that the leak detection method chosen demonstrates a 95% success rate. According to the EPA, it must be capable of detecting a leak of 0.2 gallons/hour or less. Practical options include manual inventory controls with periodic tank tightness testing and the installation of dry and wet-type monitoring wells to detect groundwater contamination. Interstitial monitoring (between the inner and outer wall of the tank) may also be employed for the detection of leaks from double-walled tanks or even single-walled tanks that have an internally-fitted liner.

Regardless of which method is utilized, the onus is on the owner and operator to assure that the tank is adequately monitored. It is imperative that releases from any portion of the tank or its associated underground piping be promptly detected. In the event of a confirmed leak, a demonstration notice must be filed with the appropriate federal, state or local regulatory authority. A site-specific corrective action plan would then follow.

Secondary containment is required only for chemical tanks. A variety of secondary containment options are available including double-walled tanks, concrete vaults and impenetrable liners. An interstitial monitoring system must be in place between the two layers of a double-walled tank to detect leaks between the UST and the second barrier wall.

This comprehensive rule tackles the complete life cycle of the UST. It also establishes standards for operations, maintenance practices and reporting and recordkeeping procedures.

It is estimated that nearly two million UST's will be affected by the ruling, 50% of which are tanks used to store gasoline at service stations. Heavy fines have been established for non-compliance. Violators can be fined up to $10,000 per violation, per day for each tank. The agency also has the power to levy fines up to $25,000 for continued non-compliance of enforcement orders.

Clearly, owners and operators of UST's have a formidable task ahead. AETC's site remediation team stands ready to address every facet of an owner or operator's compliance needs. ■

The Hammer Hits Again

In just two months the hammer will fall again for the EPA's second third wastes. By June 8, the EPA will publish a final rule that will address land disposal prohibitions for the second third of the 450 "listed wastes" — those designated as most toxic and disposed of in the largest volumes. The June deadline will go into effect as scheduled unless the EPA sets alternate treatment standards, grants a national capacity variance or a case-by-case extension.

A proposed rule outlining the agency's strategy was published in January in the Federal Register (54 FR 1056). Treatment standards, technology-based standards, a soft hammer provision and specific land disposal prohibitions are key components of the EPA's initial proposal.

Specific treatment standards were established for some of the second third wastes and not for others. Wastes that were not assigned treatment standards fall under the soft hammer provision. Because soft hammer wastes do not have associated treatment standards, they may be land disposed under the following two conditions:

Condition 1 — The land disposal unit or cell meets the minimum technology requirements of the Hazardous and Solid Waste Amendments (HSWA) (i.e., double liners, monitoring systems)

and

Continued on page 4

The Hammer Hits Again
Continued from page 3

Condition 2 — The generator certifies (prior to disposal) that a thorough investigation of the available treatment options was made and that continued land disposal is the only "practical", environmentally sound, alternative currently available.

The soft hammer provisions apply until the EPA establishes treatment standards or until May 8, 1990, whichever comes first.

The Specifics

The proposal establishes specific treatment standards for several second third wastes as well as a select group of wastes which fell under the soft hammer provision of last August's first third ban. Wastes which have treatment standards must first be treated, the remaining residue must then be tested; if the hazardous constituents detected exceed the established standard, the waste or extract cannot be land disposed. The treatment standards are listed in two tables, Constituent Concentration in Waste (CCW) and Constituent Concentration in Waste Extract (CCWE). These tables can be found in 54 FR 1116-1119.

Specific treatment technologies must be utilized for certain second third wastes. For example, the non-wastewater form of six K wastes, eight P wastes and four U wastes must be treated via incineration in hazardous waste incinerators, boilers or industrial furnaces. A second group of K, P and U wastes must be treated via carbon adsorption.

Notification and Recordkeeping Requirements

Generators of banned wastes must notify the chosen disposal facility of applicable disposal prohibitions and associated treatment standards with each shipment. For soft hammer wastes, as mentioned earlier, the generator must submit a demonstration to the EPA which certifies that the most practical, environmentally sound outlet was chosen.

Waste analysis data and notification statements must be retained for a minimum of five years.

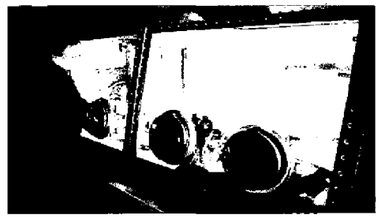
Complicated, complex and confusing, apt adjectives to describe the land disposal prohibitions. But when the hammer falls in June, a careful, methodical review of the final rule will provide generators with a stable course to compliance. ■

Regulatory Update
Continued from page 1

(2) The second set proposes to bring mixed wastes under the authority of Chapter 21C. Mixed wastes are defined as those that contain radioactive material and hazardous waste. All the hazardous waste regulations under Chapter 21C will be applied to mixed wastes, except for waste oil. (3) The third set of amendments concern household hazardous waste collection events. (4) The fourth set corrects the lists of hazardous wastes, changes transporter requirements and changes siting requirements for hazardous waste treatment or disposal technologies. ■

News From AETC

AETC's Reactive Chemical Group has upgraded their service capabilities with the purchase of a mobile, Dri-Lab Glove Box. It is a hermetically sealed enclosure for working with materials sensitive to air or moisture.



AETC's new mobile Dri-Lab Glove Box.

The Glove Box provides an inert atmosphere free of moisture and air. Reactive chemicals can be easily worked with via the two 9" glove ports.

AETC is proud to announce the promotion of **James T. Bell** to Director of Regulatory Affairs. Formerly with the New Jersey Department of Environmental Protection (NJDEP), Jim joined AETC three years ago. He was graduated from Villanova University with a B.S. degree in Chemical Engineering.

In addition, congratulations are in order for **Andrew Babij** for his recent promotion to Director of Technical Services. Andy, who has been with AETC for over eight years, was graduated from Rutgers College with a B.A. degree in Chemistry. He is currently pursuing a MBA from Rutgers University in Newark, New Jersey. ■

Advanced Environmental Technology Corporation
Kathleen A. Michael
Information and Communication Coordinator
Gold Mine Road
Flanders, New Jersey 07836

BULK RATE
U.S. POSTAGE
PAID
FLANDERS, NJ
PERMIT NO. 42

PERKIN ELMER CORPORATION
METCO DIVISION
1101 PROSPECT AVENUE
WESTBURY NY 11590
ATTN: PATRICK A. TIGHE

Vol. 4, No. 1 April 1989

AETC'S REGULATORY, ENVIRONMENTAL AND TECHNOLOGY UPDATE

Comprehensive Underground Storage Tank Rule Addresses All Facets of Tank System Management

Out of sight, out of mind. An adage that may still hold true for the lovelorn but certainly not for owners and operators of underground storage tanks.

A sweeping final rule, which took effect late last December (53 FR 37082), has given rise to a compliance effort tantamount to that of early RCRA. The rule is complex, covering all facets of tank system management from installation to final closure.

"A scenario of nightmarish proportions," was how one trade journal depicted the consequences of the rule.

In laying out its plan, the EPA made it explicitly clear that state and local governing bodies have authority to impose their own, more stringent requirements, "so long as the intent of the rule is realized 100%." This has led many who fall under the jurisdiction of the rule to forecast a rocky road to compliance. Above all, careful attention must be paid to the subtle nuances which exist between federal, state or local underground storage tank (UST) regulations.

At least 20 states have adopted the EPA's rule with little or no modification. But eighteen states and nearly 100 major cities have established their own, more stringent requirements.

The Language of the Rule

The rule defines an underground storage tank (UST) as "any tank that has at least 10% of its volume underground (including the underground piping connected to the tank)." As a result, nearly two million existing tanks containing either petroleum or "other" hazardous chemicals (as defined by CERCLA) fall under the rule's authority. Hazardous wastes listed under Subtitle C of RCRA are not regulated under the new UST regulation.

It establishes standards relative to owners and operators of new and existing tanks for the prevention, detection and cleanup of releases from their system. A phase-in period has been established for existing tanks, whereby the age of the tank determines its compliance schedule.

Owners and operators of existing petroleum and chemical tanks must install a leak detection system within a maximum of five years, depending upon the tank's age. For example, if a tank has been in use for twenty-five years, appropriate leak detection devices must be in place by December 1989. Younger tanks must be up to standard within five years.

In addition to complying with the new leak detection requirements, existing tanks must meet new tank standards within ten years (December, 1993). To upgrade existing tanks, spill and overflow prevention devices must be in place, such as catch basins and overfill alarms. Corrosion protection equipment must also be installed.

Regardless of the tank's age, correct filling practices must be followed by all tank owners or operators.

For new tanks, put into place after the December 1988 deadline, a certification statement must be filed with the EPA which details that proper installation procedures were followed. Spill

Continued on page 3

Regulatory Update

Environmental Protection Agency — Standards for the Tracking and Management of Medical Waste — Interim final rule and request for comments published in the March 24, 1989, Federal Register, pages 12326-12395. Site of Regulation: 40 CFR Parts 22 and 259. Effective Date: June 22, 1989. Comments Due: May 23, 1989.

The Medical Waste Tracking Act of November, 1988, (MWTA) required the EPA, among other things, to establish a two-year demonstration program for tracking medical waste generated in the following states: Connecticut, New Jersey, New York and states which border the Great Lakes. The EPA's program is published in this interim final rule.

Massachusetts — Department of Environmental Quality Engineering — Hazardous Waste Regulations — Amendments (4) published in the February 17, 1989, Massachusetts Register, pages 431-661. Site of Regulation: 310 CMR 30. Effective Date: February 17, 1989.

This package includes four amendments to the hazardous waste management regulations. (1) The first set consists of hazardous waste tank regulations for new and existing tanks. It contains design and installation standards for new tanks, upgrading and replacement procedures for existing tanks and inspection requirements for both. The regulation also describes procedures for responding to releases of hazardous waste from tanks.

Continued on page 4

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: Chromium Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: JMacri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Metco Division Perkin-Elmer

TRI Facility ID Number: 11590PRKNL1101P

Street Address: 1101 Prospect Avenue

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3542	b.	c.	d.	e.	f.

4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		075	09	50	027	53	16

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663	b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD131318651	b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A	b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-47-3
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Chromium
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	Process the toxic chemical:	a. ☐ As a reactant b. ☐ As a formulation component	c. ☐ As an article component d. ☐ Repackaging
3.3	Otherwise use the toxic chemical:	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☒ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	03	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	B	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name N/A				
5.3.2	Stream or Water Body Name N/A				
5.3.3	Stream or Water Body Name N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounc
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11590PRKNL1101P

Toxic Chemical, Category, or Generic Name: Chromium Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 1000	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pound

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Toxic Chemical, Category, or Generic Name
Chromium Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11590PRKNL1101P
Chemical, Category, or Generic Name
Chromium Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released *	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	830	1000	1200	1200
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

FAX TRANSMITTAL

Tridon Chemical CORP.

FAX# (516) 293-6453
25 South Mall • Plainview, New York 11803 • (516) 293-2190

DATE: 6/24

COMPANY: Nitco

FAX NO: 338-2477

ATT: Terry

FROM: Bert

PAGE 1 of 7

6/29/92 gave to Connie

NOTE: ① MSDS for ST-1 follows (thinner S511G)

Original

② Label (for 1991) ~~follows~~ = enclosed

~~"enlarged to show detail"~~

I'll put copies in the mail tomorrow

HMIS®

HEALTH	3
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	

Style NC-V502 Printed by LABELMASTER, CHICAGO, IL 60646 (800) 621-5808

WARNING! FLAMMABLE . . . HARMFUL IF SWALLOWED OR INHALED . . . USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY

READ MSDS BEFORE USING THIS PRODUCT. THOSE MATERIALS LISTED IN THE MSDS WITH AN ASTERISK HAVE BEEN LISTED BY ONE OF THE FOLLOWING TESTING AGENCIES NATIONAL TOXICOLOGY PROGRAM, INTERNATIONAL RESEARCH AND CANCER, OR OSHA

FIRST AID—

Effects of Overexposure

Inhalation Anesthetic Irritation of the respiratory tract or acute nervous system depression characterized by headache, dizziness, staggering gait, confusion, unconsciousness or coma.

Skin or Eye Contact: Primary irritation.

Emergency and First Aid Procedures.

Vapor: Remove from overexposure. Restore breathing. Keep warm and quiet. Notify a physician.

Splash (eyes): Flush immediately with large quantities of running water for at least 15 minutes. Take to a physician for definitive medical treatment.

Splash (skin): Remove with soap and water. Remove contaminated clothing.

In Case of Fire:

Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.

Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks and open flame. Closed container may explode when exposed to extreme heat. Do not apply to hot surfaces.

Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

In Case of Spill or Leak:

Remove all sources of ignition (flames, hot surfaces, and electrical, static, or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools.

Special Protection Information:

Respiratory Protection: **In outdoor or open area** use NIOSH approved mechanical filter respirator to remove solid air borne particles of overspray during spray application. **In restricted ventilation areas** use NIOSH approved chemical-mechanical filters designed to remove a combination of particulate and gas and vapor.

In confined areas use NIOSH approved air-supplied respirators or hoods.

Ventilation: Provide general dilution or local exhaust ventilation in volume and pattern to keep TLV of most hazardous ingredient on material safety data sheet below acceptable limit, and to remove decomposition products during welding or flame cutting on surfaces coated with this product.

Protective Gloves: Required for prolonged or repeated contact.

Eye Protection: Use safety eyewear designed to protect against splash of liquids.

Other Protective Equipment: Prevent prolonged skin contact with contaminated clothing.

Special Precautions:

Precautions to be Taken in Handling and Storing: Do not store above 120° F.

Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. **DO NOT FLAME CUT, BRAZE, OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.**

Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

ATTENTION:

Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC — DAY OR NIGHT
1-800-424-9300

USING THE NATIONAL PAINT AND COATINGS ASS
HAZARDOUS MATERIAL IDENTIFICATION SYSTEM
HAZARD CLASSIFICATION IS

HEALTH** :

**Note: If an asterisk is present, see Sec. 2 and 8 of the MSDS for further information.

FLAMMABILITY :

REACTIVITY :

PERSONAL PROTECTION : Se
label and MSDS for proper personal protection equ

Those materials listed on Section II of the MSDS may affect the following organs for: 0910A01M 0
LIVER RESPIRATORY TRACT
KIDNEY REPRODUCTIVE SYSTEM
CENTRAL NERVOUS SYSTEM

20-12 CARDIAC SENSITIZATION

DEXTER

THE DEXTER CORPORATIC

ONE GALLON—U.S. MEASURE = 3.7

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIAL IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH** : 3

**Note: If an asterisk is present see section 2 and 8 of the MSDS for further information

FLAMMABILITY : 3

REACTIVITY : 0

PERSONAL PROTECTION : See this label and MSDS for proper personal protection equipment

STIR WELL BEFORE US
0910A01M 0 MIE
MFG DATE: 10/07/91
ST1 Q2329 THINNER
~~SCOTCH TAPE~~ LABEL 1
Flash Point: 42
UN1263 PAINT RELATE

Those materials listed on Section II of the MSDS may affect the following organs for: 0910A01M 0
LIVER RESPIRATORY TRACT
KIDNEY REPRODUCTIVE SYSTEM
CENTRAL NERVOUS SYSTEM

20-12 CARDIAC SENSITIZATION

WARNING! Flammable Harmful if swal
adequate ventilation. (See back panel fo
FOR INDUSTRIAL USE (
KEEP CONTAINER CLOSED WHE

HAYWARD, CALIF. • WAUK

DEXTER

THE DEXTER CORPORATION

ONE GALLON—U.S. MEASURE 3.785 LITERS

SOCIATION'S
1. THIS PRODUCT'S

3 STIR WELL BEFORE USING
6910A01M 0 MIB2790
MFG DATE: 10/07/91

3 ST1 02329 THINNER

0 ~~SCOTCH TAPE~~ LABEL TO CAW
Flash Point: 42
UN1263 PAINT RELATED MATERIAL

e this
ipment

WARNING: This Product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reProductive harm.

WARNING! Flammable Harmful if swallowed Use only with adequate ventilation (See back panel for further information)

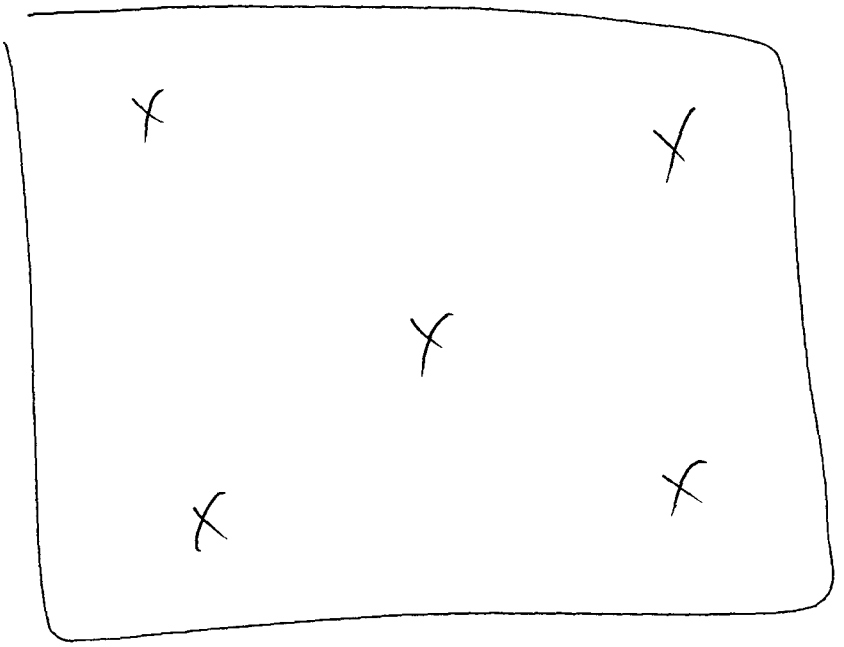
FOR INDUSTRIAL USE ONLY

KEEP CONTAINER CLOSED WHEN NOT IN USE

HAYWARD, CALIF. • WAUKEGAN, ILL.

CFM

2400 cfm



United States Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY
FORM A

WHERE TO SEND COMPLETED FORMS: 1. EPCRA Reporting Center, P.O Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 1999

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 2 trade secret? [ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 Is this copy [ ] Sanitized [ ] Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the statement, the annual reportable amount as defined in 40 CFR 372.27 (a), did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed, or otherwise used in an amount not exceeding 1 million pounds during this reporting year.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
KEVIN RODGERS MANAGER, FACILITIES		06/30/2000

SECTION 4. FACILITY IDENTIFICATION

4.1 TRI Facility ID Number: 11801-PRKNL-220MI

Facility or Establishment Name	Facility or Establishment Name or Mailing Address (if different from street address)
SULZER METCO (US), INC.	SULZER METCO (US), INC.
Street: 220 MILLER PLACE	Mailing Address: 1101 PROSPECT AVENUE
City/County/State/Zip Code: HICKSVILLE NASSAU NY 11801-	City/County/State/Zip Code: WESTBURY NY 11590-0201

4.2 This report contains information for: (Important : check c if applicable) c. [ ] A Federal facility

4.3 Technical Contact Name: JOHN DETOMASSO — Telephone Number (include area code): (515) 338 - 2337

4.4 Intentionally left blank

4.5 SIC Code (s) (4 digits)

Primary a.	b.	c.	d.	e.	f.
3399	NA				

4.6

Latitude Degrees	Minutes	Seconds	Longitude Degrees	Minutes	Seconds
040	47	10	073	31	00

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA Identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 152084398	a. NYD981558570	a. NA	a. NA
b. NA	b. NA	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1 Name of Parent Company: NA [ ] SULZER INC.

5.2 Parent Company's Dun & Bradstreet Number: NA [ ] 001826957

EPA FORM A
PART II. CHEMICAL IDENTIFICATION

TRIFID: 11801-PRKNL-220MI

SECTION 1. TOXIC CHEMICAL IDENTITY **Report 1 of 1**

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	007429905
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	ALUMINUM (FUME OR DUST)
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes". Generic Name must be structurally descriptive.)
	NA

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces and punctuation.)
	NA

EPA United States Environmental Protection Agency

Envirofacts Warehouse Toxics Release Inventory

EZ Query Batch Reports Form R Reports

Overview Law EXIT EPA Customized Query State Reports Query Model Feedback EF Home

TRI FORM R Reports

Facility Name Begining with: sulzer
Reporting Year Selected: 1999
Query Executed On: JUL-25-2001
Results are based on data extracted on: JUL-06-2001

LIST OF TRI FORM R FACILITIES IN ENVIROFACTS

Click on the TRI Facility ID to get the Form R Detailed Report.

TRI FACILITY ID	FACILITY NAME	ADDRESS	SUBMISSIONS
48084SLZRP1972M	SULZER METCO (US) TROY	1972 MEIJER DR., TROY, MI - 480847143	5
78717SLZRR9900S	SULZER ORTHOPEDICS INC.	9900 SPECTRUM DR., AUSTIN, TX - 78717	1
29641HLSTR155AH	SULZER PROCESS PUMPS (US) INC.	155 AHLSTROM WAY, EASLEY, SC - 29641	3
97210SLZRB2800N	SULZER PUMPS (US) INC.	2800 N.W. FRONT AVE., PORTLAND, OR - 97210	4

Total Number Of Facilities Found: 4

EPA United States Environmental Protection Agency

Envirofacts Warehouse Toxics Release Inventory

EZ Query Batch Reports Form R Reports

Overview Law EXIT EPA Customized Query State Reports Query Model Feedback EF Home

TRI FORM R Reports

Facility Name Begining with: sulzer metco
Reporting Year Selected: 1999
Query Executed On: JUL-25-2001
Results are based on data extracted on: JUL-06-2001

LIST OF DOCUMENT CONTROL NUMBERS WITH THEIR CHEMICAL NAMES IN ENVIROFACTS

- To obtain a Form R Detailed Report for all the Document Control Numbers listed in the table below Click here: 48084SLZRP1972M
- Click on a selected Document Control Number from the table below to get the Form R Detailed Report.

DOCUMENT CONTROL NUMBER	CHEMICAL NAME	FORM TYPE INDICATOR
1399135204648	NICKEL COMPOUNDS	FORM R
1399135207811	COPPER COMPOUNDS	FORM R
1399135207874	CHROMIUM COMPOUNDS	FORM R
1399135207912	ALUMINUM (FUME OR DUST)	FORM R
1399135211199	COBALT COMPOUNDS	FORM R

Total Number Of DCN's Found: 5

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: CHROME S.G W/R BE
PRODUCT CODE: 71-32770

HMIS CODES: H F R P
1 2 0 J

SECTION I - MANUFACTURER IDENTIFICATION

MANUFACTURER'S NAME: HARTIN PAINT & FILLER CO.
ADDRESS: 225 BROAD STREET, CARLSTADT NEW JERSEY 07072
EMERGENCY PHONE: 201-438-3300 **INFORMATION PHONE:** SAME
DATE REVISED : 09-20-89 **NAME OF PREPARER :**

SECTION II - HAZARDOUS INGREDIENTS/SARA III INFORMATION

HAZARDOUS COMPONENTS	CAS NUMBER	OCCUPATIONAL EXPOSURE LIMITS OSHA PEL	ACGIH TWA	TLV STEL	VAPOR PRESSURE mm Hg @ TEMP		WEIGHT PERCENT
*GLYCOL ETHER	111-76-2	50	25	(75)	1.0	68F	1
*ALCOHOL	67-63-0	400	400	500	* 33.0	68F	3
ALUMINIUM PASTE	7429-90-5	15MG/M3	10 MG.M3	10 MG/M3	N/A		5

* Indicates toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372.
MAY ALSO CONTAIN THE FOLLOWING PRODUCTS: TITANIUM DIOXIDE [CAS # 13463-67-7] CARBON BLACK [CAS # 1333-86-4]
MAGNESIUM SILICATE [CAS #14807-96-6]

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING RANGE: 131 to 360 Deg F **SPECIFIC GRAVITY (H2O=1):** 1.0
VAPOR DENSITY: LIGHTER THAN AIR **EVAPORATION RATE:** SLOWER THAN ETHER
COATING V.O.C. : 2.53 LB/GL (303 G/L)
SOLUBILITY IN WATER:
APPEARANCE AND ODOR:

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: 53 Deg F **METHOD USED:** TCC
FLAMMABLE LIMITS IN AIR BY VOLUME- LOWER: 0.9% **UPPER:** 12.0%

EXTINGUISHING MEDIA: FOAM, ALCOHOL FOAM, CO2, DRY CHEMICAL, WATER FOG

SPECIAL FIREFIGHTING PROCEDURES
MATERIALS BURNS RAPIDLY WITH INTENSE HEAT. USE SELF-CONTAINED BREATHING APPARATUS AND PROTECTIVE CLOTHING.

UNUSUAL FIRE AND EXPLOSION HAZARDS
AVOID UNNECESSARY EXPOSURE TO HEAT. VAPORS MAY TRAVEL TO SOURCE OF IGNITION AND FLASH BACK.

SECTION V - REACTIVITY DATA

STABILITY: STABLE

CONDITIONS TO AVOID

HIGH HEAT. SPARKS. OPEN FLAME

INCOMPATIBILITY (MATERIALS TO AVOID)

ALKALINE METALS. STRONG ACIDS. OXIDIZING AGENTS

HAZARDOUS DECOMPOSITION OR BYPRODUCTS

OXIDES OF NITROGEN-CARBON DIOXIDE/MONOXIDE

HAZARDOUS POLYMERIZATION: WILL NOT OCCUR

SECTION VI - HEALTH HAZARD DATA

INHALATION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

VAPORS MAY BE IRRITATING AND CAUSE DIZZINESS. HEADACHE. NAUSEA. VOMITTING AND NARCOSIS

SKIN AND EYE CONTACT HEALTH RISKS AND SYMPTOMS OF EXPOSURE

BREIF CONTACT WITH SKIN SHOULD NOT PRODUCE ANY HARMFUL EFFECTS. BUT PROLONGED CONTACT. AS FROM CLOTHING WET WITH CHEMICAL. MAY CAUSE IRRITATION. EYE CONTACT CAUSES SEVERE IRRITATION.

SKIN ABSORPTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

NONE CURRENTLY KNOWN.

INGESTION HEALTH RISKS AND SYMPTOMS OF EXPOSURE

MAY CAUSE TOXICOLOGICAL AND NEUROLOGICAL EFFECTS.

HEALTH HAZARDS (ACUTE AND CHRONIC)

ACUTE INGESTION CAN CAUSE HEADACHE. DROWSINESS AND UNCONSCIOUSNESS. ACUTE INHALATION OF VAPORS ARE IRRITATING TO NASAL PASSAGES AND THROAT. ACUTE REPEATED OR PROLONGED SKIN CONTACT CAN CAUSE DRYING OF THE SKIN. AND ACUTE VAPOR OR LIQUID EYE CONTACT MAY BE INHALED TO THE EYES.

CARCINOGENICITY: NTP? NO **IARC MONOGRAPHS?** NO **OSHA REGULATED?** NO

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

EMPHYSEMA. ASTHMA. DERMATITIS.

EMERGENCY AND FIRST AID PROCEDURES

IF SWALLOWED CALL A PHYSICIAN SKIN - FLUSH WITH WATER. IF INHALED REMOCE TO FRESH AIR AND CALL A PHYSICIAN. GIVE ARTIFICIAL RESPIRATION IF BREATHINMG IS DIFFICULT. EYES - FLUSH WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES. TREATMEN TSHOULD BE DIRECTED AT THE CONTROL OF SYMPTOMS AND THE CLINICAL CONDITION. THERE IS NO SPECIFIC ANTIDOTE

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

WEAR SUITABLE PROTECTIVE EQUIPMENT. SPILLS SHOULD BE COLLECTED FOR DISPOSAL BY APPROPRIATE METHODS.

WASTE DISPOSAL METHOD

DISPOSE OF WASTE BY APPROPRIATE METHODS OR INCENERATE IN A FURNACE WHERE PERMITTED UNDER APPROPRIATE FEDERAL. STATE. AND LOCAL REGULATIONS.

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

STORE LARGE QUANITIES ONLY IN BUILDINGS DESIGNED TO COMMPLY WITH OSHA 1910.106. STORE IN COOL AREA.

OTHER PRECAUTIONS

KEEP CLOSURE TIGHT AND CONTAINER UPRIGHT TO PREVENT LEAKAGE . DO NOT STORE OR USE HEAT. SPARKS OR OPEN FLAME. STORE DRUM OUT OF SUN AND AWAY FROM HEAT. STORE AND USE ONLY IN WELL-VENTILATED AREAS. DRUMS OF THIS MATERIAL SHOULD BE GROUNDED WHEN POURING. NEVER USE PRESSURE TO EMPTY. DRUM IS NOT A PRESSURE VESSESL. DO NOT PUNCTURE CONTAINER OR LEAVE OPENED OR UNCOVERED. DRUMS SHOULD NOT BE WASHED OUT OR USED FOR OTHER PURPOSES. DO NOT GET IN EYES. AVOID SKIN CONTACT. HARMFUL IF INHALED. PREVENT PROLONGED OR REPEATED BREATHING OR VAPOR OR MIST. READ INSTRUCTIONS BEFORE USING

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION

IN OPEN AREAS: USE APPROVED MECHANICAL FILTER RESPIRATORS TO REMOVE SOLID AIR-BORNE PARTICLES. IN RESTRICTED VENTILATION AREAS: USE OSHA APPROVED CHEMICAL/MECHANICAL FILTER RESPIRATORS DESIGNED TO REMOVE A COMBINATION OF PARTICLES AND VAPOR. IF LOCAL EXHAUST IS NOT SUFFICIENT TO KEEP LEL BELOW STATED IN SECTION III.

VENTILATION

ALL APPLICATION AREAS SHOULD BE VENTILATED IN ACCORDANCE WITH OSHA REGULATION 29CFR.1910 TO KEEP AIR CONTAMINANT CONCENTRATION LEVELS BELOW APPLICATION OSHA PERMISSABLE EXPOSURE LIMIT OR ACGIH'S TLV LIMIT.

PROTECTIVE GLOVES

REQUIRED FOR PROLONGED OR REPEATED CONTACT

EYE PROTECTION

USE SAFETY EYEWEAR WITH SPLASH GUARDS OR SIDE SHEILDS.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT

EYE BATH. SAFETY SHOWER. APRONS

WORK/HYGIENIC PRACTICES

WEAR PROTECTIVE CLOTHING WHEN NECESSARY. WASH THOROUGHLY BEFORE HANDLING FOOD PRODUCTS.

SECTION IX - DISCLAIMER

DISCLAIMER

WHILE HARTIN PAINT AND FILLER CORP. BELEIVES THAT THE DATA CONTAINED HEREIN ARE FACTUAL AND THE OPINIONS EXPRESSED ARE THOSE OF QUALIFIED EXPERTS REGARDING THE RESULTS OF THE TESTS CONDUCTED. THE DATA ARE NOT TO BE TAKEN AS A WARRANTY OR REPRESENTATION FOR WHICH THE HARTIN ASSUMES LEGAL RESPONSIBILITY. IT IS THE USERS RESPONSIBILITY FOR SAFE USE.

U.S. Environmental Protection Agency

Enforcement & Compliance History Online (ECHO)

Recent Additions | Contact Us | Print Version

EPA Home > Compliance and Enforcement > ECHO > Search Data > Detailed Facility Report

Detailed Facility Report

Report Error | Data Dictionary

For Public Release - Unrestricted Dissemination Report Generated on 02/22/2007
US Environmental Protection Agency - Office of Enforcement and Compliance Assurance

Facility Permits and Identifiers

Data Dictionary

Statute	System	Source ID	Facility Name	Street Address	City	State	Zip
	FRS	110000323793	SULZER METCO US INC	1101 PROSPECT AVENUE	WESTBURY	NY	11590
CAA	AFS	3605900264	SULZER METCO US INC	1101 PROSPECT AVE	WESTBURY	NY	11590
RCRA	RCR	NYD131318651	SULZER METCO (US), INC.	PROSPECT AVENUE	WESTBURY	NY	11590
EP313	TRI	11590PRKNL1101P	SULZER METCO (US) INC.	1101 PROSPECT AVE	WESTBURY	NY	11590

(40 45.8'N, 73 33.16'W)

Facility Characteristics

Data Dictionary

Statute	Source ID	Universe	Status	Permit Expiration Date	Lat/Long	Indian Country?	SIC Codes	NAICS Codes
	110000323793				~~LRT lat: 40.763900 LRT long: -73.555600~~	NA		
CAA	3605900264	Minor (Not Fed.Rep.)	Operating			NA	3559	
RCRA	NYD131318651	SQG	Active (H)			No		333298 332117
EP313	11590PRKNL1101P				~~lat: 40.7639 long: -73.5528~~	NA	3559	

If the CWA permit is past its expiration date, this normally means that the permitting authority has not yet issued a new permit. In these situations, the expired permit is normally administratively extended and kept in effect until the new permit is issued.

For the RCRA program, activities that contribute to an overall facility status of Active are displayed in parentheses using the acronym HPACS, where H indicates handler activities, P - permitting, A - corrective action, C - converter, and S - state-specific. More information is available in the Data Dictionary.

Inspection and Enforcement Summary Data

Data Dictionary

Statute	Source ID	RECAP Insp. Last 03Yrs	Date of Last Inspection	Formal Enf Act Last 03 Yrs	Penalties Last 03 Yrs
CAA	3605900264	0	Never	0	$00
RCRA	NYD131318651	1	12/01/2005	0	$00

Inspection History (03 years)

Data Dictionary

Statute	Source ID	Inspection Type	Lead Agency	Date
RCRA	NYD131318651	COMPLIANCE EVALUATION INSPECTION ON-SITE	EPA	12/01/2005

Entries in *italics* are not considered inspections in Reporting for Enforcement and Compliance Assurance Priorities (RECAP) official counts.

Compliance Summary Data

Data Dictionary

Information on the nature of alleged violations is available on the FAQ page.

Statute	Source ID	Current SNC/HPV?	Current As Of	Description	Qtrs in NC (of 12)
CAA	3605900264	N/A	01/20/2007		
RCRA	NYD131318651	No	01/19/2007		2

Three Year Compliance Status by Quarter

Data Dictionary

Violations shown in a given quarter do not necessarily span the entire 3 months. Information on the nature of alleged violations is available on the FAQ page, and information on the duration of non-compliance is available at the end of this report.

AIR Compliance Status													
Statute:Source ID CAA: 3605900264	QTR1 Apr-Jun04	QTR2 Jul-Sep04	QTR3 Oct-Dec04	QTR4 Jan-Mar05	QTR5 Apr-Jun05	QTR6 Jul-Sep05	QTR7 Oct-Dec05	QTR8 Jan-Mar06	QTR9 Apr-Jun06	QTR10 Jul-Sep06	QTR11 Oct-Dec06	QTR12 Jan-Mar07
HPV History												
Program/Pollutant in Current Violation												
SIP	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED	C-PROCED

High Priority Violator (HPV) History section: "Unaddr" means the facility has not yet been addressed with a formal enforcement action. "Addrs"means the facility has been addressed with a formal enforcement action, but its violations have not been resolved. Lead Agency designated can be US EPA, State, Both, or No Lead Determined. If HPV History is blank, then the facility was not a High Priority Violator. C=Compliance; V=Violation; S=Compliance Schedule.

RCRA Compliance Status													
Statute:Source ID RCRA: NYD131318651		QTR1 Jan-Mar04	QTR2 Apr-Jun04	QTR3 Jul-Sep04	QTR4 Oct-Dec04	QTR5 Jan-Mar05	QTR6 Apr-Jun05	QTR7 Jul-Sep05	QTR8 Oct-Dec05	QTR9 Jan-Mar06	QTR10 Apr-Jun06	QTR11 Jul-Sep06	QTR12 Oct-Dec06
Facility Level Status		Compl	Compl	Compl	Compl	Compl	Compl	Compl	In Viol	In Viol	Compl	Compl	Compl
Type of Violation	Agency												
Generators - General	EPA								12/01/05	02/28/06			
Generators - General	EPA								12/01/05	02/28/06			
Generators - General	EPA								12/01/05	02/28/06			

The first date displayed for a RCRA Violation corresponds to the violation determination date, and the next to the resolution date (if the violation has been resolved).

Notices of Violation or Informal Enforcement - AFS, PCS, RCRAInfo (03 year history)

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date
RCRA	NYD131318651	WRITTEN INFORMAL	EPA	01/09/2006

Formal Enforcement Actions - AFS, PCS, RCRAInfo, NCDB (03 year history)

Data Dictionary

Statute	Source ID	Type of Action	Lead Agency	Date	Penalty	Penalty Description
- No data records returned.						

In some cases, formal enforcement actions may be entered both at the initiation and final stages of the action. These may appear more than once above. Entries in *italics* are not "formal" actions under the PCS definitions but are either the initiation of an action or penalties assessed as a result of a previous action. This section includes US EPA and State formal enforcement actions under CAA, CWA and RCRA.

EPA Formal Enforcement Actions - ICIS (03 year history)

Data Dictionary

Primary Law/Section	Case Number	Case Type	Case Name	Issued/Filed Date	Settlement Date	Federal Penalty	State/Local Penalty	SEP Cost	Comp Action Cost
- No data records returned.									

Federal enforcement actions and penalties shown in this section are from the Integrated Compliance Information System (ICIS). These actions may duplicate records in the Formal Enforcement Actions section.
† This enforcement case involves more than one facility. Click on the Case Number for more information.

Demographic Profile of Surrounding Area (3 Miles)

Data Dictionary

Open more detailed information in a new window (links leave ECHO): 1 Mi 3 Mi or 5 Mi.
This section provides demographic information regarding the community surrounding the facility. ECHO compliance data alone are not sufficient to determine whether violations at a particular facility had negative impacts on public health or the environment. Statistics are based upon the 2000 US Census data, and are accurate to the extent that the facility latitude and longitude listed below are correct. The latitude and longitude are obtained from the EPA Locational Reference Table(LRT) when available.

Radius of Area:	3 Miles	Land Area:	99.93%	Households in area:	39,022
Center Latitude:	40.763404	Water Area:	0.07%	Housing units in area:	39,619
Center Longitude:	-73.555457	Population Density:	4380.35/sq. mi.	Households On Public Assistance:	422
Total Persons:	123,745	Percent Minority:	30.35%	Persons Below Poverty Level:	6,295

Race Breakdown	Persons (%)	Age Breakdown:	Persons (%)
White:	95,852 (77.46%)	Child 5 years and less:	9,816 (7.93%)
African-american:	11,658 (9.42%)	Minors 17 years and younger:	29,782 (24.07%)
Hispanic-Origin:	15,909 (12.86%)	Adults 18 years and older:	93,964 (75.93%)
Asian/Pacific Islander:	8,844 (7.15%)	Seniors 65 years and older:	17,686 (14.29%)
American Indian:	179 (0.14%)		
Other/Multiracial:	4,442 (3.59%)		

Education Level (Persons 25 & older)	Persons (%)	Income Breakdown:	Households (%)
Less than 9th grade:	5,195 (6.67%)	Less than $15,000:	2,565 (6.57%)
9th-12th grades:	8,134 (10.44%)	$15,000-$25,000:	2,467 (6.32%)
High School Diploma:	24,362 (31.27%)	$25,000-$50,000:	7,471 (19.15%)
Some College/2-yr:	14,989 (19.24%)	$50,000-$75,000:	8,115 (20.80%)
B.S./B.A. or more:	25,217 (32.37%)	Greater than $75,000:	18,387 (47.12%)

Please note: Entries in gray denote records that are not federally required to be reported to EPA. These data may not be reliable.

Notice About Duration of Violations -- The duration of violations shown on this report is an estimate of the actual duration of the violations that might be alleged or later determined in a legal proceeding. For example, the start date of the violation as shown in the ECHO database is normally when the government first became aware of the violation, not the first date that the violation occurred, and the facility may have corrected the violation before the end date shown. In some situations, violations may have been corrected by the facility, but EPA or the State has not verified the correction of these violations. In other situations, EPA does not remove the violation flag until an enforcement action has been resolved.

Map Returned Facility

This report was generated by the Integrated Data for Enforcement Analysis (IDEA) system, which updates its information from program databases monthly. The data were last updated: AFS: 01/20/2007. RCRAInfo: 01/19/2007. FRS: 01/18/2007. TRI: 05/03/2006. ICIS: 01/18/2007.

Some regulated facilities have expressed an interest in explaining data shown in the Detailed Facility Reports in ECHO. Please check company web sites for such explanations.

Feldhusen, Marian

From: TrackingUpdates@fedex.com
Sent: Monday, February 26, 2007 1:21 PM
To: Feldhusen, Marian
Subject: FedEx Shipment 799591993760 Delivered

This tracking update has been requested by:

Company Name: SULZER METCO US INC

Name: Marian Feldhusen

E-mail: marian.feldhusen@sulzer.com

Our records indicate that the following shipment has been delivered:

Tracking number:	799591993760
Ship (P/U) date:	Feb 23, 2007
Delivery date:	Feb 26, 2007 12:57 PM
Sign for by:	J.EBERT
Delivered to:	Receptionist/Front Desk
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.

Shipper Information	Recipient Information
Marian Feldhusen	Chief Joseph Pascarella
SULZER METCO US INC	Westbury Fire Department
1101 PROSPECT AVENUE	355 Maple Avenue
WESTBURY	Westbury
NY	NY
US	US
11590	11590

Special handling/Services:
Deliver Weekday

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 12:00 PM CST on 02/26/2007.

To learn more about FedEx Express, please visit our website at fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.

Feldhusen, Marian

From: TrackingUpdates@fedex.com
Sent: Monday, February 26, 2007 11:00 AM
To: Feldhusen, Marian
Subject: FedEx Shipment 791238327280 Delivered

This tracking update has been requested by:

Company Name: SULZER METCO US INC

Name: Marian Feldhusen

E-mail: marian.feldhusen@sulzer.com

Our records indicate that the following shipment has been delivered:

Tracking number:	791238327280
Ship (P/U) date:	Feb 23, 2007
Delivery date:	Feb 26, 2007 10:44 AM
Sign for by:	Signature Release on file
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.

Shipper Information	Recipient Information
Marian Feldhusen	Mr. Edward F. Jacoby Jr.
SULZER METCO US INC	NYS Emergency Response Commission
1101 PROSPECT AVENUE	1220 Washington Avenue
WESTBURY	Building 22, Suite 101
NY	Albany
US	NY
11590	US
	122262251

Special handling/Services:
Deliver Weekday

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 9:46 AM CST on 02/26/2007.

To learn more about FedEx Express, please visit our website at fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.

Feldhusen, Marian

From: TrackingUpdates@fedex.com
Sent: Monday, February 26, 2007 10:19 AM
To: Feldhusen, Marian
Subject: FedEx Shipment 799092107551 Delivered

This tracking update has been requested by:

Company Name: SULZER METCO US INC

Name: Marian Feldhusen

E-mail: marian.feldhusen@sulzer.com

Our records indicate that the following shipment has been delivered:

Tracking number:	799092107551
Ship (P/U) date:	Feb 23, 2007
Delivery date:	Feb 26, 2007 10:01 AM
Sign for by:	R.ROBERTS
Delivered to:	Mailroom
Service type:	FedEx Standard Overnight
Packaging type:	FedEx Envelope
Number of pieces:	1
Weight:	0.50 lb.

Shipper Information	Recipient Information
Marian Feldhusen	Mr. Greg Caronia, LEPC
SULZER METCO US INC	NC Office of Emergency Management
1101 PROSPECT AVENUE	100 Carman Avenue
WESTBURY	East Meadow
NY	NY
US	US
11590	11554

Special handling/Services:
Deliver Weekday

Please do not respond to this message. This email was sent from an unattended mailbox. This report was generated at approximately 9:06 AM CST on 02/26/2007.

To learn more about FedEx Express, please visit our website at fedex.com.

All weights are estimated.

To track the latest status of your shipment, click on the tracking number above, or visit us at fedex.com.

This tracking update has been sent to you by FedEx on the behalf of the Requestor noted above. FedEx does not validate the authenticity of the requestor and does not validate, guarantee or warrant the authenticity of the request, the requestor's message, or the accuracy of this tracking update. For tracking results and fedex.com's terms of use, go to fedex.com.

Thank you for your business.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD131318651
2. Page 1 of: 1
3. Emergency Response Phone: (908) 354-0210
4. Manifest Tracking Number: 003535908 JJK

GENERATOR

5. Generator's Name and Mailing Address: SULZER METCO US INC
1101 PROSPECT AVE
WESTBURY, NY 11590
Generator's Phone: (516) 338-2417

Generator's Site Address (if different than mailing address): SAME

6. Transporter 1 Company Name: CLEAN VENTURE INC.
U.S. EPA ID Number: NJ0000027193

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Cycle Chem Inc.
217 South First Street
Elizabeth, NJ 07206
Facility's Phone: (908) 355-5800
U.S. EPA ID Number: NJD002200046

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. Waste Corrosive liquid, acidic, inorganic, n.o.s. 8 UN3264 PG II (D002 D006 D007 D008 T) ERGW 154	XXI	D. M	X501	~~L~~ P	D002 D006 D007 D008 T
	2.					
	3.					
	4.					

SULZER METCO (US) INC.
NOV 07 2008
EHS DEPARTMENT

14. Special Handling Instructions and Additional Information: LDR On File 945948/-1/91/1/23/95 (1)5TAY-8 MIXED SPENT ACID

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X Jim Kourkoumelis
Signature:
Month 10 Day 28 Year 08

INT'L

16. International Shipments: ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: F. S. White
Signature: F. S. White
Month 10 Day 28 Year 08
Transporter 2 Printed/Typed Name:
Signature:
Month Day Year

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H141			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name: Mylene Gonzalez
Signature: Mylene Gonzalez
Month 10 Day 28 Year 08

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: NYD[illegible]
2. Page 1 of 1
3. Emergency Response Phone: (908) 354-0210
4. Manifest Tracking Number: 003535908 JJK

GENERATOR

5. Generator's Name and Mailing Address: [illegible]ZER METCO US INC
1101 FRANKLIN AVE.
MINEOLA, NY 11590
Generator's Site Address (if different than mailing address): SAME
Generator's Phone: (516) [illegible]-2417

6. Transporter 1 Company Name: CLEAN VENTURE INC.
U.S. EPA ID Number: NJ0000[illegible]

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: Cycle Chem Inc.
217 South Front Street
Elizabeth, NJ 07206
Facility's Phone: (908) [illegible]-5900
U.S. EPA ID Number: NJD002200010

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. Waste Corrosive liquid, acidic, inorganic, n.o.s. (contains [illegible]) UN 3264 PG II	XXI	DM	XS01	P	D002 D006 D007 D008 I
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information: LDR On File 9[illegible]-1/91717[illegible]7795 [illegible]-N MIXED SPENT ACID

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: X T. Kowal
Signature:
Month / Day / Year: 10 / 29 / 08

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: F. S. White
Signature: F. S. White
Month / Day / Year: 10 / 29 / 08
Transporter 2 Printed/Typed Name:
Signature:
Month / Day / Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator)
Month / Day / Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. H040 2. 3. 4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name
Signature
Month / Day / Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

WASTE CONTROL
SPECIALISTS LLC

September 13, 2005

Peter DiPietrantonio
Sulzer-Metco (US), Inc.
1101 Prospect Ave
Westbury, NY 11590

Dear Mr. DiPietrantonio:

Thank you for selecting Waste Control Specialists, LLC as your Treatment, Storage, and Disposal Facility. We value your business and hope to be of future service.

This letter serves as confirmation that we are in receipt of the waste described on the below referenced manifest. Enclosed, please find your signed original manifest indicating that the waste was received at the WCS Facility in Andrews, Texas on 09/09/2005.

WCS is committed to providing a level of customer service unequaled in the industry today. If you have any questions regarding this manifest, please do not hesitate to contact me at (888) 789-2783.

Again thank you for selecting Waste Control Specialists, LLC.

Sincerely,

Belinda Herrera
Manifest Coordinator

Re: Manifest
3216917
N/A

Corporate
5430 LBJ Freeway, Ste. 1700
Three Lincoln Centre
Dallas, TX 75240
Ph. 972.715.9800
Fx. 972.448.1419

Facility
P.O. Box 1129
Andrews, TX 79714
Ph. 888.789.2783
Fx. 505.394.3427

WASTE CONTROL
SPECIALISTS LLC

Certificate of Disposal

Date of Certificate: 09/14/05

WCS
9998 W Hwy 176
Andrews, TX 79714
EPA ID No. TXD988088464

Reference
Sulzer-Metco (US), Inc.
1101 Prospect Ave
Westbury, NY 11590

WCS Profile #:	WP-019353
Manifest:	3216917
Received On:	09/09/05

This is to certify that the waste shipped to WCS on the above mentioned manifest was disposed of on 14-SEP-2005 in accordance with all applicable state, federal, and local regulations. The waste was disposed of in a WCS permitted chemical waste landfill.

I certify that the information contained in or accompanying this document is true, accurate, and complete. As to the identified section(s) of this document for which I cannot personally verify truth and accuracy, I certify as the company official having supervisory responsibility for the persons who, acting under my direct instructions, made the verification that this information is true, accurate, and complete.

Sincerely,
WCS

for Technical Services Manager

Corporate
5430 LBJ Freeway, Ste. 1700
Three Lincoln Centre
Dallas, TX 75240
Ph. 972.715.9800
Fx. 972.448.1419

Facility
P.O. Box 1129
Andrews, TX 79714
Ph. 888.789.2783
Fx. 505.394.3427

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY
P.O. Box 13087
Austin, Texas 78711-3087

05-86614-
05-86670 Trk 96012
Van 548738W
#6953

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form approved. OMB No. 2050-0039.

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: N/A
Manifest Document No.: 50829
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address: SULZER METCO (US) INC. 1101 PROSPECT AVE. WESTBURY, NY 11590
4. Generator's Phone: (516) 338-2327
A. State Manifest Document Number: 3216917
B. State Generator's ID: D0036

5. Transporter 1 Company Name: Bulkall TRI-STATE MOTOR TRANSIT, CO.
6. US EPA ID Number: MOD095038998
C. State Transporter's ID: 40355
D. Transporter's Phone: 1800 234 8768

7. Transporter 2 Company Name:
8. US EPA ID Number:
E. State Transporter's ID:
F. Transporter's Phone:

9. Designated Facility Name and Site Address: WASTE CONTROL SPECIALISTS, LLC. 9998 W. HWY. 176 ANDREWS, TX 79714
10. US EPA ID Number: TXD988088464
G. State Facility's ID: 50858
H. Facility's Phone: (505) 394-4300

11A. HM	11. US DOT Description (including Proper Shipping Name, Hazard Class, ID Number and Packing Group)	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. ~~Waste No.~~
X	a. RADIOACTIVE MATERIAL, EXCEPTED PACKAGE - LIMITED QUANTITY OF MATERIAL, (7), UN2910	0.57	DM	0.9652	K	~~[illegible]~~ OLITS3M1
	b.					
	c.					
	d.					

J. Additional Descriptions for Materials Listed Above: 11A. NON-HAZ ZIRCONIUM OXIDE WASTE

K. Handling Codes for Wastes Listed Above:

15. Special Handling Instructions and Additional Information: 24 HR EMERGENCY CONTACT # 410-377-3742

WCS- WP019353

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked, and labelled/placarded, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations, including applicable state regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

GENERATOR — Printed/Typed Name: [illegible] Signature: [illegible] Month Day Year: 8 31 05

TRANSPORTER — 17. Transporter 1 Acknowledgement of Receipt of Materials — Date
Printed/Typed Name: George Friend Signature: [illegible] Month Day Year: 08 31 05

18. Transporter 2 Acknowledgement of Receipt of Materials — Date
Printed/Typed Name: Signature: Month Day Year:

FACILITY — 19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19. — Date
Printed/Typed Name: Sarah Farrar Signature: Sarah Farrar Month Day Year: 09 09 05

TCEQ-0311 (Rev. 09/01/02) White - original Pink-TSD Facility Yellow-Transporter Green-Generator's first copy

When using the Uniform Waste Manifest for rail or water (bulk shipment) or international shipments refer to the applicable TCEQ regulations.

REPORT SPILLS AND/OR DISCHARGES TO THE TEXAS SPILL RESPONSE CENTER AT 512/463-7727 (24 HOURS)

INSTRUCTIONS TO GENERATOR (Please Type or Print Clearly)

(1) Enter the Generator's U.S. EPA twelve digit identification number and the unique five digit number assigned to this manifest by the generator if you are shipping hazardous waste.

(2) Enter the total number of pages used to complete this manifest.

(3) Enter the company name and mailing address of the generator of the waste.

(4) Provide a phone number where an authorized agent of your firm may be reached in the event of an emergency.

(5) Enter the company name of the first transporter and their U.S. EPA ID Number.

(6) If applicable, enter the company name of the second transporter and their U.S. EPA ID Number. If more than two transporters are used, enter each additional transporter's information on the Continuation Sheet (EPA form 8700-22A) or in box 15 of this form.

(7) Enter the company name, site address, and U.S. EPA ID Number of the facility designated to receive the waste listed on this manifest.

(8) **COMPLETE ALL STATE OF TEXAS INFORMATION A. THROUGH H. IN THE SHADED AREAS.**

(9) Complete the waste description table as follows:

(A) ITEM 11A - When shipping an EPA/DOT regulated hazardous waste or material in conjunction with solely state regulated waste enter an "x" in the HM box before each EPA/DOT regulated waste/material description.

(B) ITEM 11 - Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, and ID Number (UN/NA) for each waste identified. If it is a Class I nonhazardous waste use the Texas Waste Code description.

(C) ITEM 12 - Enter the number of containers for each waste and the appropriate abbreviation for type located in Subchapter A of the TCEQ Industrial Solid Waste Rules.

(D) ITEM 13 - Enter the total quantity of waste described on each line.

(E) ITEM 14 - Enter the appropriate letter from the table below for the unit of measure.

G = Gallons (liquids only)	Y = Cubic Yards	M = Metric Tons (1000 kg.)
P = Pounds	L = Liter (Liquids Only)	N = Cubic Meters
T = Tons (2000 lbs.)	K = Kilograms	

(F) ITEM I - Enter the appropriate TCEQ State Waste Code for each waste you are shipping.

(10) The Generator must read, sign (by hand), and date the certification statement. If a mode other than highway is used, the word "highway" should be lined out and the appropriate mode (rail, water or air) inserted in the space below. In signing the waste minimization certification statement, those generators shipping hazardous waste who have not been exempted by statute or regulation from the duty to make a waste minimization certification are also certifying that they have complied with the waste minimization requirements.

(11) The manifest must be signed and dated by the first transporter in the presence of the Generator. If more than one transporter is to be used, the Generator must provide additional copies for their use.

*(12) Generator retains green copy, sending remaining copies with the driver.

INSTRUCTIONS FOR THE TRANSPORTER (Please Type or Print Clearly)

(1) As driver of the transport vehicle, you are responsible for ensuring that all waste received by you arrives at the specified destination.

(2) Sign and date the space provided, certifying the waste amounts in **PART I** were received for transport. **NOTE:** If you are unable to carry out the delivery of the shipment as specified, dial the emergency phone numbers given in **PART I** notifying the **GENERATOR.**

(3) Upon delivery of the shipment, the TSD Facility Owner/Operator is to sign for the shipment in your presence and fill in "date received".

*(4) Separate the yellow copy and retain for your records. Leave the remaining copies with the **TSD** Facility Owner/Operator.

INSTRUCTIONS TO TREATMENT, STORAGE AND DISPOSAL (TSD) FACILITY OWNER/OPERATOR (Please Type or Print Clearly)

(1) The authorized representative of the designated (or alternate) facility's owner or operator must note in **ITEM 19** any significant discrepancy between the waste described on the manifest and the waste actually received at the facility.

(2) Enter date received and sign in the presence of the driver declaring receipt of the wastes and verifying the quantities in the table in **PART I.**

(3) Retain the pink copy for your records and return the completed original (white) copy to the **GENERATOR.**

* U.S. EPA and TCEQ regulations require that copies of this Uniform Hazardous Waste Manifest be retained for a period of three (3) years in your company records. Do **not** send to TCEQ unless otherwise notified by these departments.

BURDEN STATEMENT

The public reporting burden for this collection of information is estimated to average 31 minutes for generators, 16 minutes for transporters, and 16 minutes for treatment, storage and disposal facilities. The recordkeeping burden per response for this collection of information is estimated to average 6 minutes for generators, 6 minutes for transporters, and 6 minutes for treatment, storage and disposal facilities. The burden associated with reading the regulations is estimated at 1 hour and 15 minutes annually. Burden means the total time, effort, or financial resources expended by persons to generate, maintain, retain, or disclose or provide information to or for a Federal agency.

An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB control number . The OMB numbers for EPA's regulations are listed in 40 CFR Part 9 and 48 CFR Chapter 15. Send comments regarding these burden statements or any other aspect of this collection, including suggestions for reducing the burden; including through the use of automated collection techniques to the Director, OPPE Regulatory Information Division, U.S. Environmental Protection Agency (2137), 401 M St., S.W., Washington, D.C., 20460 and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Attention: Desk Officer for EPA, 725 17th Street, N.W. Washington, D.C. 20503. Include the OMB control number in any correspondence.

ESI Form 540 (6/99) — This form contains all of the information required in the NRC form 540 (3 95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST SHIPPING PAPER

5. Shipper - Name and Facility
Sulzer-Metco (US), Inc.
1101 Prospect Ave.
Westbury, NY 11590

Shipper I.D. Number: N/A
Collector
Processor

7. NRC Form 540 and 540A — Page 1 of 4 Page(s)
NRC Form 541 and 541A — 9 Page(s)
NRC Form 542 and 542A — 0 Page(s)
Additional Information — 0 Page(s)

8. Manifest Number (Use this number on all continuation pages): 50829-02

Emergency Telephone Number (include Area Code): (410) 377-3742

User Permit Number: N/A
Shipment Number: 50829

☒ Generator type (specify)
Other

9. Consignee - Name and Facility Address:
WasteControl Specialists, LLC.
9998 W. Hwy. 176
Andrews, TX 79714

Contact: Anne Dean
Telephone Number: (505) 394-4300

Organization: ECOLOGY SERVICES, INC.

Contact: Peter DiPietrantonio

Telephone Number (Include Area Code): (516) 338-2337

Signature - Authorized consignee acknowledging waste receipt

Date: 9/14/05

2. Is this an "Exclusive Use" shipment?
☐ YES
☒ NO

3. Total number of packages identified on this manifest ==> 57

Carrier Name and Address:
Tri State Motor Transit Co.
PO Box 113
Joplin, MO 64802

EPA ID Number: MOD095038998
Shipping Date: 08/31/05

10. Certification
This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

4. Does EPA regulated waste requiring a manifest accompany this shipment? ☐ YES ☒ NO
If "yes" provide manifest number ==========>

EPA Manifest Number: TX 3216917

Contact: Cassie Gardner

Signature - Authorized carrier acknowledging waste receipt

Telephone Number (Include Area Code): 800-234-8768

Date: 08-31-05

Authorized Signature

Title

Date: 8/31/05

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	328 kg	S-01
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	274 kg	S-02
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	355 kg	S-03
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	326 kg	S-04
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	85 kg	S-05
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	85 kg	S-06
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	152 kg	S-07
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	52 kg	S-08

For Consignee Use Only

ESI Form 540A
(6/99)

This form contains all of the information required in the NRC form 540A

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER
Continuation Sheet

8. Manifest Number
(Use this number on all continuation pages)
50829-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	118 kg	S-09
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	67 kg	S-10
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	73 kg	S-11
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	75 kg	S-12
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	56 kg	S-13
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	56 kg	S-14
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	63 kg	S-15
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	111 kg	S-16
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	74 kg	S-17
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	86 kg	S-18
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	82 kg	S-19
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	103 kg	S-20
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	208 kg	S-21
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	318 kg	S-22
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	330 kg	S-23
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	353 kg	S-24
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	310 kg	S-25

ESI Form 540A
(6/99)

This form contains all of the information required in the NRC form 540A

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER
Continuation Sheet

8. Manifest Number
(Use this number on all continuation pages)

50829-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	236 kg	S-26
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	264 kg	S-27
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	192 kg	S-28
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	91 kg	S-29
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	77 kg	S-30
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	311 kg	S-31
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	376 kg	S-32
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	230 kg	S-33
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	229 kg	S-34
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	89 kg	S-35
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	102 kg	S-36
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	66 kg	S-37
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	75 kg	S-38
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	180 kg	S-39
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	113 kg	S-40
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	249 kg	S-41
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	75 kg	S-42
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 μCi	N/A	89 kg	S-43

ESI Form 540A
(6/99)

This form contains all of the information required in the NRC form 540A

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER
Continuation Sheet

8. Manifest Number
(Use this number on all continuation pages)

50829-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY IN SI UNITS	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (*use appropriate units*)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	75 kg	S-44
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	62 kg	S-45
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	98 kg	S-46
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	85 kg	S-47
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	111 kg	S-48
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	139 kg	S-49
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	87 kg	S-50
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	200 kg	S-51
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	73 kg	S-52
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	134 kg	S-53
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	273 kg	S-54
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	415 kg	S-55
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	354 kg	S-56
Radioactive Material, Excepted Package – Limited Quantity of Material, 7, UN 2910	N/A	N/A	Solid: salts WP-019153	U-nat + C			0.566 MBq 15.30 µCi	N/A	362 kg	S-57

ESI Form 541
(3 95)

This form contains all of the information required in the NRC form 541

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

Number of packages/ disposal containers	Net Waste Volume (m^3)	Net Waste Weight (kg)	Special Nuclear Material (grams) U-233	U-235	Pu	Total
57	12.084	9652	None	None	None	None

Activity (MBq) All Nuclides	Tritium	C-14	Tc-99	I-129	Source (Kg)
32.2677 MBq 0.8721 mCi	None	None	None	None	0.0017

2. Manifest Number : 50829-02

3. Page 1 of 9 Page(s)

4. Shipper Name
Sulzer-Metco (US), Inc.

Shipper ID Number:
N/A

Disposal Container Description							Waste Description for Each Waste Type in Container							
							Physical Description			14. Chemical Description		15. Radiological Description		16. Waste Classification
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-01	4	0.208	328	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-02	4	0.208	274	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-03	4	0.208	355	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-04	4	0.208	326	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-05	4	0.208	85	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-06	4	0.208	85	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-07	4	0.208	152	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20. SeaLand Container

NOTE 2: Waste Description Codes. (Chose up to three, which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26 Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anioon Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37. Paint or Plating
38. Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50 LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13 Code 100 = NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celetom
62. Floor Dry/ Superfine
63. Hi Dri
64 Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicaperl HP200
73. Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90 Cement
91. Concrete (encapsulation)
92. Bitumen
93 Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							
							Physical Description			14. Chemical Description		15. Radiological Description		16. Waste Classification
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-08	4	0.208	52	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-09	4	0.208	118	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-10	4	0.208	67	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-11	4	0.208	73	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-12	4	0.208	75	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-13	4	0.208	56	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-14	4	0.208	56	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20 SeaLand Container

NOTE 2. Waste Description Codes (Chose up to three, which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23 Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37. Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes. (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celatom
62. Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Floroo
67. Floroo X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71 Chemsil 3030
72 Dicaperl HP200
73 Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78 Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93 Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							
							Physical Description			14. Chemical Description		15. Radiological Description		16. Waste Classification
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-15	4	0.208	63	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-16	4	0.208	111	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-17	4	0.208	74	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-18	4	0.208	86	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-19	4	0.208	82	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-20	4	0.208	103	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-21	4	0.208	208	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1 Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9 Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13 High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6 or additional page
20. SeaLand Container

NOTE 2: Waste Description Codes. (Chose up to three, which predominate by volume)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28 EPA or State Hazardous
29 Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37. Paint or Plating
38. Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes. (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED

Sorption

60. Speedi Dri
61. Celatom
62 Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Floreo
67. Floreo X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Diaperl HP200
73. Diaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90 Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							
							Physical Description			14. Chemical Description		15. Radiological Description		16. Waste Classification
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-22	4	0.208	318	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-23	4	0.208	330	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-24	4	0.208	353	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	N/A	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-25	4	0.208	310	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	N/A	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-26	4	0.208	236	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-27	4	0.208	264	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-28	4	0.208	192	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20. SeaLand Container

NOTE 2: Waste Description Codes (Chose up to three, which predominate by volume.)

20 Charcoal
21 Incinerator Ash
22. Soil
23 Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28 EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anioon Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37. Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40 Noncompactible Trash
41 Animal Carcass
42 Biological Material (except animal Carcass)
43. Activated Material
50 LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celatom
62 Floor Dry Superfine
63. Hi Dri
64 Safe T Sorb
65. Safe N Dri
66. Floroo
67. Floroo X
68 Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicapel HP200
73. Dicapel HP500
74 Petroset
75 Petroset II
76. Aquaset
77 Aquaset II
78 Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							16. Waste Classification
							Physical Description			14. Chemical Description		15. Radiological Description		
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m³)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-29	4	0.208	91	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-30	4	0.208	77	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-31	4	0.208	311	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-32	4	0.208	376	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-33	4	0.208	230	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-34	4	0.208	229	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-35	4	0.208	89	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6 or additional page
20. SeaLand Container

NOTE 2 Waste Description Codes. (Chose up to three, which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25 Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30 Cation Ion-exchange Media
31. Anioon Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36 Sealed Source Device
37. Paint or Plating
38. Evaporator Bottoms Sludges Concentrates
39 Compactible Trash
40. Noncompactible Trash
41 Animal Carcass
42. Biological Material (except animal Carcass)
43 Activated Material
50 LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED

Sorption

60. Speedi Dri
61. Celatom
62. Floor Dry Superfine
63. Hi Dri
64 Safe T Sorb
65 Safe N Dri
66 Floroo
67. Floroo X
68 Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicapeil HP200
73. Dicapeil HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99 Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							16. Waste Classification
							Physical Description			14. Chemical Description		15. Radiological Description		
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m³)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm² Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-36	4	0.208	102	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-37	4	0.208	66	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-38	4	0.208	75	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-39	4	0.208	180	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-40	4	0.208	113	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-41	4	0.208	249	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-42	4	0.208	75	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11 Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20 SeaLand Container

NOTE 2: Waste Description Codes. (Chose up to three, which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30 Cation Ion-exchange Media
31. Anioon Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36 Sealed Source Device
37. Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes. (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED

Sorption

60. Speedi Dri
61. Celatom
62 Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Floroo
67. Floroo X
68. Solid A Sorb
69. Chemsil 30
70 Chemsil 50
71. Chemsil 3030
72. Dicaperl HP200
73 Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100 None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							
							Physical Description			14. Chemical Description		15. Radiological Description		16. Waste Classification
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-43	4	0.208	89	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-44	4	0.208	75	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-45	4	0.208	62	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-46	4	0.208	98	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-47	4	0.208	85	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-48	4	0.208	111	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-49	4	0.208	139	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP"

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4 Metal Drum or Pail
5 Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other Describe in item 6. or additional page
20. SeaLand Container

NOTE 2. Waste Description Codes. (Chose up to three, which predominate by volume.)

20 Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32 Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37 Paint or Plating
38 Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes. (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED

Sorption

60. Speedi Dri
61. Celatom
62. Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66 Floreo
67. Floreo X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72 Diaperl HP200
73. Diaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92 Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							16. Waste Classification
							Physical Description			14. Chemical Description		15. Radiological Description		
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10. Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-50	4	0.208	87	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-51	4	0.208	200	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-52	4	0.208	73	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-53	4	0.208	134	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-54	4	0.208	273	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-55	4	0.208	415	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU
S-56	4	0.208	354	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes. For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP"

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20. SeaLand Container

NOTE 2: Waste Description Codes. (Chose up to three, which predominate by volume)

20. Charcoal
21. Incinerator Ash
22 Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37. Paint or Plating
38. Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40 Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celatom
62. Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65 Safe N Dri
66 Floroc
67. Floroc X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicapsil HP200
73. Dicapsil HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92 Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

ESI Form 541 A
541A (3 95)

This form contains all of the information required in the NRC form

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

CONTINUATION PAGE

Disposal Container Description							Waste Description for Each Waste Type in Container							16. Waste Classification
							Physical Description			14. Chemical Description		15. Radiological Description		
5. Container Identification Number/ Generator ID Number(s)	6. Container Description (See Note 1)	7. Volume (m^3)	8. Waste And Container Weight (kg)	9. Surface Radiation Level (µSv/hr)	10 Surface Contamination MBq/100 cm^2 Alpha	Beta-Gamma	11. Waste Descriptor (See Note 2)	12. Approximate Waste Volume(s) in Container	13. Sorbent Solidifcation, Stabilization, Media (See Note 3)	Chemical Form/ Chelating Agent	Weight % Chelating Agent If > 0.1%	Individual Radionuclides and Activity (MBq) and Container Total; or Container Total Activity and Radionuclide Percent		AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
S-57	4	0.208	362	<5.0	<4.0E-06	<4.0E-05	39	0.208 cu. m.	100	Salts in zirconium oxide WP-019153	N/A	Unat+C 0.566 MBq (15.30 µCi)	Total Activity: 0.566 MBq 15.30 µCi	AU

NOTE 1 Container Description Codes For containers waste requiring disposal in approved structural overpacks, the numerical code must be followed by "-OP".

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethylene Tank or Liner
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
14. Corrugated Box
19. Other. Describe in item 6. or additional page
20. SeaLand Container

NOTE 2: Waste Description Codes (Chose up to three, which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23 Gas
24 Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source Device
37 Paint or Plating
38. Evaporator Bottoms Sludges Concentrates
39. Compactible Trash
40. Noncompactible Trash
41 Animal Carcass
42. Biological Material (except animal Carcass)
43. Activated Material
50. LS Vials
59. Other. Describe in item 11. or additional page

NOTE 3. Sorption, Solidification, Stabilization Media Codes. (Choose up to three, which predominate by volume.) For media meeting disposal site structural stability requirements, the numerical code must be followed by "-S" and the media vendor and brand name must also be identified in item 13. Code 100 = NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celetom
62. Floor Dry Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Floreo
67 Floreo X
68 Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicaperl HP200
73. Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
78. Vermiculite
89. Other. Describe in item 13 or additional page

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13 or additional page
100. None Required

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

For EPA use only

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 94

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joseph D. Reardon, Global Quality

Signature: Joseph D Reardon

Date Signed: July 20, 1995

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Sulzer Metco (US) Inc.

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address): 1101 Prospect Avenue

City: Westbury

State: New York

Zip Code: 11590

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check a or b; check c if applicable)	a. ☐ An entire facility	b. ☒ Part of a facility	c. ☐ A Federal facility			
4.3	Technical Contact	Name: Joseph D. Reardon			Telephone Number (include area code): (516) 334-1300		
4.4	Public Contact	Name: Joseph D. Reardon			Telephone Number (include area code): (516) 334-1300		
4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	44	00
4.7	Dun & Bradstreet Number(s) (9 digits)	a. 15-208-4398					
		b.					
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570					
		b.					
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A					
		b.					
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A					
		b.					

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	☐ NA Sulzer Inc.
5.2	Parent Company's Dun & Bradstreet Number	☐ NA (9 digits) 00-182-6957

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Cobalt
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY (Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing d. [ ] For sale/distribution e. [ ] As a byproduct f. [ ] As an impurity
3.2	Process the toxic chemical:	a. [ ] As a reactant b. [ ] As a formulation component	c. [X] As an article component d. [X] Repackaging
3.3	Otherwise use the toxic chemical:	a. [ ] As a chemical processing aid b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04 (Enter two-digit code from instruction package.)	

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/ year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name				
	N/A				
5.3.2	Stream or Water Body Name				
	N/A				
5.3.3	Stream or Water Body Name				
	N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury | County: Nassau

State: New York | Zip Code: 11590 | Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. B	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City: | County:

State: | Zip Code: | Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d	7A.1e
			%	Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d	7A.2e
			%	Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d	7A.3e
			%	Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d	7A.4e
			%	Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d	7A.5e
			%	Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Chemical, Category, or Generic Name
Cobalt Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A Prior Year (pounds/year)	Column B Current Reporting Year (pounds/year)	Column C Following Year (pounds/year)	Column D Second Following Year (pounds/year)
8.1	Quantity released *	3	3	3	3
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	790	360	400	400
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.90			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	N/A	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

REVISION DATE: 4/26/91

MATERIAL SAFETY DATA SHEET

PRODUCT NAME: SPC WATER PRIMER

MANUFACTURER: ELECTRO ARC MFG. COMPANY
5270 GEDDES ROAD
ANN ARBOR, MI. 48105 (313) 483-4233

EMERGENCY NO: CHEMTREC: 1-800-424-9300

PROPER SHIPPING NAME, HAZARD CLASS, I.D. NO.
Lubricating Compound (containing <50% petroleum oil)

CHEMICAL FAMILY: Petroleum Hydrocarbons

FORMULA: Proprietary

HAZARDOUS INGREDIENTS

CAS REG.NO.	%V	INGREDIENT	OSHA PEL	ACGIH TLV
647-42-52-5	>45%	SEVERLY HYDRO TREATED NAPHEHENIC PETROLEUM DISOLVENT	5 mg/m3 (mist)	
	5.5%	SURFACTANTS:		
64-17-5		NEP9		
57-55-6		MONA WET 70.E		

SECTION II - HEALTH HAZARD STATEMENT

HAZARD DESCRIPTION: No acute effects from incidental contact with concentrate. Excessive inhalation in a mist form at levels above the TLV (5 mg/m3 mist) may case a change in respiratory performance and can have an anesthetic effect. Skin dryness, irritation, dermatitis from excessive prolonged or repeated contact. Danger of pneumonitis from aspiration into lungs if swallowed.

EXPOSURE LIMITS: MIST - 5 mg/m3 TLV (8-hour time-weighted average exposure: OSHA 29 CFR 1910.1000, Table Z-1). Avoid unnecessary exposure to liquid oil.

107

SECTION III - PHYSICAL DATA

BOILING POINT: ~212 F
VAPOR PRESSURE mm Hg: Not Established
VAPOR DENSITY (AIR = 1): Not Established
SOLUBILITY IN WATER: Complete
SPECIFIC GRAVITY (H2O=1): 0.95 Typ.
PERCENT VOLATILE BY VOLUME (%): ~45%
EVAPORATION RATE (WATER=1): ~1
pH: 9.8 Typ.
APPEARANCE AND ODOR: Off milky white liquid with mild bland petroleum odor.

SECTION IV - FIRE AND EXPLOSION HAZARDS

NFPA HAZARD RATING
HEALTH: 1
FLAMMABILITY: 1
REACTIVITY: 0
SPECIAL: NONE

HAZARD RATING SCALE
0-MINIMAL 3-SERIOUS
1-SLIGHT 4-SEVERE
2-MODERATE

FLASH POINT: Not Applicable
AUTOIGNITION TEMPERATURE: Not Applicable
FLAMMABLE LIMITS IN AIR: Not Applicable
EXTINGUISHING MEDIA: Not Applicable

SPECIAL FIRE FIGHTING PROCEDURES: If involved in a fire, avoid breathing fumes, wear self-contained breathing apparatus. A water spray may be used to keep fire exposed containers and surroundings cool.

UNUSUAL FIRE AND EXPLOSION HAZARDS: "Empty" product containers retain product residue. Do not pressurize, cut, heat, weld or expose such containers to flame; they may explode and cause injury or death.

SECTION V - HEALTH HAZARD DATA

ROUTES OF EXPOSURE AND EFFECTS:
EYES: Eye contact may cause irritation and burning.
SKIN: Dry skin, irritation or dermatitis may develop on prolonged or repeated exposure.
INHALATION: Excessive inhalation in a mist form at levels above the TLV (5mg/m3 for oil mist) may cause a change in respiratory performance and may cause an anesthetic effect. Prolonged or repeated inhalation of high concentration of mist may cause a benign form of pulmonary fibrosis.
INGESTION: Ingestion may cause local irritation of the mucous of the mouth, esophagus and stomach. May act as a laxative. Liquid oil aspirated into lungs may cause dangerous chemical pneumonitis with increasing difficulty in breathing and possible death. This effect may be delayed.

108

SECTION V - HEALTH HAZARD DATA (CONTINUED)

EMERGENCY FIRST AIR PROCEDURES:

EYES: Wash with copious amounts of water for 15 minutes, holding eyelids apart and away from eyeball. Remove contact lens to assure complete flushing. Contact physician if irritation persists.

SKIN: Wash well with soap and water. Change all contaminated clothing. Shower at earliest convenience.

INHALATION: Remove victim to fresh air immediately. If breathing has stopped apply artificial respiration and administer oxygen if necessary.

INGESTION: DO NOT induce vomiting. Contact a physician immediately. Contains petroleum oils. Small amounts which accidently enter the mouth should be rinsed out until the taste of it is gone aspirations of material into lungs may cause pneumonitis which can be fatal.

SECTION VI - CHEMICAL REACTIVITY

STABILITY: Stable under normal conditions. Not chemically reactive.

CONDITIONS TO AVOID: Contact with strong oxidizers (like peroxides, chlorine, oxygen under pressure, strong oxidizing acids), extreme heat or sources of ignition.

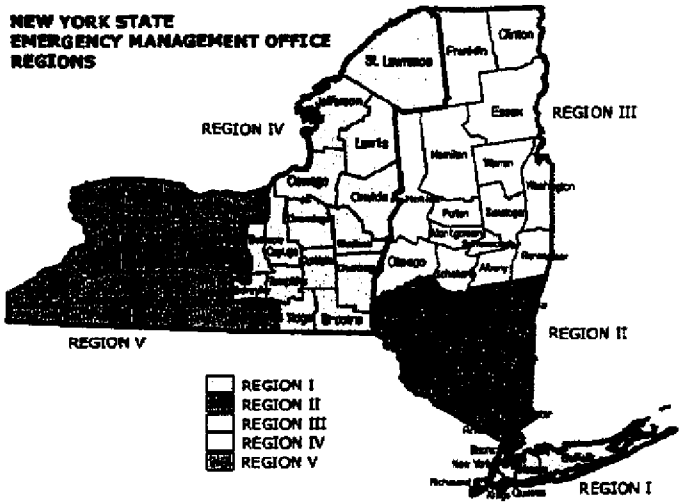
HAZARDOUS DECOMPOSITION PRODUCTS: Oxides of carbon, sulfur, and hydrogen sulfide from combustion. Asphyxiants. Reactive volatile hydrocarbons from thermal decomposition.

HAZARDOUS POLYMERIZATION: Will not occur.

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Eliminate all ignition sources. Contain spill at source and prevent discharges to streams or sewer systems. Absorb on an absorbent material. Clean spill area with detergent solutions. Provide adequate ventilation during clean-up. Avoid unnecessary contact with liquid by use of oil-impervious gloves, boots or other protective clothing as needed. Advise authorities if product has entered or may enter sewers, watercourses, or extensive land area.

WASTE DISPOSAL METHOD: Treat effluent with acid/alum and/or polymer. Deposit recovered oil in waste oil system, incinerate under approved conditions, or transfer oil to approved re-refiner. Contaminated absorbent and diking solids may be put in approved landfill. Deposit of liquid in landfill is strictly regulated (40 CFR 265.341). Follow federal, state, and local regulations.



SULZER METCO (US) INC.
FEB 11 2008
EHS DEPARTMENT

COUNTY	SEMO REGION	CHAIRPERSON	ADDRESS	ADDRESS 2	CITY	ST	ZIP	TELE #	FAX #	Email Contact	Alt/Vice CHAIRPERSON
Nassau	I	Greg Caronia	NCOEM	100 Carman Ave	East Meadow	NY	11544	516 573 0652	516-573-7007	gcaronia@nassau countyny.gov	
New York	I	Alex Timlin	NYCOEM	165 Cadman Plaza	Brooklyn	NY	11201	718-422-8901	718-422-8710	atimlin@oem.nyc.gov	Robert Crowe
Suffolk	I	Joseph Williams	SCOEM	CO110 Yaphank Ave	Yaphank	NY	11980	631-852-4900	631-852-4861	joe.williams@suffolkcountyny.gov	Warren Horst
Columbia County LEPC	II	Mr. Bill Stelling	Emergency Management	85 Industrial Track	Hudson	NY	12534	518-766-6689	518-828-1279	bblack@slli.net	Ms. Daly
Delaware County LEPC	II	Mr. Nelson Delameter	Emergency Management	280 Phoebe Lane Suite 3	Delhi	NY	13753	607-865-9600	607-865-7756	nelson.delameter@co.deleware.ny.us	Mr.Delameter
Dutchess County LEPC	II	Ms. Sue Thompson	LEPC	392 Creek Road	Poughkeepsie	NY	12601	845-486-2080	845-486-3998	sthompson@bawling.com	Mr. Davidson
Greene County LEPC	II	Mr. Harry C. Sacco		25 Volunteer Drive	Cairo	NY	12413	518-965-4495	518-622-0572	harrysacco@francomm.com	Mr. Farrell
Orange County LEPC	II	Mr. Christopher Cammarata	County Government Center	255 Main Street	Goshen	NY	10924	845-291-3199	845-294-8927	ccammarata@co.orange.ny.us	Mr. Greene
Putnam County LEPC	II	Mr. Thomas Lannon	Health Department	112 Old Route Six	Carmel	NY	10512	845-808-4800	845-808-4010	tlannon@pcbes.org	Mr. Stabellini
Rockland County LEPC	II	Mr. Chris Jensen	Fire & Emergency Services	35 Firemen's Memorial Drive	Pomona	NY	10970	845-364-8800	845-364-8961	cjensen@co.rockland.ny.us	Mr. Gretsch
Sullivan County LEPC	II	Mr. Greg Tavormina	100 North Street	PO Box 5012	Monticello	NY	12701	845-845-794-3000 ext. 3100	845-794-0890	gregory.tavormina@co.sullivan.ny.us	Mr. Martinkovic
Ulster County LEPC	II	Mr. Richard Jackson		238 Golden Hill Lane	Kingston	NY	12401	845-246-2100	845-331-1738	asny@co.ulster.ny.us	Mr. Sullivan
Westchester County LEPC	II	Mr. Dan Chess	Office of Emergency Management	4 Dana Road	Valhalla	NY	10595	914-945-2479 ext. 862	914-231-1622	dchess@us.ibm.com	Mr. Tranchellina
Albany County LEPC	III	Mr. Harry J. Merriman, Sr.	Emergency Management	75 Remsen St.	Cohoes	NY	12047	518-720-8033	518-447-7239	harry.merriman@otda.state.ny.us	Mr. Harry J. Merriman, Sr.
Clinton County LEPC	III	Mr. Eric Day	Emergency Preparedness	16 Emergency Services Drive	Plattsburgh	NY	12903	518-565-4791	518-566-1202	daye@co.clinton.ny.us	Mr. King
Essex County LEPC	III	Mr. Raymond Thatcher	Emergency Services	PO Box 217	Elizabethtown	NY	12932	518-873-3660	518-873-3663	rthatcher@co.essex.ny.us	Mr. Thatcher
Franklin County LEPC	III	Mr. Malcolm Jones	Emergency Services	55 Bare Hill Road	Malone	NY	12953	518-483-2580	518-483-3803	mjones@co.franklin.ny.us	Mr. Jones
Fulton County LEPC	III	Allan Polamteer	County Complex	2712 State Highway 29	Johnstown	NY	12095	518-736-5858	518-762-4938	civildef@co.fulton.ny.us	Mr. Pierce
Hamilton County LEPC	III	Ms. Carol Schmid	Emergency Management	PO Box 205	Lake Pleasant	NY	12108	518-548-6223	518-548-7608	Carol@paramedics.com	Mr. Slack
Herkimer County LEPC	III	Mr. James Palmer	Emergency Services	71 Reservoir Road	Herkimer	NY	13350	315-867-1254	315-867-5873	jpalmer@burline.com	Mr. Palmer

COUNTY	SEMO REGION	CHAIRPERSON	ADDRESS	ADDRESS 2	CITY	ST	ZIP	TELE #	FAX #	Email Contact	Alt/Vice CHAIRPERSON
Montgomery County LEPC	III	Mr. Gary Nestle	Emergency Management	PO Box 1500	Fonda	NY	12068	518-853-4011	518-853-4714	emogen34@nycap.rr.com	Mr. Nestle
Otsego County LEPC	III	Mr. Michael Strong	County Office Building	197 Main Street	Cooperstown	NY	13326	607-547-4227	607-547-4377	Strongm@Otsegocounty.com	Mr. West
Rensselaer County LEPC	III	Ray Davis	Public Safety Building	4000 Main Street	Troy	NY	12181	518-270-2626	518-270-4164	rdavis@rensco.com	Mr. Davis
Saratoga County LEPC	III	currently vacant	Emergency Services	25 W. High Street	Ballston Spa	NY	12020	518-885-2232	517-884-4707		Mr. Monroe
Schoharie County LEPC	III	Ms. Judith Cary	Emergency Management	PO Box 690	Schoharie	NY	12157	518-295-8344	518-295-8308	judithwarner@co.schoharie.ny.us	Mr. Coonradt
Warren County LEPC	III	Mr. John Farrell	Office of ND/CD	4028 Main Street	Warrenburg	NY	12885	518-793-3861	518-623-2772	ndcdts@warrencountydpw.com	Mr. Farrell
Washington County LEPC	III	Mr. William Cook	Washington County LEPC	383 Broadway	Fort Edwards	NY	12828	518-747-7520	518-746-2157	Wcook@co.washington.ny.us	Mr. Dusha
Allegany County LEPC	V	Mr. John Tucker	County Office BLDG	7 Court Street	Belmont	NY	14813	585-268-7658	585-268-9695	tuckerj@alleghanyco.com	Mr. Gallmann
Cattaraugus County LEPC	V	Mr. John Northrup	Emergency Management	330 Court Street	Little Valley	NY	14755	7163727955	716-372-5225	jenorthrup@yahoo.com	Mr. Ed Korse
Chautauqua County LEPC	V	Mr. Joseph Gerace	Gerace Office Bldg.	3 North Erie Street	Mayville	NY	14757	315-253-4561	585-753-4140	jg@sheriff.us	Mr. McNeight
Chemung County LEPC	V	Ms. Kristin Card	Emergency Management	P.O. Box 588	Elmira	NY	14902	607-737-2096	607-737-2098	kcard@co.chemung.ny.us	Ms. Card
Erie County LEPC	V	Ms. Stephanie Burgess	Public Safety Campus	45 Elm Street Room#237	Buffalo	NY	14203	716-859-8632	716-859-1678	shburgess@adelphia.net	Mr. Puntillo
Genesee County LEPC	V	Mr. Tim Yaeger	Emergency Services	7690 State Street Road	Batavia	NY	14020	585-344-0078	585-344-8535	tyaeger@co.genesee.ny.us	Mr. Tim Yaeger
Livingston County LEPC	V	Mr. Kevin Niedermaier	Emergency Services	6 Court Street, Rm. B-10	Geneseo	NY	14454	585-243-7160	585-243-7162	kniedermaier@co.livingston.ny.us	Mr. Kevin Niedermaier
Monroe County LEPC	V	Mr. Thomas Walsh	Public Safety Training Facility	1190 Scottsville Road, Suite 200	Rochester	NY	14624	585-473-0710	585-473-7087	mcoep@monroecounty.gov	Muffy Meisenzahl
Niagara County LEPC	V	Vacant	Emergency Services	5526 Niagara Street, Box 496	Lockport	NY	14095	716-438-3171	716-438-3173	james.volkosh@niagaracounty.com sandy.scott@niagaracounty.com	Mr. Jim Volkosh
Ontario County LEPC	V	Mr. Alan Hawker	Safety Training Facility	2914 County Road 48	Canandaigua	NY	14424	585-396-4310	585-396-4583	ahawker@zotosintl.com	Mr. Jeffrey Harloff jeffrey.harloff@co.ontario.ny.us

COUNTY	SEMO REGION	CHAIRPERSON	ADDRESS	ADDRESS 2	CITY	ST	ZIP	TELE #	FAX #	Email Contact	Alt/Vice CHAIRPERSON
Orleans County LEPC	V	Mr. Jesse Babcock	Emergency Services	14064 County Court House Rd.	Albion	NY	14411	585-589-4414	585-589-7671	babcock@lakeplains.net	Mr. Paul Wagner pwagner@orleansny.com
Steuben County LEPC	V	Mr. Tim Marshall	Emergency Management	3 E. Pulteney Square	Bath	NY	14810	607-664-2700	607-776-3334	tim@co.steuben.ny.us	Mr. Michael Sprague MikeS@co.steuben.ny.us
Wayne County LEPC	V	Mr. Richard Cobb	Emergency Management	7336 Route 31	Lyons	NY	14489	315-946-5664	315-946-9721	rcobb@co.wayne.ny.us	Thelma Wideman twideman@co.wayne.ny.us
Wyoming County LEPC	V	Mr. Anthony Martino	Emergency Services	151 N. Main Street, PSb	Warsaw	NY	14659	585-786-8866	585-786-8961	amartino@wyomingco.net	Mr. Anthony Martino
Yates County LEPC	V	Mr. Glen Miller	Emergency Management	227 Main Street	Penn Yan	NY	14527	315-536-3000	315-536-5191	gmiller@yatescounty.org	Ms. Julie Simmons juliesimmons@roadrunner.com

February 7, 2007

2007 ~~2006~~ Submissions

Tier II Report (2006)

① • Mr. Greg Caronia, LEPC
Nassau County Office of Emergency Management
100 Carman Avenue
East Meadow, NY 11544

phone: 516 - 573 - 0652
fax: 516 - 573 - 7007

---

② • Chief Joseph Pascarella / GEORGE [illegible]
Westbury Fire Department GEORGE KELLMAN
355 Maple Avenue
Westbury, NY 11590 DOUG INGRAM

phone: 516 - 334 - 7968

---

③ • Mr. Edward F. Jacoby JR., Chairman
NYS Emergency Response Commission
1220 Washington Avenue
Building 22 - Suite 101
Albany, NY 12226 - 2251

P2SUL002713

Material	01/2007	02/2007	03/2007	04/2007	05/2007	06/2007	07/2007	08/2007	09/2007	10/2007	11/2007	12/2007
Total	69,172.00 LB	91,201.00 LB	77,056.00 LB	75,607.00 LB	69,476.00 LB	58,388.50 LB	49,069.00 LB	81,456.00 LB	89,759.50 LB	98,078.50 LB	93,217.50 LB	114,674.00 LB
1000577 METCO 204N	10,445.50 LB	13,915.50 LB	6,339.00 LB	5,614.50 LB	6,280.00 LB	4,640.00 LB	2,455.00 LB	5,790.00 LB	6,900.00 LB	15,537.50 LB	9,756.50 LB	6,116.50 LB
1029027 SULZER MET	10,189.00 LB	8,651.00 LB	3,951.00 LB	3,151.00 LB	4,212.50 LB	4,187.50 LB	1,812.50 LB	6,487.50 LB	4,487.50 LB	10,900.00 LB	4,650.00 LB	9,500.00 LB
1000800 METCO 204N	6,337.00 LB	1,937.00 LB	9,187.00 LB	23,249.50 LB	10,162.50 LB	8,575.00 LB	5,087.50 LB	31,200.00 LB	9,237.50 LB	10,055.00 LB	18,255.00 LB	38,787.50 LB
1000591 METCO 204N	5,832.00 LB	16,206.50 LB	13,006.00 LB	7,087.00 LB	8,750.00 LB	9,437.50 LB	6,375.00 LB	11,375.00 LB	32,425.00 LB	25,070.00 LB	19,225.00 LB	16,475.00 LB
1001593 METCO 204C	5,710.50 LB	10,060.50 LB	8,023.00 LB	5,860.50 LB	4,236.50 LB	5,449.00 LB	8,724.50 LB	5,274.00 LB	3,739.50 LB	7,612.00 LB	4,237.00 LB	8,712.00 LB
1019245 SPM2000 PO	5,100.50 LB	3,475.50 LB	5,375.00 LB	4,125.00 LB	4,050.00 LB	3,425.00 LB	6,500.00 LB	5,350.00 LB	4,825.50 LB	8,513.00 LB	5,813.00 LB	1,999.50 LB
1000354 METCO 202N	5,055.00 LB	4,510.00 LB	1,890.00 LB	570 LB	165 LB	150 LB	260 LB	10 LB	890 LB	570 LB	4,030.00 LB	2,410.00 LB
1000575 METCO 210N	4,965.00 LB	3,800.00 LB	1,585.00 LB	4,515.00 LB	3,855.00 LB	2,720.00 LB	1,705.00 LB	2,455.00 LB	1,265.00 LB	2,235.00 LB	4,725.00 LB	3,335.00 LB
1000590 METCO 204B	4,520.00 LB	6,200.00 LB	9,110.00 LB	3,855.00 LB	6,830.00 LB	3,555.00 LB	2,655.00 LB	5,635.00 LB	11,855.00 LB	3,950.00 LB	3,510.00 LB	4,130.00 LB
1001585 AMDRY 204N	3,412.50 LB	16,362.50 LB	13,075.00 LB	12,299.50 LB	14,374.50 LB	12,124.50 LB	8,524.50 LB	4,532.00 LB	10,274.50 LB	9,223.50 LB	10,248.50 LB	14,953.50 LB
1000599 METCO 205N	2,175.00 LB	1,675.00 LB	1,625.00 LB	1,612.50 LB	1,612.50 LB	1,225.00 LB	1,175.00 LB	1,075.00 LB	1,050.00 LB	1,050.00 LB	1,037.50 LB	1,037.50 LB
1000587 METCO 202N	1,937.50 LB	1,637.50 LB	125 LB	0 LB	2,150.00 LB	262.5 LB	1,200.00 LB	0 LB	687.5 LB	287.5 LB	4,287.50 LB	3,387.50 LB
1000578 METCO 210N	1,922.50 LB	1,467.50 LB	1,467.50 LB	2,447.50 LB	2,197.50 LB	2,047.50 LB	1,822.50 LB	1,122.50 LB	787.5 LB	1,975.00 LB	1,950.00 LB	1,937.50 LB
1038360 METCO 204B	982.5 LB	620 LB	1,420.00 LB	200 LB	200 LB	200 LB	200 LB	200 LB	0 LB	0 LB	0 LB	87.5 LB
1050349 METCO 204A	400 LB	450 LB	450 LB	450 LB	0 LB	0 LB	312.5 LB	312.5 LB	287.5 LB	287.5 LB	0 LB	0 LB
1000077 METCO 210	175 LB	220 LB	290 LB	445 LB	250 LB	265 LB	135 LB	475 LB	585 LB	150 LB	705 LB	480 LB
1037601 METCO 204N	12.5 LB	12.5 LB	12.5 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1000600 METCO 210N	0 LB	0 LB	125 LB	125 LB	150 LB	125 LB	125 LB	162.5 LB	162.5 LB	162.5 LB	287.5 LB	287.5 LB
1043121 METCO 204F	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	537.5 LB
1059332 ZYGUARD 20	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	500 LB	500 LB	500 LB	500 LB
1059333 ZYGUARD 20	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1059334 ZYGUARD 20	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1062181 METCO 204B	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB

SULZER METCO
EHS DEPARTMENT

Abradables: Blends and Resales 2007

Material	01/2006	02/2006	03/2006	04/2006	05/2006	06/2006	07/2006	08/2006	09/2006	10/2006	11/2006	12/2006
Total	11,240.00 LB	13,900.00 LB	10,565.00 LB	11,485.00 LB	16,910.00 LB	17,515.00 LB	29,680.00 LB	28,825.00 LB	22,565.00 LB	27,895.00 LB	26,315.00 LB	27,935.00 LB
1000298 METCO 601N	5,450.00 LB	9,350.00 LB	5,675.00 LB	3,400.00 LB	6,200.00 LB	7,075.00 LB	17,350.00 LB	14,805.00 LB	11,995.00 LB	13,340.00 LB	12,015.00 LB	13,435.00 LB
1000331 METCO 605N	60 LB	50 LB	50 LB	135 LB	0 LB	245 LB	105 LB	200 LB	80 LB	75 LB	240 LB	140 LB
1000571 METCO 600N	400 LB	365 LB	220 LB	150 LB	65 LB	265 LB	140 LB	90 LB	80 LB	60 LB	195 LB	55 LB
1001065 AMDRY 2010	1,420.00 LB	350 LB	200 LB	3,895.00 LB	5,800.00 LB	4,085.00 LB	3,720.00 LB	2,375.00 LB	555 LB	1,400.00 LB	85 LB	1,345.00 LB
1002385 SULZER MET	1,310.00 LB	810 LB	810 LB	785 LB	585 LB	275 LB	135 LB	3,580.00 LB	2,930.00 LB	2,330.00 LB	2,035.00 LB	2,035.00 LB
1002392 AMDRY ALUM	1,230.00 LB	1,705.00 LB	2,505.00 LB	1,780.00 LB	1,650.00 LB	1,360.00 LB	3,640.00 LB	1,900.00 LB	825 LB	4,840.00 LB	3,680.00 LB	2,950.00 LB
1006131 SP8847 Met	90 LB	90 LB	20 LB	515 LB	415 LB	315 LB	250 LB	165 LB	65 LB	45 LB	0 LB	50 LB
1020384 AMDRY 955	240 LB	140 LB	60 LB	10 LB	0 LB	490 LB	415 LB	340 LB	265 LB	190 LB	190 LB	190 LB
1020659 AMDRY XPT	340 LB	340 LB	340 LB	340 LB	385 LB	865 LB	410 LB	410 LB	410 LB	550 LB	860 LB	1,750.00 LB
1029003 AMDRY S-57	0 LB	0 LB	0 LB	5 LB	55 LB	5 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1029024 METCO 604N	0 LB	0 LB	0 LB	0 LB	45 LB	45 LB	45 LB	45 LB	45 LB	0 LB	0 LB	0 LB
1031864 METCO 600N	320 LB	320 LB	305 LB	190 LB	1,130.00 LB	1,870.00 LB	2,850.00 LB	4,695.00 LB	4,695.00 LB	4,035.00 LB	3,595.00 LB	3,195.00 LB
1031936 AMDRY 949	305 LB	305 LB	305 LB	205 LB	205 LB	545 LB	545 LB	145 LB	545 LB	955 LB	955 LB	455 LB
1032596 AMDRY 9500	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB	75 LB
1051782 A958 85 C	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1051795 DU1605 ALS	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	10 LB	10 LB
1060440 METCO 2602	0 LB	0 LB	0 LB	0 LB	300 LB	0 LB	0 LB	0 LB	0 LB	0 LB	2,380.00 LB	2,250.00 LB

Key figure

Material #	Description	01/2007	02/2007	03/2007	04/2007	05/2007	06/2007	07/2007	08/2007	09/2007	10/2007	11/2007	12/2007
		87,309.01 ***	85,693.17 ***	85,727.85 ***	88,046.13 ***	95,164.63 ***	89,669.63 ***	88,054.85 ***	84,524.85 ***	85,162.13 ***	76,584.13 ***	80,470.98 ***	83,985.98 ***
1000807	DIAMALLOY 2005NS POW	7,895.00 LB	4,545.00 LB	4,100.00 LB	2,525.00 LB	1,720.00 LB	3,965.00 LB	1,715.00 LB	1,660.00 LB	2,000.00 LB	410 LB	1,915.00 LB	1,615.00 LB
1032570	DIAMALLOY 5826-DISCOU	5,185.00 LB	5,185.00 LB	5,185.00 LB	5,185.00 LB	5,155.00 LB	5,155.00 LB	5,055.00 LB	5,035.00 LB	5,035.00 LB	5,030.00 LB	5,005.00 LB	215 LB
1058930	WOKA - 50501-1 WELDING	3,900.89 KG	2,449.40 KG	136.078 KG	136.078 KG	136.076 KG	136.076 KG	136.076 KG	136.076 KG	136.076 KG	136.076 KG	0 KG	0 KG
1000085	METCO 81VF-NS POWDE	3,460.00 LB	5,670.00 LB	3,655.00 LB	2,725.00 LB	6,000.00 LB	2,920.00 LB	6,225.00 LB	4,575.00 LB	3,995.00 LB	4,165.00 LB	2,185.00 LB	2,525.00 LB
1032569	DIAMALLOY 5815-DISCOU	2,770.00 LB	2,755.00 LB	2,715.00 LB	2,695.00 LB	2,500.00 LB	2,410.00 LB	2,410.00 LB	390 LB	390 LB	355 LB	295 LB	20 LB
1032571	DIAMALLOY 5848- DISCO	2,720.00 LB	2,720.00 LB	2,675.00 LB	2,425.00 LB	2,410.00 LB	2,195.00 LB	2,075.00 LB	55 LB	890 LB	570 LB	270 LB	0 LB
1000305	METCO 36C POWDER 5#	2,490.00 LB	1,695.00 LB	4,595.00 LB	3,010.00 LB	2,345.00 LB	915 LB	610 LB	750 LB	1,265.00 LB	1,295.00 LB	650 LB	1,150.00 LB
1000086	METCO 34F POWDER 5#	2,445.00 LB	1,420.00 LB	1,290.00 LB	1,460.00 LB	1,600.00 LB	1,355.00 LB	950 LB	1,235.00 LB	1,090.00 LB	920 LB	1,240.00 LB	1,030.00 LB
1000790	DIAMALLOY 2004 POWDE	2,270.00 LB	1,435.00 LB	2,575.00 LB	1,450.00 LB	945 LB	2,075.00 LB	2,715.00 LB	2,045.00 LB	3,935.00 LB	2,635.00 LB	3,070.00 LB	2,210.00 LB
1000065	METCO 81NS POWDER 5	2,205.00 LB	935 LB	1,345.00 LB	635 LB	1,615.00 LB	1,390.00 LB	1,415.00 LB	195 LB	1,930.00 LB	695 LB	1,100.00 LB	1,080.00 LB
1000304	METCO 73F-NS-1 POWDE	1,915.00 LB	3,540.00 LB	2,545.00 LB	2,730.00 LB	2,455.00 LB	2,460.00 LB	2,040.00 LB	2,335.00 LB	2,220.00 LB	675 LB	2,185.00 LB	4,165.00 LB
1041052	WOKA - 3105 POWDER 1(	1,790.00 LB	1,780.00 LB	1,780.00 LB	1,680.00 LB	1,530.00 LB	1,530.00 LB	1,530.00 LB	1,380.00 LB	1,380.00 LB	1,380.00 LB	1,380.00 LB	1,380.00 LB
1029031	#N/A	1,700.00 LB	1,700.00 LB	1,700.00 LB	2,400.00 LB	2,400.00 LB	2,400.00 LB	3,450.00 LB	3,450.00 LB	450 LB	100 LB	100 LB	600 LB
1041049	WOKA - 3101 POWDER 1(	1,700.00 LB	1,430.00 LB	2,030.00 LB	1,480.00 LB	1,050.00 LB	930 LB	500 LB	650 LB	800 LB	410 LB	640 LB	920 LB
1001588	SULZER METCO 5810 PO	1,655.00 LB	1,255.00 LB	1,160.00 LB	1,155.00 LB	645 LB	645 LB	595 LB	545 LB	495 LB	430 LB	380 LB	380 LB
1041066	WOKA - 3602 POWDER 1(	1,480.00 LB	1,350.00 LB	0 LB	500 LB	500 LB	160 LB	160 LB	150 LB	650 LB	1,170.00 LB	2,220.00 LB	2,510.00 LB
1001057	AMDRY 9831 POWDER 5#	1,265.00 LB	365 LB	1,340.00 LB	690 LB	990 LB	1,360.00 LB	1,360.00 LB	1,575.00 LB	675 LB	675 LB	690 LB	690 LB
1041050	WOKA - 3102 POWDER 1(	1,250.00 LB	195 LB	280 LB	500 LB	660 LB	260 LB	440 LB	500 LB	270 LB	1,200.00 LB	740 LB	720 LB
1000796	DIAMALLOY 3007 POWDE	1,180.00 LB	3,030.00 LB	5,130.00 LB	7,095.00 LB	4,900.00 LB	3,330.00 LB	5,835.00 LB	7,560.00 LB	7,335.00 LB	4,707.00 LB	3,127.00 LB	2,592.00 LB
1001068	AMDRY 5670 POWDER 5#	1,170.00 LB	1,535.00 LB	1,790.00 LB	1,340.00 LB	1,300.00 LB	2,110.00 LB	1,740.00 LB	1,585.00 LB	1,430.00 LB	955 LB	900 LB	770 LB
1000793	DIAMALLOY 3004 POWDE	1,110.00 LB	195 LB	100 LB	735 LB	4,670.00 LB	4,435.00 LB	4,440.00 LB	1,870.00 LB	6,600.00 LB	6,600.00 LB	6,465.00 LB	6,130.00 LB
1001586	SULZER METCO 5803 PO	1,110.00 LB	1,050.00 LB	785 LB	305 LB	1,235.00 LB	1,180.00 LB	1,175.00 LB	1,665.00 LB	1,650.00 LB	1,055.00 LB	1,055.00 LB	990 LB
1000050	METCO 32C POWDER 5#,	1,090.00 LB	1,290.00 LB	1,655.00 LB	1,630.00 LB	925 LB	750 LB	1,710.00 LB	1,075.00 LB	1,075.00 LB	750 LB	360 LB	885 LB
1000084	METCO 71VF-NS POWDE	1,085.00 LB	680 LB	680 LB	1,270.00 LB	1,255.00 LB	1,390.00 LB	1,460.00 LB	675 LB	2,620.00 LB	2,585.00 LB	2,035.00 LB	1,415.00 LB
1000443	METCO 31C-NS POWDER	1,080.00 LB	1,660.00 LB	575 LB	1,945.00 LB	2,690.00 LB	1,165.00 LB	335 LB	35 LB	425 LB	55 LB	1,390.00 LB	1,665.00 LB
1039320	SULZER METCO 7372 PO	945 LB	945 LB	945 LB	945 LB	945 LB	930 LB	930 LB	930 LB	930 LB	930 LB	930 LB	930 LB
1001067	AMDRY 5260 POWDER 5#	895 LB	1,240.00 LB	1,620.00 LB	1,295.00 LB	1,185.00 LB	810 LB	545 LB	1,575.00 LB	1,385.00 LB	1,085.00 LB	862 LB	762 LB
1041157	WOKA - 3601 POWDER 1(	850 LB	1,600.00 LB	1,790.00 LB	1,160.00 LB	700 LB	900 LB	1,370.00 LB	2,290.00 LB	1,910.00 LB	1,260.00 LB	1,260.00 LB	1,160.00 LB
1049784	WOKA - 3807 POWDER 1(	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB	850 LB
1002433	SXH-70 / 10 LBS	830 LB	50 LB	570 LB	50 LB	50 LB	40 LB	1,060.00 LB	60 LB	70 LB	2,250.00 LB	1,660.00 LB	3,180.00 LB
1000088	METCO 72F-NS POWDER	800 LB	625 LB	1,225.00 LB	135 LB	1,070.00 LB	2,085.00 LB	815 LB	550 LB	925 LB	645 LB	1,665.00 LB	1,315.00 LB
1000795	DIAMALLOY 3006 POWDE	775 LB	775 LB	725 LB	675 LB	670 LB	670 LB	670 LB	670 LB	660 LB	660 LB	660 LB	660 LB
1049664	WOKA - 7203 POWDER 1(	770 LB	460 LB	460 LB	460 LB	430 LB	430 LB	430 LB	430 LB	430 LB	430 LB	190 LB	190 LB
1000788	DIAMALLOY 2002 POWDE	740 LB	645 LB	535 LB	1,575.00 LB	1,525.00 LB	1,150.00 LB	1,150.00 LB	1,040.00 LB	820 LB	455 LB	375 LB	80 LB
1038394	DIAMALLOY 131PAB / 10#	740 LB	740 LB	740 LB	690 LB	710 LB	610 LB	610 LB	560 LB	510 LB	510 LB	330 LB	330 LB
1041187	WOKA - 7305 POWDER 1(	740 LB	580 LB	553 LB	299 LB	305 LB	225 LB	160 LB	90 LB	240 LB	240 LB	240 LB	210 LB
1020141	DIAMALLOY 5849 POWDE	705 LB	1,080.00 LB	1,610.00 LB	1,610.00 LB	2,000.00 LB	1,270.00 LB	1,020.00 LB	1,020.00 LB	870 LB	870 LB	875 LB	875 LB
1000069	METCO 430NS POWDER	700 LB	600 LB	370 LB	590 LB	1,495.00 LB	695 LB	465 LB	250 LB	25 LB	585 LB	560 LB	1,505.00 LB
1000573	METCO 82VF-NS POWDE	700 LB	690 LB	555 LB	335 LB	135 LB	0 LB	155 LB	575 LB	565 LB	345 LB	490 LB	420 LB
1000799	METCO 76F-NS POWDER	695 LB	655 LB	450 LB	255 LB	445 LB	715 LB	610 LB	580 LB	340 LB	225 LB	145 LB	100 LB
1000075	METCO 71NS POWDER 5	685 LB	1,325.00 LB	1,155.00 LB	525 LB	1,370.00 LB	1,935.00 LB	1,905.00 LB	1,335.00 LB	1,175.00 LB	1,075.00 LB	280 LB	1,175.00 LB
1041065	WOKA - 3302 POWDER 1(	630 LB	630 LB	630 LB	630 LB	650 LB	650 LB	650 LB	650 LB	650 LB	550 LB	560 LB	550 LB
1001603	SULZER METCO 5241 PO	610 LB	340 LB	340 LB	730 LB	0 LB	0 LB	0 LB	980 LB	0 LB	3,090.00 LB	4,250.00 LB	4,150.00 LB
1000588	METCO 70C-NS POWDER	595 LB	1,107.50 LB	407.5 LB	207.5 LB	675 LB	1,000.00 LB	987.5 LB	987.5 LB	887.5 LB	687.5 LB	675 LB	575 LB
1041074	WOKA - 7201 POWDER 1(	580 LB	540 LB	500 LB	480 LB	360 LB	360 LB	310 LB	250 LB	250 LB	100 LB	300 LB	250 LB
1041077	WOKA - 7207 POWDER 1(	580 LB	580 LB	710 LB	610 LB	800 LB	600 LB	400 LB	590 LB	390 LB	670 LB	870 LB	670 LB
1041053	WOKA - 3106 POWDER 1(	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB	550 LB
1041062	WOKA - 3206 POWDER 1(	550 LB	550 LB	550 LB	550 LB	640 LB	640 LB	640 LB	640 LB	640 LB	630 LB	610 LB	610 LB
1041060	WOKA - 3201 POWDER 1(	530 LB	530 LB	480 LB	360 LB	360 LB	360 LB	290 LB	290 LB	280 LB	180 LB	160 LB	160 LB
1041257	WOKA - 3657 POWDER 1(	520 LB	440 LB	360 LB	310 LB	260 LB	210 LB	160 LB	160 LB	160 LB	140 LB	90 LB	90 LB
1040627	SPM5-2657 POWDER 5#	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB	500 LB
1042909	WOKA - 3534 POWDER 1(	500 LB	600 LB	500 LB	780 LB	580 LB	280 LB	280 LB	160 LB	1,080.00 LB	860 LB	560 LB	460 LB
1059521	#N/A	500 LB	0 LB										
1000449	METCO 73F-NS-2 POWDE	470 LB	735 LB	1,525.00 LB	1,355.00 LB	645 LB	200 LB	1,410.00 LB	100 LB	2,205.00 LB	575 LB	455 LB	2,430.00 LB
1001056	AMDRY 9830 POWDER 5#	460 LB	460 LB	450 LB	380 LB	360 LB	330 LB	340 LB	335 LB	335 LB	335 LB	335 LB	315 LB
1058937	WOKA - 50504-1 WELDING	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	453.592 KG	0 KG	0 KG

1041586	WOKA - 3501 POWDER 1(	440 LB	200 LB	200 LB	340 LB	330 LB	280 LB	250 LB	230 LB	230 LB	210 LB	410 LB	230 LB
1041061	WOKA - 3203 POWDER 1(	430 LB	240 LB	40 LB	540 LB	540 LB	320 LB	320 LB	320 LB	320 LB	310 LB	310 LB	310 LB
1035941	SPM5-2599 POWDER 5#	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB	425 LB
1041076	WOKA - 7205 POWDER 1(	420 LB	420 LB	420 LB	420 LB	380 LB	170 LB	150 LB	140 LB	230 LB	230 LB	190 LB	0 LB
1041188	WOKA - 7505 POWDER 1(	420 LB	370 LB	360 LB	360 LB	360 LB	360 LB	360 LB	250 LB	250 LB	150 LB	100 LB	100 LB
1050672	SULZER METCO 5803-1 F	400 LB	400 LB	400 LB	400 LB	420 LB	420 LB	420 LB	420 LB	420 LB	420 LB	420 LB	420 LB
1041184	WOKA - 3603 POWDER 1(	380 LB	380 LB	0 LB	440 LB	1,000.00 LB	0 LB	0 LB	990 LB	0 LB	1,500.00 LB	1,100.00 LB	100 LB
1001600	SULZER METCO 5812 PO	370 LB	370 LB	370 LB	370 LB	315 LB	315 LB	315 LB	310 LB	0 LB	515 LB	425 LB	425 LB
1041155	WOKA - 3202 POWDER 1(	340 LB	300 LB	300 LB	280 LB	250 LB	250 LB	250 LB	250 LB	210 LB	210 LB	160 LB	180 LB
1001598	METCO 73F POWDER 5#	325 LB	325 LB	305 LB	305 LB	305 LB	255 LB	250 LB	220 LB	220 LB	200 LB	210 LB	210 LB
1050650	WOKA - 3307 POWDER 1(	320 LB	120 LB	800 LB	520 LB	360 LB	120 LB	120 LB	120 LB	0 LB	120 LB	2,000.00 LB	1,720.00 LB
1000057	METCO 34FP POWDER 5:	305 LB	205 LB	105 LB	105 LB	305 LB	205 LB	495 LB	395 LB	295 LB	315 LB	120 LB	410 LB
1000128	METCO 439NS-2 POWDE	300 LB	50 LB	845 LB	270 LB	80 LB	40 LB	0 LB	0 LB	1,715.00 LB	910 LB	570 LB	520 LB
1041075	WOKA - 7202 POWDER 1(	300 LB	300 LB	0 LB	0 LB	390 LB	80 LB	80 LB	480 LB	500 LB	480 LB	480 LB	0 LB
1000805	DIAMALLOY 4010 POWDE	290 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	290 LB	260 LB	255 LB	250 LB	250 LB
1001592	METCO 70F-NS POWDER	280 LB	280 LB	280 LB	280 LB	280 LB	280 LB	280 LB	280 LB	280 LB	10 LB	0 LB	0 LB
1000802	DIAMALLOY 1008 POWDE	270 LB	565 LB	95 LB	570 LB	470 LB	365 LB	535 LB	535 LB	210 LB	355 LB	195 LB	355 LB
1000791	DIAMALLOY 2006 POWDE	265 LB	265 LB	265 LB	265 LB	205 LB	155 LB	155 LB	155 LB	55 LB	55 LB	55 LB	55 LB
1041185	WOKA - 3703 POWDER 1(	260 LB	220 LB	220 LB	220 LB	220 LB	220 LB	220 LB	220 LB	210 LB	110 LB	110 LB	110 LB
1050036	WOKA - 3057 POWDER 1(	240 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB	160 LB
1001069	AMDRY 5843 POWDER 1(	230 LB	0 LB	310 LB	500 LB	1,480.00 LB	1,650.00 LB	100 LB	1,050.00 LB	0 LB	0 LB	740 LB	3,660.00 LB
1001036	AMDRY 302 POWDER (30	220 LB	220 LB	210 LB	210 LB	210 LB	205 LB	200 LB	200 LB	200 LB	170 LB	165 LB	165 LB
1041051	WOKA - 3103 POWDER 1(	220 LB	220 LB	150 LB	150 LB	60 LB	300 LB	300 LB	210 LB	180 LB	170 LB	20 LB	0 LB
1000434	METCO 71VF-NS-1 POWD	210 LB	680 LB	445 LB	405 LB	740 LB	335 LB	150 LB	510 LB	485 LB	310 LB	490 LB	165 LB
1041057	WOKA - 3115 POWDER 1(	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB
1041158	WOKA - 3701 POWDER 1(	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	210 LB	200 LB	200 LB	200 LB	200 LB
1058974	WOKA - 3109 POWDER 1(	200 LB	200 LB	150 LB	150 LB	150 LB	150 LB	150 LB	150 LB	150 LB	150 LB	0 LB	0 LB
1001591	SULZER METCO 5860 PO	185 LB	185 LB	170 LB	170 LB	170 LB	165 LB	160 LB	160 LB	155 LB	155 LB	155 LB	155 LB
1041054	WOKA - 3107 POWDER 1(	180 LB	180 LB	180 LB	180 LB	75 LB	80 LB	80 LB	80 LB	80 LB	80 LB	180 LB	180 LB
1041068	WOKA - 3607 POWDER 1(	170 LB	170 LB	70 LB	670 LB	610 LB	510 LB	510 LB	510 LB	510 LB	510 LB	500 LB	500 LB
1041253	WOKA - 3651 POWDER 1(	170 LB	170 LB	170 LB	170 LB	190 LB	170 LB	170 LB	170 LB	150 LB	150 LB	150 LB	150 LB
1059459	WOKADUR NIE-TUBE Ø 1	131.84 LB	0 LB	0 LB	132.28 LB	132.28 LB	132.28 LB	0 LB	0 LB	132.28 LB	132.28 LB	396.98 LB	396.98 LB
1000794	DIAMALLOY 3005 POWDE	130 LB	130 LB	105 LB	0 LB	55 LB	0 LB	135 LB	95 LB	45 LB	25 LB	25 LB	25 LB
1001035	AMDRY 301 POWDER (30	130 LB	110 LB	0 LB	105 LB	0 LB	245 LB	210 LB	70 LB	0 LB	345 LB	285 LB	225 LB
1041058	WOKA - 3116 POWDER 1(	130 LB	110 LB	100 LB	100 LB	70 LB	20 LB	20 LB	260 LB	160 LB	160 LB	160 LB	160 LB
1041161	WOKA - 7502 POWDER 1(	130 LB	130 LB	130 LB	130 LB	130 LB	20 LB	20 LB	20 LB	150 LB	150 LB	150 LB	150 LB
1032564	SM 5255 / 10#	110 LB	450 LB	230 LB	80 LB	690 LB	560 LB	415 LB	305 LB	110 LB	0 LB	10 LB	10 LB
1000789	DIAMALLOY 2003 POWDE	105 LB	105 LB	30 LB	290 LB	240 LB	35 LB	35 LB	35 LB	35 LB	0 LB	0 LB	180 LB
1029036	#N/A	100 LB	300 LB	300 LB	1,600.00 LB	1,600.00 LB	3,100.00 LB	2,600.00 LB	2,600.00 LB	100 LB	100 LB	100 LB	100 LB
1041159	WOKA - 7102 POWDER 1(	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	70 LB	70 LB
1049658	WOKA - 7307 POWDER 1(	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB	100 LB
1002400	SULZER METCO 5546NS	90 LB	85 LB	5 LB	265 LB	150 LB	150 LB	0 LB	720 LB	520 LB	470 LB	320 LB	120 LB
1041191	WOKA - 7104 POWDER 1(	90 LB	90 LB	90 LB	90 LB	90 LB	90 LB	80 LB	80 LB	80 LB	80 LB	80 LB	60 LB
1041254	WOKA - 3652 POWDER 1(	90 LB	0 LB	0 LB	0 LB	270 LB	260 LB	260 LB	240 LB	250 LB	0 LB	30 LB	430 LB
1050451	WOKA - 7257 POWDER 1(	90 LB	90 LB	90 LB	90 LB	70 LB	70 LB	70 LB	70 LB	70 LB	70 LB	70 LB	70 LB
1041071	WOKA - 3702 POWDER 1(	80 LB	80 LB	0 LB	160 LB	130 LB	130 LB	80 LB	80 LB	0 LB	360 LB	190 LB	190 LB
1000572	METCO 1123 POWDER 5#	70 LB	55 LB	55 LB	35 LB	265 LB	215 LB	205 LB	175 LB	175 LB	100 LB	100 LB	40 LB
1042982	WOKA - 3632 POWDER	70 LB	0 LB	120 LB	20 LB	70 LB	270 LB	270 LB	270 LB	270 LB	270 LB	220 LB	170 LB
1058975	WOKA - 3309 POWDER 1(	60 LB	10 LB	0 LB		70 LB	70 LB	70 LB	70 LB	70 LB	70 LB	70 LB	70 LB
1042701	WOKA - 3110 POWDER 1(	50 LB	50 LB	50 LB	50 LB	50 LB	50 LB	30 LB	30 LB	30 LB	30 LB	30 LB	30 LB
1058931	WOKA - 50502-1 WELDIN(	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	22.68 KG	0 KG	0 KG
1041255	WOKA - 3653 POWDER 1(	20 LB	10 LB	10 LB	10 LB	10 LB	0 LB	0 LB	200 LB	90 LB	40 LB	340 LB	740 LB
1049657	WOKA - 7210 POWDER 1(	20 LB	20 LB	20 LB	0 LB	130 LB	130 LB	130 LB	130 LB	130 LB	130 LB	130 LB	20 LB
1029035	34FP/15F BLEND	10 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC	605 PC
1041160	WOKA - 7302 POWDER 1(	10 LB	10 LB	10 LB	10 LB	20 LB	20 LB	20 LB	20 LB	20 LB	20 LB	20 LB	20 LB
1041183	WOKA - 3303 POWDER 1(	10 LB	10 LB	10 LB	10 LB	10 LB	10 LB	10 LB	0 LB	0 LB	200 LB	80 LB	50 LB
1002375	SP 86/70NS POWDER NIC	5 LB	395 LB	345 LB	345 LB	345 LB	285 LB	285 LB	425 LB	425 LB	385 LB	130 LB	80 LB
1000061	METCO 439NS POWDER	0 LB	60 LB	40 LB	225 LB	105 LB	0 LB	0 LB	145 LB	105 LB	270 LB	220 LB	185 LB
1000308	METCO 73SF-NS POWDE	0 LB	0 LB	1,780.00 LB	1,445.00 LB	1,420.00 LB	930 LB	730 LB	780 LB	280 LB	145 LB	140 LB	1,115.00 LB
1001601	SULZER METCO 5847 PO	0 LB	250 LB	0 LB	1,620.00 LB	315 LB	1,110.00 LB	70 LB	3,195.00 LB	1,235.00 LB	610 LB	1,935.00 LB	2,815.00 LB
1031721	METCO 71VFNS-5 PWDR	0 LB	540 LB	540 LB	540 LB	510 LB	495 LB	0 LB	0 LB	1,080.00 LB	1,060.00 LB	1,105.00 LB	705 LB

1031929	AMDRY 367 POWDER / 5#	0	LB	495	LB	245	LB	245	LB	840	LB	740	LB	1,035.00	LB	925	LB	925	LB	125	LB	125	LB	510	LB
1041073	WOKA - 7103 POWDER 1(	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB
1041186	WOKA - 7105 POWDER 1(	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	50	LB	200	LB
1041189	WOKA - 3104 POWDER 1(	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB
1042908	WOKA - 7218 POWDER 1(	0	LB	500	LB	500	LB	500	LB	500	LB	500	LB	400	LB	320	LB	220	LB	20	LB	0	LB	300	LB
1051514	ROSS MOULD PLUNGER	0	LB	0	LB	200	LB	1,680.00	LB	1,670.00	LB	3,130.00	LB	1,630.00	LB	1,610.00	LB	110	LB	250	LB	1,540.00	LB	1,540.00	LB
1059394	WOKA 9406-NI PELLETS	0	LB	0	LB	0	LB	0	LB	0	LB	500	LB	500	LB	500	LB	0	LB	0	LB	0	LB	0	LB
1059522	#N/A	0	LB	1,000.00	LB	0	LB	1,000.00	LB	1,000.00	LB	1,000.00	LB	1,000.00	LB	0	LB	0	LB	0	LB	0	LB	0	LB
1059523	#N/A	0	LB	1,000.00	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB
1061164	WOKA - 3123 POWDER 1(	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	300	LB	300	LB	300	LB	290	LB
1061273	WOKA - 3223 POWDER 1(	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	0	LB	40	LB	40	LB
1049752	WOKA - 50054 WELDING POWDER 10# W4%C							0	LB																
1050674	WOKA - 7310 POWDER 10# CRC-25%NICR-HIP					100	LB	100	LB	110	LB	100	LB	100	LB	100	LB	100	LB	100	LB	100	LB	100	LB
1061060	WOKA - 50117 WELDING POWDER MTC 10# W6%C																	0	LB						

Material	01/2007	02/2007	03/2007	04/2007	05/2007	06/2007	07/2007	08/2007	09/2007	10/2007	11/2007	12/2007
Total	6,170.00 LB	8,955.00 LB	6,755.00 LB	5,615.00 LB	4,975.00 LB	7,725.00 LB	6,990.00 LB	4,480.00 LB	6,250.00 LB	4,795.00 LB	7,460.00 LB	6,845.00 LB
1006157 XPT 470 /	2,280.00 LB	2,810.00 LB	2,500.00 LB	2,270.00 LB	1,740.00 LB	2,670.00 LB	2,100.00 LB	1,610.00 LB	610 LB	1,260.00 LB	1,840.00 LB	1,520.00 LB
1000023 METCO 16C	1,030.00 LB	1,025.00 LB	925 LB	565 LB	0 LB	385 LB	310 LB	115 LB	0 LB	0 LB	820 LB	455 LB
1030072 XPT 595 /	800 LB	800 LB	800 LB	800 LB	800 LB	750 LB	750 LB	750 LB	750 LB	750 LB	710 LB	710 LB
1015393 METCO 12C	435 LB	310 LB	240 LB	185 LB	85 LB	85 LB	0 LB	170 LB	70 LB	30 LB	0 LB	0 LB
1000787 DIAMALLOY	410 LB	2,400.00 LB	280 LB	200 LB	535 LB	1,455.00 LB	1,385.00 LB	385 LB	3,310.00 LB	1,510.00 LB	2,880.00 LB	2,855.00 LB
1020646 METCO 15E	375 LB	745 LB	335 LB	565 LB	230 LB	0 LB	410 LB	5 LB	840 LB	735 LB	430 LB	120 LB
1030519 METCO 15F	220 LB	120 LB	70 LB	0 LB	300 LB	295 LB	195 LB	190 LB	100 LB	50 LB	40 LB	100 LB
1000053 METCO 18C	205 LB	95 LB	65 LB	0 LB	280 LB	120 LB	95 LB	70 LB	65 LB	40 LB	5 LB	0 LB
1030515 METCO 16C	150 LB	150 LB	150 LB	150 LB	150 LB	150 LB	150 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1000355 METCO 19E	145 LB	130 LB	100 LB	100 LB	55 LB	55 LB	55 LB	55 LB	0 LB	0 LB	0 LB	150 LB
1035520 METCO 15E	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB	60 LB
1030516 METCO 15E	50 LB	50 LB	50 LB	0 LB	0 LB	0 LB	0 LB	0 LB	100 LB	100 LB	50 LB	50 LB
1029071 METCO 16CN	10 LB	10 LB	150 LB	150 LB	160 LB	110 LB	110 LB	50 LB	35 LB	10 LB	575 LB	575 LB
1051108 METCO 20-E	0 LB	0 LB	380 LB	0 LB	0 LB	490 LB	310 LB	310 LB	310 LB	250 LB	250 LB	250 LB
1051112 METCO 14-E	0 LB	200 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB	0 LB
1051113 METCO 15E-	0 LB	50 LB	310 LB	230 LB	230 LB	750 LB	710 LB	710 LB	0 LB	0 LB	0 LB	0 LB
1051117 METCO 15F-	0 LB	0 LB	340 LB	340 LB	350 LB	350 LB	350 LB	0 LB	0 LB	0 LB	0 LB	0 LB

Facility Name: Sulzer Metco US Inc.

****
********** THIS REPORT HAS NOT PASSED A VALIDATION CHECK! **********
****

****
****

FACILITY IDENTIFICATION:
Sulzer Metco US Inc.
Dept:
1101 Prospect Avenue
Westbury, NY 11590 USA
County:
Number of employees: 330
Latitude: 40.4544
Longitude: 73.3348
Method: A0 - Address Matching (Other)
Description: OT - Other

SULZER METCO (US) INC.
FEB 11 2008
EHS DEPARTMENT

IDENTIFICATION NUMBERS:
Dun & Bradstreet: 152084398
SIC: 3559 (SPECIAL INDUSTRY MACHINERY,NEC)
SIC: 3499 (FABRICATED METAL PRODUCTS NEC)

CONTACT INFORMATION:

Rolli, Alfonso
Title: EHS Manager Contact Type 1: Regulatory Point of Contact
Address: 1101 Prospect Avenue, Westbury, NY, 11590 USA
Phones: 24-hour: 914-393-2564 Work: 516-338-2337
Email: alfonso.rolli@sulzer.com

Wuest, Greg
Title: Director QESH Contact Type 1: Owner / Operator
Address: 1101 Prospect Avenue, Westbury, NY, 11590 USA
Phones: 24-hour: 631-724-3792 Work: 516-338-2217

D'Arpa, Michael
Title: Facilities Mgr.
Address: 1101 Prospect Avenue, Westbury, NY, 11590 USA
Phones: 24-hour: 516-526-2976 Work: 516-338-2567

CHEMICAL DESCRIPTIONS:
[x] All chemicals in inventory are identical to last year's submission
---

CHEM NAME: Aluminum-based Powders
CAS: Various

Facility Name: Sulzer Metco US Inc.

[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[x] Fire [ ] Sudden Release of Pressure [x] Reactivity [x] Immediate (acute) [ ] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 05 (100,000 - 999,999 pounds)
Avg Daily Amt code: 05 (100,000 - 999,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Ceramic Powders
CAS: Various
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 05 (100,000 - 999,999 pounds)
Avg Daily Amt code: 05 (100,000 - 999,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Chrome Carbide Powders
CAS: 12012-35-0
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [x] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

Facility Name: Sulzer Metco US Inc.

Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Cobablt-based Powders
CAS: Various
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS

PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [x] Immediate (acute) [x] Delayed (chronic)

INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365

STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Copper-based Powders
CAS: Various
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS

PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)

INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365

STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Iron-based Powders
CAS: Various

Facility Name: Sulzer Metco US Inc.

[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Molybdenum
CAS: 7439-98-7
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [ ] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Nickel-based Powders
CAS: Various
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 05 (100,000 - 999,999 pounds)
Avg Daily Amt code: 05 (100,000 - 999,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

Facility Name: Sulzer Metco US Inc.

Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Nitrogen - Cryogenic Liquid
CAS: 7727-37-9
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [ ] Mix [ ] Solid [x] Liquid [x] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [x] Sudden Release of Pressure [ ] Reactivity [x] Immediate (acute) [ ] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: A Pressure: 2 Temp: 7 Location: Yard - Exterior Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Polyester Powder
CAS: 26099-71-8
[ ] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:
[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)
INVENTORY:
Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 03 (1,000 - 9,999 pounds)
No. of days on-site: 365
STORAGE CODES & STORAGE LOCATIONS:
Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
CHEMICALS IN INVENTORY STATE FIELDS:
No additional chemical information is required by New York

CHEM NAME: Tungston Carbide Powder
CAS: 12070-12-1
[x] Identical to previous year
[ ] TRADE SECRET
[x] Pure [x] Mix [x] Solid [ ] Liquid [ ] Gas [ ] EHS
PHYSICAL & HEALTH HAZARDS:

Facility Name: Sulzer Metco US Inc.

[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [x] Delayed (chronic)

INVENTORY:

Max Daily Amt code: 04 (10,000 - 99,999 pounds)
Avg Daily Amt code: 04 (10,000 - 99,999 pounds)
No. of days on-site: 365

STORAGE CODES & STORAGE LOCATIONS:

Container Type: D Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: N Pressure: 1 Temp: 4 Location: Production Floor Amount: pounds
Container Type: R Pressure: 1 Temp: 4 Location: Production - Steel Hoppers Amount: pounds
Container Type: E Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds
Container Type: I Pressure: 1 Temp: 4 Location: Warehouse and Production Floor Amount: pounds

CHEMICALS IN INVENTORY STATE FIELDS:

No additional chemical information is required by New York

FACILITY STATE FIELDS:

No additional information is required by New York

STATE / LOCAL FEES: None.

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Certification (Read and sign after completing all sections)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 6, and that based on my inquiry of those individuals responsible for obtaining this information, I believe that the submitted information is true, accurate, and complete.

Alfonso Rolli — Name and official title of owner/operator OR owner/operator's authorized representative

Signature

2/11/2008 — Date signed

S... METCO (US) INC.
... 1 1 2008
EHS DEPARTMENT

TIER2 SUBMIT

Facility Submission Guide

November 2007

U.S. Environmental Protection Agency
Chemical Emergency and Preparedness Office
Washington, DC

National Oceanic and Atmospheric Administration
Office of Response and Restoration/
Hazardous Materials Response Division
Seattle, WA

USER'S MANUAL

Table of Contents

Chapter 1 - Introduction

Tier2 in brief
Getting Tier2 Submit
CAMEO in brief
Getting CAMEO
Technical Support

Chapter 2 - What do I need to get Started?

Hardware requirements
Software requirements
Installation procedures
Import last year's Tier2 Submit data into Tier2 Submit 2007

Chapter 3 - Entering Data

P2SUL002727

Entering data for one facility (step by step instruction)
Entering data for multiple facilities (step by step instruction)

Tier2 Field Descriptions
State Tier2 Field Descriptions

Chapter 4 - Modifying Tier2 Submit Data

Add a Facility
Add a Contact
Add a Chemical to Inventory

Delete a Facility
Delete a Contact
Delete a Chemical from Inventory

Change a Facility
Change a Contact
Change a Chemical in Inventory

Chapter 5 - Validating Data

Validate Record
Validation Report

Chapter 6 - Submitting Data!

Submit with only one Facility in Tier2 Submit
Submit with more than one Facility in Tier2 Submit

Chapter 7 - Importing / Exporting

Importing

Exporting

Chapter 8 - Reference Information

Frequently Asked Questions (FAQs)
Hot Buttons
File Menu
Edit Menu
Record Menu
Search Menu
Scripts Menu
Help Menu
Tier2 Field Descriptions
State Tier2 Field Descriptions
Statutes and Regulations
How to report your facility's latitude and longitude

CHAPTER 1 - Introduction

Tier2 Submit is a software program developed by the Environmental Protection Agency (EPA) and National Oceanic Atmospheric Administration (NOAA) for use by facilities to enter and submit Emergency Planning and Community Right-to-Know Act (EPCRA) 311/312 chemical information, commonly known as **Tier II reports**. Tier2 Submit will allow users to enter multiple facilities, chemicals and contacts. The program also includes many of the state's additional data requirements.

You can use Tier2 Submit in two ways:

- **Facilities:** Enter, store, print and export Tier II information for sending to State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs) and Fire Departments. Tier2 Submit is designed to help the reporting facility enter the data efficiently and submit the electronic information easily.
- **SERCs, LEPCs & Fire Depts:** Receive Tier2 Submit files from facilities to import into CAMEO or other database applications for emergency planning.

Tier2 Submit is organized into three modules (parts):

- **Facilities module** - where the user enters business name, address, Standard Industrial Code, etc.
- **Contacts module** - where the user enters owner, emergency, and other contact's addresses and phone numbers.
- **Chemicals in Inventory module** - where the user enters chemical property and storage information, etc.

The user can navigate to each of these modules freely to add, delete or edit the

information. Tier2 Submit has virtually unlimited capacity so even companies with thousands of facilities can use the software effectively. Tier2 Submit is also designed with basic and advanced search features, so facilities, SERCs, LEPCs and Fire Departments can search by county or State for efficient regulatory submission or emergency planning tasks.

Getting Tier2 Submit

You can obtain the latest Tier2 Submit information and a free copy of the software at the Tier2 Submit web site http://www.epa.gov/osweroe1/content/epcra/tier2.htm

CAMEO in brief

CAMEO is a suite of software programs you can use to plan for and respond to chemical emergencies. It was developed for frontline chemical emergency planners and responders by EPA's Chemical Emergency Preparedness and Prevention Office (EPA CEPPO) and the National Oceanic and Atmospheric Administration's Office of Response and Restoration (NOAA OR&R). CAMEO includes a set of databases, or modules, a toxic gas dispersion model, and an electronic mapping program. CAMEO runs on Microsoft Windows and Apple Macintosh computers.

You can use CAMEO in two main ways:

- To access, store, and evaluate information needed for emergency response. Firefighters, police officers, and other emergency workers know that a response can be hampered by lack of accurate information about the substance spilled and safe response actions. CAMEO is designed to help you quickly access just such information , when you need it at the scene of a response.
- To develop emergency plans for your community. It's especially designed to help you meet the requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III).

CAMEO initially was developed because NOAA recognized the need to assist first responders with easily accessible and accurate response information. Since 1988, EPA CEPPO and NOAA OR&R have collaborated to further development of

CAMEO.

Note: While CAMEO is highly compatible with Tier2 Submit and an excellent tool for emergency planning and response, facilities, SERCs, LEPCs and Fire Depts do not need CAMEO to enter and submit Tier II data.

Getting CAMEO

You can obtain the latest CAMEO information and a free copy of the software at the CAMEO web site http://www.epa.gov/osweroe1/content/cameo/index.htm

Technical Support

Tier2 Submit was developed by NOAA and EPA and is now maintained by the RMP Reporting Center. For **Tier2 Submit technical support, please call 301-429-5018 or e-mail: userrmp.usersupport@csc.com**. Monday-Friday 8am-4:30pm Eastern.

For answers to questions about completing your **Tier II information**, please see the Tier II Instructions or contact the Environmental Protection Agency (EPA) RCRA, Superfund & EPCRA Call Center at 1-800-424-9346 or TDD (800) 553-7672. Monday-Friday 9am-5pm Eastern.

TOC < PREV NEXT >

CHAPTER 2 - What do I need to get Started?

In this chapter, you'll find both the system hardware and software requirements in addition to the installation instructions for Tier2 Submit.

Hardware Requirements

PC: Intel-compatible Pentium-class computer; 256 MB RAM, hard disk drive with 60 MB of free hard drive space, SVGA color display.

Macintosh: Macintosh computer with a G3, G4, or G5 processor; 256 MB RAM, hard disk drive with 60 MB of free hard drive space.

Software requirements

You may use Tier2 Submit with either:

PC: Windows 2000 (Service Pack 4), Windows XP (Service Pack 2).

Macintosh: Mac OS 10.3.9 or 10.4.

You also need an Internet browser.

Installation procedures

1. Go to http://www.epa.gov/osweroe1/content/epcra/tier2.htm and follow the instructions for downloading Tier2 Submit 2007.

   The software can take up to 40 minutes to download from a dial up connection

   Important 2006 Users! - DO NOT DELETE Tier2Submit 2006 - You may need your old version (Tier2Submit 2006) to export your data into the new version (Tier2Submit2007).

2. After the software has downloaded, click on the Tier2Submit Installer icon and follow the on screen instructions (Click "Next" and then "Finish" - This will create a **Tier2Submit2007** folder on your computer's C drive).

   If you experience any trouble downloading or installing Tier2 Submit 2007, please contact the RMP Reporting Center at 301-429-5018 or e-mail: userrmp.usersupport@csc.com.

Import last year's Tier2 Submit data into Tier2 Submit 2007

Note: If you have last year's submission file (zip file created during electronic submission) skip to step 2. If you did not create a submission file last year or cannot locate it, start at step 1.

1. Locate last year's Tier2 Submit program. Go to **File** on the top menu bar and click "Create Submission". Choose "All Records" and click "Start Submission Validation". On the next screen click "Electronic File". Next on the "Save As" window, name your submission (e.g., AcmeChem2006.zip) and be sure to name the file with the .zip extension. On the following screen click the "Done" button.

   Now you have successfully exported your 2006 Tier2 Submit data. Now to import into Tier2Submit2007.

2. Open up the Tier2Submit2007 program.

   From the **Facilities** *module in Tier2 Submit (If you are not in the* **Facilities** *module go to* **File** *on the top menu bar and click Open and then select Facilities from the list).*

   Go to **File** from the top menu bar and click "Import/Export".
   Click the "Import Files" button on the next window.
   On the next window choose "Browse" and find the directory where you saved the zip file (Tier2 Submit 2006 submission). Click on the zip file and then click the "Open" button.
   Click OK on the pop up window and then the "Done" button.

   Congratulations you have successfully imported your 2006 data into Tier2Submit2007!

TOC < PREV NEXT >

CHAPTER 3 - Entering Data

In this chapter a new user will learn how to enter Tier II facility, contact and chemical information into Tier2 Submit. The user will also learn how to validate, print and export the data for either a Single Facility or Multiple Facilities

Some points to remember while entering your Tier II information:

- There are three parts to the instructions: **Entering Data, Validating Data** and **Submitting Data.**
- Federally required fields are marked with a blue asterisk * State required fields are marked with a red **X.**
- Your data is automatically saved as you enter it, there is no separate "save" function.
- If you need data field descriptions use Tier2 Field Descriptions or State Tier2 Field Descriptions.

Entering Data - Single Facility

*Federally required fields are marked with a blue asterisk * State required fields are marked with a red X. Your data is automatically saved as you enter it, there is no separate "save" function*

Facilities Module

1. Type in your facility address information and be sure to fill in all the required fields (marked with a blue asterisk *)
2. Next proceed to enter the appropriate data in the **Location & ID** Tab.

Location & ID

3. Enter the SIC code(s) and any Dun&Bradstreet Numbers if applicable (some states require additional IDs).

Note: You must click once into the blank ID type field to bring up the ID type pull down menu.

4. Enter the number of employees at the facility.
5. Enter the facility's Latitude/Longitude if the state has requested it.

   See "How to report a facility latitude and longitude" for further details

6. Enter method of finding Lat/Long and Description of the Lat/Long location if

applicable.

7. Click the box "Check if chemicals are identical to last years submission" if applicable.

   Next proceed to the "Contacts" Tab.

Contacts

8. Read the Federal Contact requirements on the window and the additional State Contact requirements (if applicable).

9. Click the "Add Contact" button.

10. Enter the Owner/Operator's contact information. If the Owner Operator is a Business name - enter the Business/Corporation Name in the Last Name field.

11. Choose the phone type from the pull down list and then enter the appropriate phone number.

12. Be sure to choose Owner/Operator from the "Contact Type" pull down list (click in the blank field for the pull down list).

13. Click "Done".

14. Click the "Add Contact" button again.

15. Enter the first Emergency Contact's information.

16. Choose the 24-hour phone type from the pull down list then enter the appropriate phone number.

17. Choose Emergency Contact from the "Contact Type" pull down list.

18. Feel free to enter any other phone numbers for the Emergency Contact (**24 hour number is federally required**).

19. Click "Done".

    Back at the Contacts Tab

20. Repeat previous steps for the 2nd emergency contact (if applicable) and for any additional state required contacts.

    When all contacts have been entered

21. Click on the "State Fields" tab.

State Fields

22. Enter the appropriate data into any state requested fields.

Next, click on the **Chem Inventory List** hot button at the top of the Facilities module.

Chemicals in Inventory module

23. Enter Chemical Name (you can use the "Lookup Chemical Name" feature as a tool but please not that this list includes additional chemicals that are not regulated by EPCRA).

24. The CAS# may have been entered automatically if you used the "Lookup Chemical Name" feature. If not, please enter the CAS# if applicable.

25. Check off EHS and/or Trade Secret if applicable.

    The Physical State & Quantity tab should be open. If not, click the "Physical State & Quantity" Tab.

Physical State & Quantity

26. Check off all Physical States, Hazards and Health Effects that apply.

27. Enter the number of days that the chemical is onsite (1-366).

28. Actual weight of chemical is required in some states; you must enter actual weight in the Average and Maximum fields (if marked with an X).

29. All states require the Weight Estimate code. Click the field Estimate Code Average and Maximum field to choose the chemical's weight range from the pull down list.

30. Some states require "Max amount in largest container". Enter amount in pounds if applicable.

31. Click the "Storage Locations" tab.

Storage Locations

32. Choose the appropriate Type, Pressure and Temperature storage codes from the pull down lists.

33. Enter the physical location of the chemical into the Location Field. (If the location is confidential type the word "Confidential" button in the Location field).

34. Enter the amount of the chemical at that particular storage location into the "Amount" field and choose the proper unit from the "Units" pull down list.

> **Reminder:** Federally required fields are marked with a blue asterisk *
>
> State required fields are marked with a red X.

35. If the reported chemical is located in multiple places at the facility repeat steps 32-34 for each location of the reported chemical at the facility.

36. If the reported chemical is a mixture click the "Mixture Components" Tab if the Chemical is a pure substance skip to step 43.

Mixture Components

37. Check off the EHS field if the mixture component is an EHS.

38. Enter the CAS # of the mixture component.

39. Enter the Component's Chemical Name into the Component field (you may use the "Lookup Chemical Name" button to find the component's name).

40. Enter the percentage of the component in the mixture and choose either Weight or Volume from the wt/vol field's pull down list.

41. Repeat steps 37-40 if there are multiple components in the mixture.

42. Click "State Fields" tab.

State Fields

43. Make sure all the appropriate information is entered into any state requested fields.

Next...

44. If the facility is reporting multiple chemicals click the New Chemical In Inventory hot button on the top of the window and repeat steps 23-43 for each additional chemical.

After all the chemicals in inventory have been entered

45. Click the Facility Record hot button from the top of the window.

Facilities module

46. Click the "Certification" Tab

Certification

47. Check off the appropriate optional attachments if applicable (Some state may require optional attachments).

48. Type in the name of the owner/operator or the owner/operator's authorized representative with official title in the "Signature" Field.

49. Type the date into the "Date" field (e.g., 02/25/05)

If necessary click the **Notes** *tab and type any notes to the receiving agency*

You have finished entering your first facility's chemical inventory information into Tier2 Submit! now on to validation.

Validating the data

50. To check all the fields for completion go to the **Record** menu on the top menu bar and click "Validate Record".

51. If any there is any missing data click the "Go to Field" button on the pop up window - If not, click "OK" and skip to step 55.

52. Enter the missing information into the data field and return to the Facility record screen (To quickly navigate to the Facility Record - Go to **File** from the top menu bar and choose Open, then click "Facilities").

> **Note:** You must be in the **Facilities** module to validate your record.

53. Go to the **Record** menu on the top menu bar and click "Validate Record" again.

54. If there is still missing data repeat steps 50-53 - If not click "OK" and skip to **Submitting Tier II Report** (step 55).

Submitting Tier II reports

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

55. Go to the **File** menu on the top menu bar and click "Create Submission".

    Found Set is the default and your Found set is the one facility you just entered.

56. Click the "Start Submit Validation" button.

    Validation Passed

57. Click the "State Submission Requirements" button to review your state's reporting procedures for 2007

58. After reviewing your state's submission requirements - Choose either "Create Electronic File" (Go to step 59) or one of the Paper Report options (Go to step 61) as a submission method, whichever your state prefers.

Electronic Submission

59. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME in Vermont reporting year 2007 = ACME_VT2007.zip).

Note: If your state prefers to receive the Tier2 Submit on diskette or CD please save the facility's Tier2 Submit file to the media . If your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New for 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

60. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen

Paper Submission

61. After you have clicked "Create Complete Paper Report" or "Create Original Style Paper Report".....click the "Print Report" button.

62. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette/CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm.**

TOC < PREV NEXT >

Entering Data - Multiple Facilities

*Federally required fields are marked with a blue asterisk * State required fields are marked with a red X.*
Your data is automatically saved as you enter it, there is no separate "save" function

Facilities Module

1. Type in your facility address information and be sure to fill in all the required fields (marked with a blue asterisk *)
2. Next proceed to enter the appropriate data in the **Location & ID** Tab.

Location & ID

3. Enter the SIC code(s) and any Dun&Bradstreet Numbers if applicable (some states require additional IDs).

Note: You must click once into the blank ID type field to bring up the ID type pull down menu.

4. Enter the number of employees at the facility.
5. Enter the facility's Latitude/Longitude if the state has requested it.

   See "How to report a facility latitude and longitude" for further details

6. Enter method of finding Lat/Long and Description of the Lat/Long location if applicable.

7. Click the box "Check if chemicals are identical to last years submission" if applicable.

   Next proceed to the "Contacts" Tab.

   Contacts

8. Read the Federal Contact requirements on the window and the additional State Contact requirements (if applicable).

9. Click the "Add Contact" button.

10. Enter the Owner/Operator's contact information. If the Owner Operator is a Business name - enter the Business/Corporation Name in the Last Name field.

11. Choose the phone type from the pull down list and then enter the appropriate phone number.

12. Be sure to choose Owner/Operator from the "Contact Type" pull down list (click in the blank field for the pull down list).

13. Click "Done".

14. Click the "Add Contact" button again.

15. Enter the first Emergency Contact's information.

16. Choose the 24-hour phone type from the pull down list then enter the appropriate phone number.

17. Choose Emergency Contact from the "Contact Type" pull down list.

18. Feel free to enter any other phone numbers for the Emergency Contact (**24 hour number is federally required**).

19. Click "Done".

    Back at the Contacts Tab

20. Repeat previous steps for the 2nd emergency contact (if applicable) and for any additional state required contacts.

    When all contacts have been entered

21. Click on the "State Fields" tab.

State Fields

22. Enter the appropriate data into any state requested fields.

Next, click on the **Chem Inventory List** hot button at the top of the Facilities module.

Chemicals in Inventory module

23. Enter Chemical Name (you can use the "Lookup Chemical Name" feature as a tool but please not that this list includes additional chemicals that are not regulated by EPCRA).

24. The CAS# may have been entered automatically if you used the "Lookup Chemical Name" feature. If not, please enter the CAS# if applicable.

25. Check off EHS and/or Trade Secret if applicable.

    The Physical State & Quantity tab should be open. If not, click the "Physical State & Quantity" Tab.

Physical State & Quantity

26. Check off all Physical States, Hazards and Health Effects that apply.

27. Enter the number of days that the chemical is onsite (1-366).

28. Actual weight of chemical is required in some states; you must enter actual weight in the Average and Maximum fields (if marked with an X).

29. All states require the Weight Estimate code. Click the field Estimate Code Average and Maximum field to choose the chemical's weight range from the pull down list.

30. Some states require "Max amount in largest container". Enter amount in pounds if applicable.

31. Click the "Storage Locations" tab.

Storage Locations

32. Choose the appropriate Type, Pressure and Temperature storage codes from the pull down lists.

33. Enter the physical location of the chemical into the Location Field. (If the location is confidential type "Confidential" into the Location field).

34. Enter the amount of the chemical at that particular storage location into the "Amount" field and choose the proper unit from the "Units" pull down list.

Reminder: Federally required fields are marked with a blue asterisk *

State required fields are marked with a red X.

35. If the reported chemical is located in multiple places at the facility repeat steps 32-34 for each location of the reported chemical at the facility.

36. If the reported chemical is a mixture click the "Mixture Components" Tab if the Chemical is a pure substance skip to step 43.

Mixture Components

37. Check off the EHS field if the mixture component is an EHS.

38. Enter the CAS # of the mixture component.

39. Enter the Component's Chemical Name into the Component field (you may use the "Lookup Chemical Name" button to find the component's name).

40. Enter the percentage of the component in the mixture and choose either Weight or Volume from the wt/vol field's pull down list.

41. Repeat steps 37-40 if there are multiple components in the mixture.

42. Click "State Fields" tab.

State Fields

43. Make sure all the appropriate information is entered into

any state requested fields.

Next...

44. If the facility is reporting multiple chemicals click the **New Chemical In Inventory** hot button on the top of the window and repeat steps 23-43 for each additional chemical.

After all the chemicals in inventory have been entered

45. Click the **Facility Record** hot button from the top of the window.

Facilities module

46. Click the "Certification" Tab

Certification

47. Check off the appropriate optional attachments if applicable (Some state may require optional attachments).

48. Type in the name of the owner/operator or the owner/operator's authorized representative with official title in the "Signature" Field.

49. Type the date into the "Date" field (e.g., 02/25/04)

If necessary click the **Notes** *tab and type any notes to the receiving agency*

You have finished entering your first facility's chemical inventory information into Tier2 Submit! now on to validation.

Validating the data

50. To check all the fields for completion go to the **Record** menu on the top menu bar and click "Validate Record".

51. If any there is any missing data click the "Go to Field" button on the pop up window - If not, click "OK" and skip to step 55.

52. Enter the missing information into the data field and return to the Facility record screen (To quickly navigate to the Facility Record - Go to **File** from the top menu bar and choose Open, then click "Facilities").

> **Note:** You must be in the **Facilities** module to validate your record.

53. Go to the **Record** menu on the top menu bar and click "Validate Record" again.

54. If there is still missing data repeat steps 50-53 - If not click "OK" and skip to **Entering data for the next facility** (step 55).

Entering data for the next facility

- If your next facility is in any way similar to the facility previously entered (same addresses, chemicals or contacts) you may duplicate the facility and change the appropriate data to save time. To do this go to **Record** on the top menu bar and choose "Duplicate Facility" then proceed to repeat steps 1-54 changing the appropriate data when necessary .
- If your next facility does not have duplicate or similar information simply click the "New Facility" button on the top the window and repeat steps 1-54.
- If you do not have another facility to enter proceed to step 56

Submitting Tier II reports

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

To create electronic submission files (Tier II Chemical Inventory Reports saved on diskette or attached to e-mail) OR printed paper Tier II Chemical Inventory Reports for a group of facilities you must first start a Search to properly select the facilities you need to submit.

56. Go to **Record** on the top menu bar and select "Show all Records".

57. Go to **Search** on the top menu bar and select "Start Search".

There are several ways you can search Tier2 Submit.

If you would like to ***submit facilities to a particular State*** *:*

- pick the State from the pull down list and then click the "Search" button.

If you would like to ***submit facilities to a particular County*** *:*

- type the County into the "County" field and then click the "Search" button.

After your search Tier2 Submit will display the found facilities in the **Facilities** *module in List view.*

58. Go to the File menu on the top menu bar and click "Create Submission".

    Found Set is the default and your Found set are the facilities you just searched for (e.g., only ACME Chemical facilities in Vermont).

59. Click the "Start Submit Validation".

    Validation Passed

60. Click the "State Submission Requirements" button to review your state's reporting procedures for 2007

61. After reviewing your state's submission requirements - Choose either "Create Electronic File" (Go to step 62) or one of the Paper Report options (Go to step 64) as a submission method, whichever your state prefers.

    Electronic Submission

62. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME facilities in Vermont reporting year 2007 = ACME_VT2007.zip).

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facilities' Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

63. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

64. After you have clicked "Create Complete Paper Report" or "Create Original Style Paper Report", click the "Print Report" button.

65. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette/CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you need to make multiple submissions (to another state or another LEPC) - return to step 56 to start a new search and submit again

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm.**

TOC < PREV NEXT >

Tier2 Submit Field Descriptions

Facilities	
Field Name	**Field Description**
Facility Name	Enter the full name of your facility (and company identifier where appropriate).
Department	Enter the full name of the facility department that is reporting
Street Address	
Street	full street address or state road of the facility
City	city in US or territory where facility is located
County	County, parish, island or district where facility is located
Fire District	Local Fire Department District where facility is located
State	State or Territory where facility is located
Zip	5 digit zip code where the facility is located
Mailing Address	
Street	full mailing street address of the facility or facility's parent company
City	mailing address city
State	mailing address State
Zip	mailing address zipcode
Country	mailing address Country
SIC	Enter the primary Standard Industrial Classification (SIC) code

Dun & Bradstreet Facility Code	Primary Dun & Bradstreet number for the facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. If your firm does not have this information, contact the State or regional office of Dun & Bradstreet to obtain your facility number or have one assigned.
RMP	EPA Facility ID given to the facility by the EPA for use with Risk Management Plan (only if applicable)
NAICS	North American Industry Classification System - Industry Classification System that is replacing the SIC. For more info visit Census - NAICS
Community Right to Know #	Number required by the State of Washington for applicable facilities
State ID	Number /code given to the facility by the state
Latitude	facility latitude
Longitude	facility longitude
Method for determining Latitude and Longitude	What method did the facility use to obtain LAT/LONG
Description of location identified by Latitude and Longitude	Where at the facility was the lat /long obtained (i.e plant entrance)
Number of employees	Number of employees that work at the facility
Check if all chemical in inventory are identical to last years submission	
I have submitted a site plan	Check this box if you have submitted a site plan the state, LEPC and fire dept. or are going to submit a site plan with the Tier 2 Submit submission
I have attached a description of dikes and other safeguards/measures	Check this box if you are going to attach a description of dikes and other safeguards/ measures with the Tier 2 Submit submission
I have attached a list of site coordinates abbreviations	Check this box if you are going to attach a list of site coordinate abbreviations with the Tier 2 Submit submission
Failed Tier2 Submit validation	This box with be automatically checked if the report did not pass the minimum requirements for submission
State / Local Fees Total	Total fees paid

Signature	Name of Owner/operator or authorized representative
Date Signed	Date the Owner/Operator or the authorized representative signed the submission

Contacts

[illegible]	[illegible]
First Name	First Name of contact - if entering the owner/ operator DO NOT enter a corporation name if this facility is not individually owned. Enter the operator.
Last	Last Name of the contact - if entering the owner/operator DO NOT enter a corporation name if this facility is not individually owned. Enter the operator.
Address	Mail address for the contact listed (Only the Owner/Operator is federally required). This mailing address may contain street address, post office box, or rural route number/box number
City	City name for address listed
State	State code for address listed
Zip	Zip code for address listed.
Country	Country for the address listed
Title	Title of the contact
E-mail	E-mail address for the contact
Phone Type	Choose a phone type for the contact from this field's pull down menu *Reminder 24-hour phone is required for the facility's emergency contact*
Phone #	type the appropriate phone number into this field for each phone type *Reminder be sure to include the area code*
Contact Type	Choose the appropriate contact type for each contact from this field's pull down menu *Reminder both Owner/Operator and Emergency Contact are federally required

Chemicals in Inventory

Field Description	Field Description
CAS #	Chemical Abstract Service (CAS) registry number - To find the CAS number of a chemical, consult the Material Safety Data Sheet (MSDS) for the chemical or product.
Chem Name	Chemical Name - enter the pure chemical, trade name, brand name or the company's code name for the substance in the space provided.
EHS	check off if the chemical reported is an Extremely Hazardous Substance or contains any ingredients (at a concentration greater then 1%) that are on the Extremely Hazardous Substances List *Tier 2 Submit will automatically check off EHS if an EHS chemical is chosen from the "Lookup Chemical Name" feature
Trade secret	DO NOT check off this data field UNLESS you are the manufacturer of a trade secret product which is being entered under this chemical description block. If you are withholding the name of a chemical in accordance with the criteria specified under EPCRA, Section 322, enter the generic chemical and check off the trade secret box.
Physical State	• Pure - check off if the chemical reported is a pure substance • Mixture - check off if the chemical reported is a mixture • Solid - check off if the chemical reported is a solid when used • Liquid - check off if the chemical reported is a liquid when used • Gas - check off if the chemical reported is a gas when used

Hazards	• Fire - check off if the chemical is or includes products which are flammable, combustible liquid, pyrophoric, and/or oxidizer as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Pressure - check off if the chemical is or includes products which are explosive or a compressed gas as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Reactive - check off if the chemical is or includes products which are unstable reactives, organic peroxides, and/or water reactive as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR)
Health Effects	• Acute - check of if the chemical is or includes products which are highly toxic, corrosive, toxic, irritants, sensitizers and other chemicals which cause an adverse effect to a target organ, which manifests itself after a long period of time following exposure or after repeated contact with the substance defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Chronic - check of if the chemical is or includes products which are carcinogens, mutagens or teratogens and other hazardous chemicals that cause an adverse effect to a target organ that manifests itself after a long period of time following exposure or after repeated contact with the substance as defined by 1910.1200 of

	the Title 29 Code of Federal Regulations (CFR)
Chemical information identical to previous year	check off this box if the information for this chemical is the same as the previous reporting year
Days On Site	Total number of days during the calendar year the chemical was located at the facility
Maximum Daily Amount	The maximum amount of each chemical at your facility should be based on the highest quantity of the substance (in pounds) that was stored at any one time during the calender year.
Max Code	Maximum Daily Amount Code- the maximum range of each chemical at your facility should be based on the highest quantity of the substance (in pounds) that was stored at any one time during the calender year.
Average Daily Amount	The average amount of each chemical at your facility should be based on the average quantity of the substance (in pounds) that was stored during the calender year.
Avg Code	Average Daily Amount Code - the average range of each chemical at your facility should be based on the average quantity of the substance (in pounds) that was stored during the calender year.
Max Amount in Largest Container	Maximum amount of reported chemical at your facility in the largest container (in pounds) that was stored at any one time during the calender year.

Storage Codes	• Type - choose the type of chemical storage container that the reported chemical was stored in during the calendar year from the pull down menu in this field • Press - choose the appropriate pressure storage code for the reported chemical from the pull down menu in this field • Temp - choose the appropriate temperature storage code for the reported chemical from the pull down menu in this field
Location	Type the location of each storage container at the facility. Each row represents one storage location (i.e. Chlorine tank #1 = Building 2 Quad 4)
Max Amount at Location	Type the maximum amount of the reported chemical that was stored at this location during the calendar year
Unit	Choose the Unit of measurement for the reported chemical at this location (Most states prefer pounds)
Mixture Components EHS	Check off if the mixture component reported is an Extremely Hazardous Substance or the component contains any ingredients (at a concentration greater then 1%) that are on the Extremely Hazardous Substances List
Mixture Components CAS	Chemical Abstract Service (CAS) registry number - To find the CAS number of a chemical, consult the Material Safety Data Sheet (MSDS) for the chemical or product
Component	Enter the pure chemical, trade name, brand name or the company's code name for the substance in the space provided
%	Number that represents the percentage of the component in the chemical being reported

CHAPTER 4 - Modify Tier II information

In this Chapter you will learn how to modify your Tier II information within Tier2 Submit. This chapter includes instructions on how to:

- Add a Facility
- Add a Contact
- Add a Chemical

- Delete a Facility
- Delete a Contact
- Delete a Chemical

- Change a Facility
- Change a Contact
- Change a Chemical

Add Facility

There are two ways to add a facility

- To add a facility that has similar Facility, Contact or Chemical information to a previously entered facility.

  - Click the rolodex icon on the left of the window to scroll through any previously entered facilities, choose the facility that is the most similiar to the new facility you would like to enter.

  - Go to the **Record** menu on the top menu of the program and choose Duplicate facility. Now you may navigate through the windows to enter/edit the data for the new facility as appropriate.

- To start a completely new facility record - Simply click the New Facility button on the top of the window.

Add Contact

1. Click the Contact List button on top of the window (Tier2 Submit will list the contacts already associated with the selected facility).
2. Click the New Contact button from the top of the window.
3. Enter all the appropriate contact data into the fields.

   In the third block you must associate the new contact to one or more facilities.
4. Click the "Add Facility" button.
5. Click on the facility you want to add the contact to (The facility will have the little black bar to the left of the year when selected).
6. Then click the "Select" button.

   Repeat steps 4-6 if you would like to associate this new contact with any other facilities.

Add a Chemical to Inventory

If you have more than one facility entered into Tier2 Submit here is a quick tip (If you only have one facility skip to step 2).

1. Click the Rolodex icon on the left side of the window to "flip" through the facility records you have already entered - Choose the facility record that you would like to add a chemical to, then...
2. Click the Chem Inventory List button on the top of the window.
3. Click the New Chemical In Inventory button on top of the window.
4. Enter all the appropriate data.

Delete Facility

1. Click the View List button from the top of the window.
2. Click on the Facility you would like to delete (a little black bar to the left of the year indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Facility".

   Quick tip - Use the Rolodex on the left side of the window to choose the facility you want to delete then go to the **Record** on the top menu bar and choose Delete Facility.

Delete Contact

1. Click the Contact List button from the top of the window.
2. Click on the Contact you would like to delete (a little black bar to the left of the last name indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Contact".

Delete a Chemical from Inventory

1. Click the Chem Inventory List button from the top of the window.
2. Click on the Chemical you would like to delete (a little black bar to the left of the last name indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Chemical in Inventory".

Change a Facility's information

1. Click the View List button from the top of the window.
2. Click on the Facility you would like to change (a little black bar to the left of the year indicates that the record is selected).
3. Click the View Record button.
4. Proceed to navigate through the data fields to change the appropriate information.

   The program will save any changes automatically.

Change a Chemical's information

1. Click the Chem Inventory List button from the top of the window.
2. Click on the Chemical you would like to change (a little black bar to the left of the last name indicates that the record is selected).
3. Click the View Record button from the top of the window.
4. Proceed to navigate through the chemical's data fields to change the appropriate information.

   The program will save any changes automatically.

CHAPTER 5 - Validating Data

Validation

Validation is Tier2 Submit's way of checking that the minimum required fields for Tier II Chemical Inventory Reports are complete. This saves time for both the receiving agency and the reporting facility.

To save time validate after you enter each facility.

- After you have entered all of the facility, contact and chemical information - Go to the facility record you wish to validate then go to **Record** from the top menu bar and choose "Validate Record".
- If the minimum fields for submission are complete a pop up window will appear stating that the facility has passed all validation checks. Click the "OK" button to complete the validation process.
- If a field did not have all the appropriate information for submission click the "Go to Field" button from the pop up window and correct the data. Then navigate back to the **Facilities** module (Go to the **File** menu choose **Open** and then "Facilities" from the list). Now check all the facility information again by going to **Record** from the top menu bar and choose "Validate Record".
- If another field did not have all the appropriate information for submission repeat the last step until your facility has all the minimum fields completed for submission.

Make a Validation Report

A user can view or print a validation report with Tier2 Submit.

- From the **Facilities** module go to the **File** menu and choose "Make Validation Report".

- The Tier2 Submit Validation report window appears and you can choose to make a validation report for the Current Record or for the "Found Set" of records.
- After choosing to make a validation report for either the Found Set or the Current Record, another window appears. You have the choice of viewing or printing the validation report in this window.
- When you "view" the validation report use the **File** menu and "Close" to return to your Facility record.

TOC < PREV NEXT >

CHAPTER 6 - Submitting Data!

After you have validated the facility you would like to submit. Follow the submission steps below:

If you only have one facility entered into Tier2 Submit:

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

1. Go to the **File** menu on the top menu bar and click "Create Submission".

   Found Set is the default and your Found set is the one facility you just entered.

2. Click the "Start Submit Validation" button.

   The facility passed if you completed validation before this step. If not see Chapter 5- Validation.

3. Click "State Submission Requirements" to double check your state's 2004 Tier II reporting procedures.

4. After reviewing your state's submission requirements choose either "Create Electronic File" (Go to step 5) or "Create Complete Paper Report" (Go to step 7) or "Create Original Style Paper Report" (Go to step 7).

   Electronic Submission

5. After you have clicked "Create Electronic File", in the "Save As" pop up

window type the name of the file (make a unique facility identifier (e.g.= ACME in Maryland reporting year 2007 = ACME_MD2007).

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facility's Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

6. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

7. After you have clicked "Create Complete Paper Report" or "Create Original Style Report", click the "Print Report" button.
8. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette / CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you have more than one facility entered into Tier2 Submit:

After you have validated the facilities you would like to submit. Follow the submission steps below:

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

To create electronic submission files (Tier II Chemical Inventory Reports

saved on diskette or attached to e-mail) OR printed paper Tier II Chemical Inventory Reports for a group of facilities you must first start a Search to properly select the facilities you need to submit.

1. Go to **Record** on the top menu bar and select "Show all Records".
2. Go to **Search** on the top menu bar and select "Start Search".

> *There are several ways you can search Tier2 Submit.*
>
> *If you would like to* ***submit facilities to a particular State*** *:*
>
> - pick the State from the pull down list and then click the "Search" button.
>
> *If you would like to* ***submit facilities to a particular County*** *:*
>
> - type the County into the "County" field and then click the "Search" button.
>
> *After your search Tier2 Submit will display the found facilities in the* **Facilities** *module in List view.*

3. Go to the File menu on the top menu bar and click "Create Submission".

   Found Set is the default and your "Found set" are the facilities you just searched for (e.g., only ACME Chemical facilities in Maryland).

4. Click the "Start Submit Validation".

   The facility passed if you completed validation before this step. If not see Chapter 5- Validation.

5. Click "State Submission Requirements" to double check your state's 2004 Tier II reporting procedures.
6. Choose either "Create Electronic File" (Go to step 7) or "Create Complete Paper Report" (Go to step 9) or "Create Original Style Report" (Go to step 9).

   Electronic Submission

7. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME facilities in Maryland reporting year 2007 = ACME_MD2007.zip).

   Note: *The Tier2 Submit submission file can consist of multiple facilities!*

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facilities Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

8. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

9. After you have clicked "Create Complete Paper Report" or "Create Original Style Report", click the "Print Report" button.
10. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette / CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you need to make multiple submissions (to another state or another LEPC) - return to step 1 to start a new search and submit again.

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm.**

TOC < PREV NEXT >

CHAPTER 7 - Importing / Exporting

To import Tier2 Submit submissions*:

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

1. Save the zip files (Tier2 Submit submissions) to a single directory (folder) on your computer or network.

   For example: C:\Tier II submissions

   From the **Facilities** *module in Tier2 Submit (If you are not in the* **Facilities** *module go to* **File** *on the top menu bar and click "Open" and then select "Facilities" from the list).*

2. Go to **File** from the top menu bar and click "Import/Export".
   a. If you are importing multiple zip files check the "Batch (multiple file) Import" box before step 3.

3. Click the "Import Files" button on the next window.

4. On the pop up window browse to find the directory where you saved the zip file (s) (Tier2 Submit submissions).

   Example: C:\Tier II Submissions

5. Highlight the zip file and click the "Open" button.

a. If you are importing multiple zip files select the first zip file in the directory. All zip files will be imported into Tier2 Submit 2007 from that directory.

6. Click "OK" on the next pop up window and then click "Done" on the following screen.

* Tier2 Submit 2007 will only take zip files created by Tier2 Submit 2003 and later. If you have a submission from Tier2 Submit 2001 or 2002 and do not have access to Tier2 Submit 2002 or 2003, contact the RMP Reporting Center **at 301-429-5018 or e-mail: userrmp.usersupport@csc.com**. Monday-Friday 8am-4:30pm eastern.

If you would like to import your Tier2 Submit data in CAMEO see Chapter 7 of the CAMEOfm User's Manual. CAMEOfm and the User's Manual can be downloaded from http://www.epa.gov/osweroe1/content/cameo/index.htm

---

Exporting Tier2 files:

Exporting should **NOT** be utilized by a reporting party. Exporting is a function for receiving agencies **ONLY**. States, LEPCs and Fire Depts. can use this command to export Tier2 Submit files to CAMEO or another program.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

To export a particular group of facilities you must first start a Search to properly select the facilities you need to export.

1. Go to **Record** on the top menu bar and select "Show all Records".
2. Go to **Search** on the top menu bar and select "Start Search".

There are several ways you can search Tier2 Submit.

If you would like to ***export facilities from a particular State*** *:*

- pick the State from the pull down list and then click the "Search" button.

If you would like to ***export facilities from a particular County*** *:*

- type the County into the "County" field and then click the "Search" button.

If you would like to ***export a single facility out of your list of facilities****:*

- type the facility name into the "Facility Name" field and then click the "Search" button.

(Or simply pick the facility from the Facility List and choose "Current Record" from the Import/Export screen).

After your search Tier2 Submit will display the found facilities in the **Facilities** *module in List view.*

3. Go to the **File** menu on the top menu bar and click "Import/Export".

   Found Set is the default and your Found set are the facilities you just searched for (i.e only facilities in VT).

4. Click the "Export Files" button.

5. In the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= All facilities in Vermont reporting year 2007 = VT_Tier2_2007.zip).

6. Click "Save" and then click "Done".

The zip file created after a Tier2 Submit submission or export is CAMEO import ready! See Chapter 7 of the CAMEOfm User's Guide for details.

CAMEOfm and the User's Manual can be downloaded from http://www.epa.gov/osweroe1/content/cameo/index.htm

---

TOC < PREV NEXT >

CHAPTER 8 - Reference Information

This chapter contains basic reference information you may find useful as you work with Tier2 Submit: explanations of the functions of Tier2 Submit button commands, menu commands, data descriptions and an overview of the legislation on which Tier II Chemical Inventory reports are based.

TIER 2 SUBMIT

Frequently Asked Questions

Tier2 Submit FAQs are now available at: http://www.epa.gov/osweroe1/content/epcra/tier2submitfaq.htm

Hot Buttons

Tier2 Submit has hot buttons which allow the user to navigate from module to module (e.g.= from Facilities to Chemical in Inventory) and between Record view and List view.

Record view is the default view and is best for entering new or editing old data within Facilities, Contacts or Chemicals in Inventory.

List view is best for seeing all records that have been entered in Tier2 Submit (e.g. = view all the facilities or all the contacts for a facility or all the chemicals in a particular facility's inventory).

The hot buttons are located on the top of each module window in both Record view and List view.

Below is a list of all the hot buttons and their functions organized by module.

NOTE: The [Help] button will take you to the Users Manual in any module.

Facilities module (Record View)

- [View List] This button switches over to the List view which allows the user to see all the facilities that have been entered into Tier2 Submit.
- [Chem Inventory List] This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- Contact List This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- New Facility This button creates a new facility record

Facilities module (List View)

- View Record This button switches over to the Record view which allows the user to add or edit information for the selected facility.

- Chem Inventory List This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- Contact List This button closes the **Facilities** module and opens the **Contacts** module in List view (if there are not any contacts already entered then the Contacts Record view is opened).

- New Facility This button creates a new facility record

- View All Facilities This button only appears at the top of the window if the user is working with a "found set" of records.
(e.g.= User searches Tier2 Submit for all facilities in Anne Arundel County, Maryland. The "found set" is only those facilities in Anne Arundel County, Maryland. The View all Facilities button clears the "found set" and shows all the facility records).

Contacts module (Record View)

- View List This button switches over to the List view which allows the user to see all the contacts that are associated with the currently selected facility.

- Facility List This button shows all the facilities associated with the current contact. (if no facilities are associated with the contact then all the facilities are show in List view).

- [New Contact] This button creates a new contact record.
- [Back / Close] This button closes the Contacts module and takes the user back to the Facility Record.

Contacts module (List View)

- [View Record] This button switches over to the Record view which allows the user to add or edit information for the selected contact.
- [Facility List] This button shows all the facilities associated with the selected contact. (Click on a contact to select - a black bar to the left of the last name indicates selection).
- [New Contact] This button creates a new contact record.
- [View All Contacts] This button only appears at the top of the window if the user is working with a "found set" of records.

  (e.g.= User clicks the [Contact List] button from the **Facilities** module and a short list of three contacts appears in the next window. These three contacts are associated with the currently selected facility. Clicking the "View all Contact" button simply clears the "found set" and shows all the contacts records in Tier2 Submit).
- [Back / Close] This button closes the Contacts module and takes the user back to the Facility Record.

Chemicals in Inventory module (Record View)

- [View List] This button switches over to the List view which allows the user to see all the chemicals associated with the currently selected facility.
- [Facility Record] closes the **Chemical in Inventory** module and shows the currently selected facility in Record view.
- [Contact List] This button closes the **Chemicals in Inventory** module and opens the **Contacts** module in List view.

- New Chemical in Inventory This button creates a new chemical in inventory record in Record view.
- Back / Close This button closes the Contacts module and takes the user back to the Facility Record.

Chemicals in Inventory module (List View)

- View Record This button switches over to the Record view which allows the user to add or edit information for the selected chemical.
- Facility Record closes the **Chemical in Inventory** module and shows the currently selected facility in Record view.
- Contact List This button closes the **Chemicals in Inventory** module and opens the **Contacts** module in List view.
- New Chemical in Inventory This button creates a new chemical in inventory record in Record view.
- View All Chemical Inventories This button appears at the top of the window if the user is working with a "found set" of chemical in inventory records. The "found set" are the chemicals associated with the currently selected facility.

  Click View All Chemical Inventories to show all the Chemicals in Inventory for all facilities.
- Back / Close This button closes the Contacts module and takes the user back to the Facility Record.

TOC < PREV NEXT >

File menu

Open

Hierarchical menu which gives Tier2 Submit users access to either one of the other modules (Facilities, Contacts or Chemical in Inventory). Users can only have one module open at a time, so opening a module via this command would automatically close any open module.

For example - The Facilities module is open and the user goes to the **Open** *command from the* **File** *menu, then chooses either Contacts or Chemicals in Inventory - The Facilities module closes and the chosen module opens.*

Close

This command closes the open module.

Import/Export

Takes user to a view in the Navigator module where options are displayed for importing or exporting data. This view would not otherwise be visible to users.

Make Validation Report

Only available from the Facility Module. Takes user to a view in the Navigator module where options are displayed for making a validation report. This view would not otherwise be visible to users.

Create Submission

Only available from the Facility module. Takes user to a view in the Navigator module where options are displayed for submit validation then options for making electronic or printed Tier II reports. This view would not otherwise be visible to users.

Exit

Exits from the Tier2 Submit program (all data is saved automatically).

Edit menu

Copy

Copies selected contents of a field.

Paste

Pastes copied contents into an applicable field.

Select All

Selects all contents of a field.

Spelling

Check Selection - spell checks the selected text.

In the Contacts module:

Show Related Facilities- shows all the facilities that are associated with the currently selected contact (in List view).

In the Chemicals in Inventory module:

Show Related Contacts- shows all the contacts for the currently selected facility (in List view).

Show Related Facility- shows the facility that is associated with the currently selected chemical (in Record view).

Sort

User can sort records by any field in each of the three modules.

(e.g.= user would like to sort all the facilities (in List view) by county in the Facilities module- user goes to the **Record** menu and clicks **Sort**. To clear the default sort the user clicks the "Clear all" button then selects FCounty from list to the left then the "Move" button and then the "Sort" button. Now all the facilities are sorted alphabetically by county).

Show All

This command clears all "found sets" and shows all the records in the opened module.

New

In the Facilities module:

New Facility - creates new facility record (in Record view).

In the Contacts module:

New Contact - creates new contact record (in Record view).

In the Chemicals in Inventory module:

New Chemical in Inventory - creates new chemical in inventory record (in Record

view).

Duplicate

Only available in the Facilities module.

This command duplicates the currently selected facility.

Delete

In the Facilities module:

Delete Facility - deletes the currently selected facility record.

In the Contacts module:

Delete Contact - deletes the currently selected contact record.

In the Chemicals in Inventory module:

Delete Chemical in Inventory - deletes the currently selected chemical in inventory record.

Delete All

available only from List view

This command deletes all the records from the open module or all of the "found set" in the open module.

Revert Record

Available only from Record view

Changes the current record back after changes have been made in any module.

Validate Record

Available only from the Facilities module

Checks all of the selected facilities' Tier II information for minimum requirements.

Go To

This command takes the user to records in each open module.

First - first record in the list
Previous- record the user was at last
Next- next record in the list
Last- last record of the list

TOC < PREV NEXT >

Search menu

Start Search

Starts the Basic Tier2 Submit search window where a user can search within each of the three modules.

Append Search

Starts the Basic Tier2 Submit search where a user can add to the existing search for better or broader results.

Subset Search

Starts the Basic Tier2 Submit search window where a user can search the "found set" in any module to narrow results.

Clear Search

Clears the previous search results' "found set".

Scripts Menu

The **Scripts** Menu - **no commands are available in this menu** for Tier2 Submit

Help menu

Tier2 Submit Help

This is the only command under the Help menu. Takes the user to this manual.

Statutes and Regulations

What is the Emergency Planning and Community Right-to-Know Act (EPCRA)?

The Emergency Planning and Community Right-to-Know Act of 1986 establishes requirements for Federal, State and local governments and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. This law built upon EPA's Chemical Emergency Preparedness Program (CEPP) and numerous State and local programs aimed at helping communities to better meet their responsibilities in regard to potential chemical emergencies. The Community Right-to-Know provisions, through the creation of State Emergency Response Commissions and Local Emergency Planning Committees, help increase the public's knowledge and access to information on the presence of hazardous chemicals in their communities and releases of these chemicals into the environment. States and communities, working with facilities, will be better able to improve chemical safety and protect public health and the environment.

Regulations

- EPCRA Regulations: 40 CFR Chapter I, Sub-chapter J
- Amendments to Hazardous Chemical Reporting Thresholds, Streamlining Requirements. 40 CFR Parts 355 and 370 (Signed May 21, 1998; Published June 8, 1998) (HTML)
- Emergency Planning and Community Right-to-Know Programs; Amendments to Hazardous Chemical Reporting Thresholds for Gasoline and Diesel Fuel at Retail Gas Stations; Final Rule (Signed February 4, 1999; Published February 11, 1999) (HTML)
  Also available in PDF.

For more Tier II information please see EPCRA Information

TOC < PREV NEXT >

How to report your facility latitude and longitude

There are four data elements to report for latitude and longitude:

1. Lat/long Description
2. Lat/Long Method
3. Reporting the Latitude and Longitude

1.) Choosing your Lat/Long Description

You will first need to choose your Lat/Long "Description" which represents the exact location of your latitude and longitude values. The most common Lat/Long "Descriptions" are "PG" for Plant Gate or entrance and "CE" indicates the Center of your facility. Tier2 Submit contains a list of codes to be used for this element.

Latitude and Longitude Description of Reference Point Codes

AB- Administrative Building: a building, structure, or portion thereof that houses the administrative functions of a facility as opposed to production or manufacturing activities.

AE- Atmospheric Emissions Treatment Unit: equipment installed for the express purpose of treating chemical emissions prior to their release into the atmosphere.

AM- Air Monitoring Station: equipment installed at a predetermined location for the automatic, manual, or periodic collection of environmental air samples.

AS- Air Release Stack: a free-standing vertical structure constructed for the conveyance and release of chemical emissions into the air.

AV- Air Release Vent: a horizontal structure constructed for the release of chemical emissions into the air, typically from the side or roof of a building.

CE- Center of Facility: a representative center point within the boundary of a facility. FC Facility Centroid: the calculated center of a contiguous facility.

IP- Intake Pipe: a pipe or intake opening constructed for the collection and conveyance of water.

LC- Loading Area Centroid: the calculated center of a portion of a facility associated with loading activities.

LF- Loading Facility: the portion of a facility associated with loading and/or transshipment activities.

LW- Liquid Waste Treatment Unit: Equipment installed for the express purpose of treating chemical emissions prior to their release to water, publicly owned treatment works (POTW) or off-site transfer.

NE- NE Corner of Land Parcel: the northeast most corner or boundary of a land parcel.

NW- NW Corner of Land Parcel: the northwest most corner or boundary of a land parcel.

OT- Other.

PC- Process Unit Area Centroid: the calculated center of a portion of a facility associated with processing and/ or manufacturing activities.

PF- Plant Entrance (Freight): the entrance to a facility associated with transshipment activities.

PG- Plant Entrance (General): the front gate or general entrance of a facility.

PP- Plant Entrance (Personnel): the entrance to a facility associated with employees.

PU- Process Unit: the portion of a facility associated with processing and/or manufacturing activities.

SD- Solid Waste Treatment/Disposal Unit: the portion of a facility associated with the treatment and/or disposal of solid waste.

SE- SE Corner of Land Parcel: the southeast most corner or boundary of a land parcel.

SP- Lagoon or Settling Pond: the portion of a facility designed to accommodate sedimentation or settling of chemical by-products necessitated by the manufacture, production, or use of chemicals.

SS- Solid Waste Storage Area: the portion of a facility associated with the storage of solid waste.

ST- Storage Tank: a receptacle or chamber used for storing bulk fuels or chemicals.

SW- SW Corner of Land Parcel: the southwest most corner or boundary of a land parcel.

UN- Unknown

WA- Wellhead Protection Area: an area at the earth's surface buffering a wellhead.

WL- Well: a shaft drilled in the earth for purposes such as obtaining subsurface drinking water, or collecting groundwater monitoring samples.

WM- Water Monitoring Station: a location or study area for the automatic, manual, or periodic collection of water samples.

WR- Pipe Release to Water: the point at which a pipe constructed for the conveyance and release of water-borne chemical emissions reaches a water body.

2.) Choosing your Method

Next, you need to choose a "Method" for determining your Lat/Long. There are four general methods to determine your site latitude and longitude: Global Positioning Systems (GPS); Geographic Information Systems (GIS); Internet Internet based finders; and paper maps. These methods are described below in order of accuracy (GPS is the most accurate way to determine a lat/long, paper maps is the least

accurate method). Although it is preferable that you use the most accurate method available to you, all four methods are acceptable. You must enter your latitudinal and longitudinal coordinates in decimal degrees.

(a) Global Positioning Systems (GPS). If you have access to a GPS unit, take the reading at the place specified by the Lat/Long "Description" that you choose. Most GPS units allow you to choose between display in decimal degrees and degrees/ minutes/seconds. You should choose decimal degrees.

(b) Geographic Information Systems (GIS). If you have your own GIS, navigate to your street and pinpoint the exact location that you choose for your Lat/Long "Description" field. Your GIS should report (usually on a status bar) the latitude and longitude of the focus point or map marker. Your GIS should also allow a preference for display in degrees/minutes/seconds or decimal degrees. Choose decimal degrees.

(c) Internet-based address finders. There are numerous Internet sites for viewing maps and finding specific locations. EPA has developed the TRI Facility Siting Tool to allow facilities that submit Toxic Release Inventory (TRI) reports to obtain their latitude and longitude. This tool may also be used by facilities submitting Tier II Chemical Inventory reports. The tool asks you to enter either a zip code or a city and state. It then provides a map that you can zoom into and pan sideways, to identify your location. Once you get to the maximum zoom-in level, it will show a satellite photo over the map, to further assist in pinpointing your exact location.

The TRI Facility Siting Tool can be accessed at the following web address: http://www.epa.gov/tri/report/siting_tool/index.htm

(d) Paper maps. Choose a map that shows a relatively small area, and that has latitude/longitude tick marks along the edges. A county map book with a small section of the county on each page, or a USGS topographic map is ideal. County map books are available in many public libraries, bookstores and office supply stores. USGS maps are available in many libraries or may be purchased directly from the USGS by submitting a written request to:

Distribution Branch of the USGS
P.O. Box 25286
Denver Federal Center
Denver, CO 90225
Phone: (303) 236-5900.

Do not use a common road atlas with one state map per page or state highway maps because they generally show too large an area to obtain adequate latitude/longitude value. After finding your exact location on the map, see where that point lies in

relation to the latitude and longitude tick marks.

You must convert decimal degrees/minutes/seconds to decimal degrees. Use the following link from the University of Kentucky to covert degrees/minutes/seconds to decimal degrees - http://www.uky.edu/KGS/gis/converter.htm

The table below lists all of the codes to be used for this element and provides a brief description of each method.

Code Description of Method

A1- Address Matching House Number: derived from a point corresponding to a house or building number along a street segment.

A2- Address Matching - Block Face: derived from a calculated midpoint of one side of a street segment with regard to odd or even addresses.

A3- Address Matching - Street Centerline: derived from a calculated midpoint and centerpoint of a street segment.

A4- Address Matching - Nearest Intersection: derived from the intersection closest to a house or building number.

A5- Address Matching – Primary Name: derived from the primary name of a township or city.

A6- Address Matching – Digitized: derived from hands-on use of computer-based mapping tools.

AO- Address Matching - Other: derived through the use of non-specific matching techniques.

C1- Census Block - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Block as defined by the U.S. Bureau of the Census.

C2- Census Block/Group - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Block/ Group as defined by the U.S. Bureau of the Census.

C3- Census Block Tract - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Tract as defined by the U.S. Bureau of the Census.

CO- Census - Other: derived from other Census-defined areas, such as Metropolitan Statistical Areas (MSAs).

GO- GPS-Unspecified: derived through the use of an unspecified GPS device.

G1- Global Positioning System (GPS) Carrier Phase Static Relative Positioning Technique: derived through the use of a GPS device employing Carrier Static Relative Positioning Technique.

G2- GPS Carrier Phase Kinematic Relative Positioning Technique: derived through the use of a GPS device employing Phase Kinematic Relative Positioning Technique.

G3- GPS Code Measurements (Pseudo Range) Differentially Corrected: derived through the use of a GPS device where measurements have been corrected for error based on the existence of known base stations relative to the study area.

G4- GPS Code Measurements (Pseudo Range) Precise Positioning Service: derived through the use of a GPS device employing real-time precise positioning techniques. G5- GPS Code Measurements (Pseudo Range) Standard Positioning Service SA OFF: derived through the use of a GPS device when the Department of Defense Selective Ability was turned off.

G6- GPS Code Measurements (Pseudo Range) Standard Positioning Service SA ON: derived through the use of a GPS device when the Department of Defense Selective Ability was turned on.

G7- GPS Code Measurements (Pseudo Range) Standard Positioning Service Corrected using Canadian Active Control System: derived through the use of a GPS device employing the Canadian Active Control System.

I1- Interpolation – Map: derived from a paper or other non-digital map

I2- Interpolation – Photo: derived from an aerial photograph

I3- Interpolation – Satellite: derived from a satellite image.

I4- Interpolation - Digital map source (TIGER): derived from a digital map, mapping software or mapping tool.

I5- Interpolation - SPOT: derived from a SPOT image.

I6- Interpolation - MSS (Multi-spectral Scanner): derived from a MSS image

I7- Interpolation - TM (Thematic Mapper): derived from a thematic mapper

L1- Loran C: derived from the use of a Loran-C positioning device

P1- Public Land Survey-Section: a coordinate pair corresponding to a point from a public land survey.

P2- Public Land Survey-Quarter Section: a coordinate pair corresponding to a point from a public land survey

P3- Public Land Survey-Eighth Section: a coordinate pair corresponding to a point from a public land survey.

P4- Public Land Survey-Sixteenth Section: a coordinate pair corresponding to a point from a public land survey.

P5- Public Land Survey-Footing: a coordinate pair corresponding to a point from a public Land survey.

S1- Classical Surveying Techniques: derived from traditional surveying techniques associated with construction activities.

UN- Unknown.

Z1- ZIP Code-Centroid: derived from the calculated center of a U.S. postal ZIP code.

Z2- ZIP+2 Code-Centroid: derived from an averaging of multiple street segments.

Approximately the size of a Census Block Group.

Z4- ZIP+4 Code-Centroid: derived from a calculated midpoint of one side of a street segment with regard to odd or even house or building numbers.

3.) Reporting Latitude and Longitude

Once you have your latitude and longitude values, you'll need to make sure they are in the proper format, you will report latitude and longitude coordinates in “decimal degrees.” Enter only numerical data. Do not preface numbers with letters such as N or W to denote the hemisphere.

Default for the hemisphere is "+" for east and north. However because "+" is assumed by the system, you must leave that space blank for east and north. For west and south, enter a negative, "-," as the first character.

For example: Latitude 38.123456 Longitude -123.123456

Be careful not to reverse your latitude and longitude coordinates. Latitude in the 48 contiguous states ranges from 25° to 49°, while longitude ranges from -72° to -124°

TOC < PREV

INTEGRATED ENVIRONMENTAL MANAGEMENT, INC
SCREENING SURVEY DOCUMENTATION

Survey Number _____

Instrument/SN: 182678	Calibration Due: 11/24/04	Site Name: SMUS - Hicksville	Date: 12/17/03	Time: 9:15 AM
Instrument/SN	Calibration Due:	Location of Materials to be Surveyed: Adjacent to loading dock		
Instrument/SN	Calibration Due:	Roll-off Box Identifier: See below		

☒ Battery Check OK ☒ Source Check OK ☒ Other (specify) Background = 14-20 μR/h.

Radionuclide(s):	Release Criteria:	Source of Release Criteria:
~~Primarily Co-60, Co-137~~ source material	~~5000 dpm (beta/gamma) per 100 cm²~~ <30 pCi/gm	☐ Procedure No. (specify): ☐ USNRC Regulatory Guide 1.86 ☐ NUREG-1500 ☐ Attached calculation ☐ Indistinguishable from background ☒ Other (specify): 9/10/03 letter from IEM

Background Data:

Efficiency Data :

☐ Correction for surface covering included

Screening Survey Results

Item (pallet #)	Highest Measurement (include units)	Less Than Applicable Criterion (yes/no)	Action Taken
14	32	Y	CH
15	18	Y	CH
16	16	Y	CH
17	16	Y	CH
18	32	Y	CH
19	22	Y	CH
20	24	Y	CH
21	18	Y	CH
✓ 22	20	Y	CH

Notes, Calculations, Drawings, etc.

Measurement units are microrem/h.

Measurements were taken ~30 cm from each surface.

"Action Taken" column: CH indicates ship to Clean Harbors for disposal.

Survey performed by (print): PETER D. PIETRANTONIO	Signature: [signature]	Date: 12/17/03
Approved by (print): P.D.	Signature: P.D.	Date:

Copyright © 2003 Integrated Environmental Management, Inc.

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
PCA 229913

February 28, 1994

Local Emergency Planning Committee
c/o Civil Preparedness Office
140 15th Street
Mineola, NY 11501

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Prevention & Response
50 Wolf Road
Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

Fire Chief
Westbury Fire Department
Maple Avenue
Westbury, NY 11590

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

Fire Chief
Syosset Fire Department
Cold Spring Road
Syosset, NY 11791

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

Fire Chief
Hicksville Fire Department
E. Marie Street
Hicksville, NY 11801

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: 516 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: 516 334-1300 EXT. 2374 24 Hr Phone: 800 424-9300
CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7429-90-5 Trade Secret [ ] Chem Name: ALUMINUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [X] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 STOCK WAREHOUSE	[ ]
CAS 1344-28-1 Trade Secret [ ] Chem Name: ALUMINUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 STOCK WAREHOUSE	[ ]
CAS 7439-89-6 Trade Secret [ ] Chem Name: IRON Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 STOCK WAREHOUSE	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI MANAGER FACILITIES Joseph Macri 02-28-94
Name and official title of owner/operator OR owner/operator's authorized representative Signature Date signed

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: 516 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: 516 334-1300 EXT. 2374 24 Hr Phone: 800 424-9300
CHEMTREC
Name: Title:
Phone: 24 Hr Phone:

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret [ ] Chem Name: NICKEL Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	N 1 4 STOCK WAREHOUSE	[ ]
CAS [ ] Trade Secret [ ] Chem Name: Check all that apply: [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)		[ ]
CAS [ ] Trade Secret [ ] Chem Name: Check all that apply: [ ] Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)		[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted on pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true accurate and complete

JOSEPH MACRI — MANAGER FACILITIES — Joseph Macri — 02-28-94
Name and official title of owner operator OR owner operator's authorized representative — Signature — Date signed

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: ____ Title: ____
Phone: ( ) ____ 24 Hr Phone: ( ) ____

Important Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7440-02-0 Trade Secret [ ] Chem Name: NICKEL Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name: ____	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 7440-47-3 Trade Secret [ ] Chem Name: CHROMIUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name: ____	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 7440-48-4 Trade Secret [ ] Chem Name: COBALT Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name: ____	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted on pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — MANAGER FACILITIES — Joseph Macri — 02-28-94
Name and official title of owner/operator OR owner/operator's authorized representative — Signature — Date signed

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300
CHEMTREC
Name: ____ Title: ____
Phone: ( ) ____ 24 Hr Phone: ( ) ____

Important Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7429-90-5 Trade Secret [ ] Chem Name: ALUMINUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [X] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 1344-25-1 Trade Secret [ ] Chem Name: ALUMINUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 1314-23-4 Trade Secret [ ] Chem Name: ZIRCONIUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [ ] Delayed (chronic)	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true accurate and complete

JOSEPH MACRI — MANAGER FACILITIES — Joseph Macri — 02-28-94

Name and official title of owner/operator OR owner/operator's authorized representative — Signature — Date signed

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

EPA HAZARDOUS WASTE CODES
(Continued)

Code	Waste description
K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene.
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine.
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene.
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K123	Process wastewater (including supernates, filtrates, and washwaters) from the production of ethylenebisdithiocarbamic acid and its salt.
K124	Reactor vent scrubber water from the production of ethylenebisdithiocarbamic acid and its salts.
K125	Filtration, evaporation, and centrifugation solids from the production of ethylenebisdithiocarbamic acid and its salts.
K126	Baghouse dust and floor sweepings in milling and packaging operations from production or formulation of ethylenebisdithiocarbamic acid and its salts.
K131	Wastewater from the reactor and spent sulfuric acid from the acid dryer from the production of methyl bromide.
K132	Spent absorbent and wastewater separator solids from the production of methyl bromide.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.

DISCARDED COMMERCIAL CHEMICAL PRODUCTS, OFF-SPECIFICATION SPECIES, CONTAINER RESIDUALS, AND SPILL RESIDUES THEREOF--ACUTE HAZARDOUS WASTE

(AN ALPHABETIZED LISTING CAN BE FOUND AT 40 CFR 261.33.)

Code	Waste description
P001	2H-1-Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenylbutyl)-, & salts, when present at concentrations greater than 0.3%
P001	Warfarin, & salts, when present at concentrations greater than 0.3%
P002	1-Acetyl-2-thiourea
P002	Acetamide, N-(aminothioxomethyl)-
P003	2-Propenal
P003	Acrolein
P004	1,4,5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexa-chloro-1,4,4a,5,8,8a,-hexahydro-, (1alpha, 4alpha, 4abeta, 5alpha, 8alpha, 8abeta)-
P004	Aldrin
P005	2-Propen-1-ol
P005	Allyl alcohol
P006	Aluminum phosphide (R,T)
P007	3(2H)-Isoxazolone, 5-(aminomethyl)-
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-Aminopyridine
P008	4-Pyridinamine
P009	Ammonium picrate (R)
P009	Phenol, 2,4,6-trinitro-, ammonium salt (R)
P010	Arsenic acid H_3AsO_4
P011	Arsenic oxide As_2O_5
P011	Arsenic pentoxide
P012	Arsenic oxide As_2O_3
P012	Arsenic trioxide
P013	Barium cyanide

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 Sheffield Ave. • North Babylon, N.Y. 11703 • (631) 422-5777 • Fax (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

INVOICE

INVOICE NO: 98970
INVOICE DATE: 09/07/07

Sulzer Metco

1101 Prospect Avenue
Westbury, NY 11590

P

ATTN:Narian Feldhusen

TERMS:Net 30 Days
PAYMENT DUE:10/07/07

RECEIVED:08/30/07
PO NO: 4530082093
JOB NO:

QTY	DESCRIPTION	UNIT	AMOUNT
	*		
	Chemical Analysis		
	Sulzer Metco		
	Solid samples for TCLP/8 RCRA Metals		
3	Lab No. 273859 (.01-.03)	110.00	330.00
	Sample Pick-up Fee by Messenger		20.00

OK to Pay

SULZER METCO (US) INC.

SEP 10 2007

EHS DEPARTMENT

INVOICE TOTAL:	350.00
PAYMENT REC'D:	.00
BALANCE DUE:	350.00

ECOTEST LABORATORIES, INC. *ENVIRONMENTAL TESTING*

377 Sheffield Ave. • North Babylon, N.Y. 11703 • (631) 422-5777 • Fax (631) 422-5770
Email: ecotestlab@aol.com Website: www.ecotestlabs.com

INVOICE

INVOICE NO: 97885
INVOICE DATE: 06/11/07

Sulzer Metco

1101 Prospect Avenue
Westbury, NY 11590

ATTN:Marian Feldhusen

TERMS:Net 30 Days
PAYMENT DUE:07/11/07

RECEIVED:05/30/07
PO NO:
JOB NO:

QTY	DESCRIPTION	UNIT	AMOUNT
	*		
	Chemical Analysis		
	Sulzer Metco		
	Powder sample for Flash Point		
1	Lab No. 272309.01	22.00	22.00
	Liquid sample for 8 RCRA Metals, Flash Point and pH		
2	Lab No. 272309 (.02-.03)	114.00	228.00

INVOICE TOTAL:	250.00
PAYMENT REC'D:	.00
BALANCE DUE:	250.00

STANDARD TERMS AND CONDITIONS

Unless otherwise agreed in a formal contract, services provided by EcoTest Laboratories, Inc., are expressly limited to the terms and conditions stated herein.

TESTING PROTOCOLS: It is necessary for us to assume that the paperwork submitted with a sample describes the testing protocol desired. Any changes to this protocol must be submitted to EcoTest Laboratories, Inc. (EcoTest) in writing. However, if changes are made after the originally requested testing is initiated or has been completed, the client must accept payment responsibility. We cannot be responsible for holding times that are exceeded due to such changes. Please send all requests for changes to the attention of the sample manager.

RUSH ANALYSES: A surcharge is usually added to the list price if rapid reporting is requested. The surcharge may vary from 10% to 200% of the list price depending primarily on the turnaround time requested. Arrangements for rush analysis must be made in advance.

CONFIDENTIALITY: Strict confidentiality is maintained in all of our dealings with client. Confidentiality agreements, therefore, are signed willingly. In any instance where information is subpoenaed by and must be released to a regulatory or legal body, the client is promptly notified. Likewise, the client agrees to respect all such relationships of trust. Client agrees it will not use EcoTest's name and/or data in any manner which might cause harm to the company's reputation and/or business. Under no circumstances is the name of EcoTest to be published, either alone or in association with that of any other party, without its approval in writing.

BILLING: All fees are charged or billed directly to the client. The billing of a third party will not be accepted without a statement, signed by the third party, which acknowledges and accepts payment responsibility. (Note: We will not be responsible for the re-collecting of samples whose holding times have been exceeded due to late or unauthorized requests for third-party billing.) Minimum billing fee for service is $25.00.

PAYMENT TERMS: Payment in advance is required for all clients except those whose credit has been established with our company. For clients with EcoTest-approved credit, our standard terms are net 30 days, after which time a 1.5 % per month late charge is added to all unpaid balances. Any deviation in payment terms must be agreed to in writing. EcoTest has the right to ask for payment in advance, if the established payment terms are not adhered to. In the event of default in payment for services rendered, the client is responsible for reasonable collection and/or legal fees.

REPORTS: EcoTest prohibits use of its name in connection with any unauthorized conclusions based on its reports without its prior written consent.

SPECIAL REPORTS: Additional charges may be necessary for customized reports which differ significantly from the EcoTest format. Additional charges will apply for specific QA/QC report formats, such as data packages or data on disket. Please ask for a quotation. (NOTE: No reports or copies thereof will be sent to anyone other than the client unless the client formally requests us to do so in writing.)

LITIGATION: All costs associated with compliance to any subpoena or other official request for documents for testimony in a court of law, or for any other purpose relating to work performed by EcoTest, in connection with work performed for that client, shall be paid by the client. Such costs shall include, but are not limited to, hourly charge for persons involved in responding to subpoenas, travel and accommodations, mileage, attorney's preparation of testifier and advice of counsel in connection with responses to subpoenas, and all other expenses deemed reasonable and associated with said litigation.

CONTRACTS: All contracts are subject to review and approval by EcoTest's legal department and must be signed by a corporate officer.

RETENTION OF SAMPLES: After the analytical results have been reported, unused portions of samples are routinely retained in our storage facilities for a period of at least two weeks. Prior arrangements must be made if samples are to be held for longer periods. EcoTest may charge a monthly fee for long-term storage.

RETENTION OF REPORTS: After analytical results have been reported to the client, EcoTest shall retain copies of such analytical reports for a period of ten years, after which such reports may be destroyed. If client requests additional copiesof such analytical reports during retention period, an additional charge will apply for the preparation and printing of such reports.

WARRANTY AND LIMITS OF LIABILITY: In accepting analytical work, we warrant the accuracy of test results for the sample as submitted. The foregoing express warranty is exclusive and is given in lieu of all other warranties, expressed or implied. We disclaim any other warranties, expressed or implied, including a Warranty of Fitness for Particular Purpose and Warranty of Merchantability. We accept no legal responsibility for the purposes for which the client uses the test results. No purchase order or other order for work shall be accepted by the company which includes any conditions that vary from the above described Standard Terms and Conditions, and EcoTest hereby objects to any conflicting terms contained in any acceptance or order submitted by client.

FED. STD. NO. 313A
June 4, 1976
SUPERSEDING
Fed. Std. No. 313
July 23, 1971

FEDERAL STANDARD

MATERIAL SAFETY DATA SHEETS PREPARATION AND THE SUBMISSION OF

This standard was approved by the Commissioner, Federal Supply Service, General Services Administration, for the use of all Federal agencies.

S1. SCOPE AND PURPOSE. The requirements established herein provide a uniform system for preparation and submission of Material Safety Data Sheets to designated government activities. The data sheets will be used in connection with safety programs required by Code of Federal Regulations Title 29 "Occupational Safety and Health Administration (29 CFR)."

S2. APPLICABLE DOCUMENTS. (See appendix B.)

S3. APPLICATION. Government agencies shall reference this standard in commodity specifications, purchase descriptions, purchase orders, contracts and other purchase documents to assure inclusion of adequate requirements and clear instructions to contractors for the preparation and submission of Material Safety Data Sheets.

S4. DATA SUBMISSION. Data submission criteria is furnished in appendix A and instructions for completing and submitting the forms are furnished in appendix B. When data has been submitted for a particular commodity, no change in formulation affecting its hazardous characteristics is permitted without prior approval by the contracting officer. Unless there are changes affecting the characteristics and composition, only one submission to the addressee in S20.5 is required. However, contractors responding to invitations to bid and requests for quotation may either submit additional copies, or notify the contracting officer of the contract number and date of previous submissions. Data submission by the manufacturer will satisfy data requirements of their distributors, dealers, jobbers and retailers. Data obtained will be used within the Government as necessary to comply with Safety and Health Regulations promulgated under Public Law 91-596 (29 CFR) and to provide information necessary to assure safe operation and environmentally acceptable disposal of Government activities through positive control over hazardous characteristics of materials used.

S4.1. OTHER DATA. A copy of the text of each hazardous warning marking or a copy of each label required by statute, law, regulation or other conditions of the contract, including labels prepared in accordance with the "Guide to Precautionary Labels on Hazardous Chemicals", prepared by the Manufacturing Chemists' Association, Inc., shall be submitted with the Form OSHA-20 or DD Form 1813. Copies of Department of Transportation (DOT) and National Fire Protection Association (NFPA) labels need not be submitted, but merely identified.

S4.1.1. REFERENCE DATA. All data submissions shall identify contract number, complete noun nomenclature and National Stock Number (NSN) of the product and, where applicable, specification reference including specification number, type, grade, and class.

S5. CHANGES. When a Federal Agency considers that this standard does not provide for its essential needs, a statement citing inadequacies shall be sent in duplicate to the General Services Administration, Federal Supply Service, Office of Standards and Quality Control, Washington, DC 20406. The Administration will determine the appropriate action to be taken and will notify the submitting agency. Military activities shall submit comments to the Preparing Activity via the appropriate Departmental custodian.

APPENDIX A

S10. SCOPE. This appendix covers criteria for identification and certification of hazardous materials.

S10.1. HAZARDOUS MATERIAL IDENTIFICATION AND CERTIFICATION GUIDE

S10.1.1. GENERAL. Hazardous material identification data are required for all material which, by virtue of its potentially dangerous nature, requires controls to assure adequate safety to life and property. Hazardous materials are found in all Federal Supply Classes, and for classes not addressed in S10.1.2 judgment must be exercised to determine which must be controlled.

S10.1.2. FEDERAL SUPPLY CLASS CRITERIA. It is important to know if an item in a Federal Supply Class (FSC) composed predominantly of flammable or toxic material is actually not hazardous, or has merely not been identified. To assure positive and complete identification in these classes, a certified Material Safety Data Sheet is required for each item in the FSCs as indicated in Table I. Identification and certification shall also be required for items that would ordinarily be catalogued under one of the classes in Table I, but are catalogued in another class because of their specific use or included as parts of another item or kit. Table II lists classes in which only items having hazardous characteristics need be identified and certified.

TABLE I. FEDERAL SUPPLY CLASSES IN WHICH ALL ITEMS MUST BE IDENTIFIED AND CERTIFIED

FEDERAL SUPPLY CLASS	
6810	Chemicals
6820	Dyes
6830	Gases; Compressed and Liquified
6840	Pest Control Agents and Disinfectants
6850	Miscellaneous Chemical Specialties
7930	Cleaning and Polishing Compounds and Preparations
8010	Paints, Dopes, Varnishes, and Related Products
8030	Preservative and Sealing Compounds
8040	Adhesives
Group 91	(Packaged Products only)
9110	Fuels, Solid
9130	Liquids Propellants and Fuels, Petroleum Base
9135	Liquid Propellant Fuels and Oxidizers, Chemical Base
9140	Fuel Oils
9150	Oils and Greases: Cutting, Lubricating, and Hydraulic
9160	Miscellaneous Waxes, Oils and Fats

TABLE II. FEDERAL SUPPLY CLASSES IN WHICH ONLY HAZARDOUS ITEMS NEED TO BE IDENTIFIED

FEDERAL SUPPLY CLASS	TITLE	HAZARDOUS ITEMS REQUIRING IDENTIFICATION
1370	Pyrotechnics	Warning fusee, fire starter
1375	Demolition Materials	Explosive device
2640	Tire Rebuilding and tire and tube repair materials	Only items containing flammable or toxic compounds
3439	Welding and Brazing supplies	Only hazardous items such as cleaners, acids, flux and supplies that contain or produce hazardous fumes
3610	Printing, duplicating and bookbinding equipment	Flammable or toxic lithographic solutions
5610	Mineral Construction materials, bulk	Hazardous Items such as cutback asphalt, deck and floor covering, deck and surface underlay compound, sealing compound, flight deck compounds
5640	Wallboard, building paper, and thermal insulation materials	Asbestos cloth which has loose fibers or flyings that may become airborne
6135	Batteries, Primary	Lead-acid, and mercury batteries and alkaline (with electrolyte)
6505	Drugs, Biologicals, and official regents	Only hazardous items
6750	Photographic Supplies	Only items containing hazardous chemicals, solvents, thinners and cements
6780	Photographic sets, kits and outfits	(See FSC 6750)

7510	Office Supplies	Only hazardous items, such as solvents, thinners, cleaning fluids, flammable inks and varnishes
8510	Perfumes, Toilet preparations, and powders	Shipping containers, and pressurized containers with flammable propellants only
8520	Toilet Soap, Shaving Preparations, and Dentifrices	(See FSC 8510)
8720	Fertilizers	Only items containing weed and pest control or other harmful ingredients, or because of their composition, are hazardous
9920	Smoker's Articles and matches	Lighter Fuel and matches only

APPENDIX B

S20. SCOPE. This appendix covers instructions for preparation and submission of the Material Safety Data Sheet.

S20.1. APPLICABLE DOCUMENTS.

S20.1.1. PUBLICATION. The following documents form a part of this standard to the extent specified herein. Unless otherwise indicated, the issues in effect on date of invitation for bids or request for proposal shall apply.

GOVERNMENTAL

49CFR, Department of Transportation; Chapter 1, Hazardous Materials Regulations Board, Parts 171-179.

(Application for copies shall be addressed to the Superintendent of Documents, Government Printing Office, Washington, DC 20402)

NOTE: Regulations in 49 CFR are also published in the R. M. Graziano's Tariff. Hazardous Materials Regulations of the Department of Transportation respectively.

NONGOVERNMENTAL

Documentation of Threshold Limit Values, American Conference of Governmental Industrial Hygienists

(Application for copies should be addressed to American Conference of Governmental Hygienists, P. O. Box 1937, Cincinnati, Ohio 45201)

Manufacturing Chemists' Association
Manual L-1, Guide to Precautionary Labeling of Hazardous Chemicals.

MCA (Manufacturing Chemists' Association) CHEM-CARD Transportation Emergency Guide

(Application for copies should be addressed to the Manufacturing Chemists' Association, 1825 Connecticut Avenue, NW, Washington, DC 20000.)

Fire Protection Guide on Hazardous Materials (contains NFPA, 325A, 325M, 49, 491M and 704M)

(Application for copies should be addressed to National Fire Protection Association International, 60 Batterymarch Street, Boston, Massachusetts 02110)

Agent R. M. Graziano's Tariff, Hazardous Materials Regulations of the Department of Transportation.

NOTE: This Tariff publishes 49 CFR, Parts 170-179.

(Application for copies should be addressed to Association of American Railroads, American Railroads Building, 1920 "L" Street NW, Washington, DC 20036.)

American Society of Testing Materials, ASTM D 323 - Vapor Pressure of Petroleum Products (Reid Method)

(Application for copies should be addressed to American Society for Testing Materials, 1961 Race Street, Philadelphia, PA 19103.)

S20.2. MATERIAL SAFETY DATA SHEET FORMS. Department of Labor Form OSHA-20 (see Figure 1), Department of Defense DD Form, 1813 (see Figure 2) or one essentially similar, approved by OSHA, is required to be filled out on all hazardous materials as defined herein. If information is inapplicable to the material under consideration, the initials "N.A." (not applicable) shall be placed in that space.

S20.3. DEFINITIONS.

S20.3.1. HAZARDOUS MATERIAL. For the purpose of preparing the Material Safety Data Sheet, a hazardous material is defined as a material having one or more of the following characteristics; (a) has a flashpoint below 200°F(93.3°C) closed cup, or is subject to spontaneous heating or is subject to polymerization with release of large amounts of energy when handled, stored and shipped without adequate control; (b) has a threshold limit value below 1000 ppm for gases and vapors, below 500 mg/m^3 for fumes, and below 30 mppcf for dusts; (c) a single oral dose which will cause 50% fatalities to test animals when administered in doses of less than 500 mg per kilogram of test animal weight; (d) is a strong oxidizing or reducing agent; (e) causes first degree burns to skin in short time exposure, or is systematically toxic by skin contact; (f) in the course of normal operations, may produce dusts, gases, fumes, vapors, mists or smokes with one or more of the above characteristics; (g) produces sensitizing or irritating effects; (h) is radioactive; or (i) the item has special characteristics which in the opinion of the manufacturer could cause harm to personnel if used or stored improperly.

S20.4. INSTRUCTIONS.

S20.4.1. INSTRUCTIONS FOR SECTION I

S20.4.1.1. MANUFACTURER'S NAME AND ADDRESS. Mailing address, including ZIP Code, the Federal Supply Code for Manufacturers (FSCM), and name of certifying company official.

S20.4.1.2. EMERGENCY TELEPHONE NUMBER. Show area code, telephone number(s) and extension(s) and hours of operation at which further information may be obtained in the event of an emergency involving the material. List emergency after hours telephone number(s) if possible.

S20.4.1.3. CHEMICAL NAME AND SYNONYMS. Applies only to products consisting of a single element or compound, such as oxygen, or methylethyl ketone.

S20.4.1.4. TRADE NAME AND SYNONYMS. Include formula number or other definite designation of the product.

S20.4.1.5. CHEMICAL FAMILY. State generic name of single elements and compounds, such as "acid" or "ketone".

S20.4.1.6. FORMULA. Refers only to the chemical formula for single elements or compounds, not to the formulation of a mixture. Example: $C_2H_5COCH_3$

S20.4.1.7. NATIONAL STOCK NUMBER (NSN).[1/] As shown in contract or order.

S20.4.1.8. GROSS WEIGHT.[1/] To the next larger tenth of a pound.

S20.4.1.9. OUTSIDE PACKAGE DIMENSIONS.[1/] To the next larger tenth of an inch.

S20.4.1.10. NATIONAL FIRE PROTECTION ASSOCIATION STD. 704 M. SIGNAL.[1/] Show numerals and specific hazard symbol.

1/ NOTE: The Data Elements specified above that are peculiar to DD Form 1813 shall be supplied as an attachment when Form OSHA-20 is submitted.

S20.4.2. INSTRUCTIONS FOR SECTION II - HAZARDOUS INGREDIENTS.

S20.4.2.1. INGREDIENTS. A hazardous ingredient is a hazardous material in a mixture in sufficient concentration to produce enough flammable vapor or gas to ignite, or to produce acute or chronic adverse effects in doses which could result from normal or predictable misuse of the mixture containing it. Ingredients of a hazardous nature shall be noted by chemical name in one of the three divisions of Section II, viz., Paints, Preservatives, and Solvents; Alloys and Metallic Coatings; and Hazardous Mixtures of other liquids, solids, or gases. The listings of ingredients in the first division is self-explanatory. Metallic coatings listed in the second division refer to coating such as plating, cladding, and metalizing; and filler metal is any metal added in making a brazed, coldered, or welded joint. Filler metals shall be considered with the ingredients of rod coatings and core fluxes as single mixtures. The third division refers to other hazardous mixtures, such as abrasive blasting materials.

S20.4.2.2. COMPOSITION. The approximate percentage of each hazardous ingredient by weight or volume (specify) shall be shown to the nearest 5 percent. The percentages of any substance constituting less than 5 percent may be indicated as such. For mixtures, such as filler metals and their coatings and core fluxes in which the hazardous ingredients constitute very small proportions of the mixture, the hazardous ingredients shall be stated to the nearest 0.5 percent, and ingredients constituting less than 0.5 percent may be indicated as such.

S20.4.2.3. THRESHOLD LIMIT VALUE. The threshold limit value(TLV) for each hazardous ingredient in a mixture will be entered in the column provided, in accordance with instructions given in Section V.

S20.4.2.4. RADIOACTIVE MATERIAL. For any radioactive material, regardless of Federal Supply Classification, the name of the radionucleoid, its physical and chemical form, activity of the material in curies or fractions thereof, and the amount shall be entered.

S20.4.2.5. ADDITIONAL INFORMATION. If more space is needed in the first or second division, use the lines provided in the third division. Normally this space will be used for mixtures not falling in the other two divisions. In addition, addenda sheets may be added to the form.

S20.4.3. INSTRUCTIONS FOR SECTION III - PHYSICAL DATA.

S20.4.3.1. BOILING POINT. State the temperature at which the liquids boil, in degree F. and C., at a pressure of 760 mm Hg. For mixtures, a boiling range is acceptable.

S20.4.3.2. VAPOR DENSITY. State the relative density or weight of a vapor or gas (with no air present) compared with an equal volume of air. Values should be given in the ambient temperature range of 60° to 90° F. (15.6° to 32.2°C.) to facilitate field usage.

S20.4.3.4. SOLUBILITY IN WATER. Use the following terms to describe the solubility of the product by weight in distilled water at 50°F. (10°C.):

Negligible.....less than 0.1 percent
Slight.....0.1 - 1 percent
Moderate.....1 - 10 percent
Appreciable.....more than 10 percent
Complete.....in all proportions

S20.4.3.5. SPECIFIC GRAVITY. State the ratio of the weight of a volume of material to the weight of an equal volume of water at 68°F. (20°C.). This determines whether the material floats or sinks in water.

S20.4.3.6. PERCENTAGE VOLATILE BY VOLUME. State the percentage of the liquid or solid by volume that evaporates at the ambient temperature of 70°F. (21.1°C.). This applies to solids such as Napthalene.

S20-4-3-7. EVAPORATION RATE. State the ratio of the evaporation rate to that of either Butyl Acetate or Deithyl Ether. Insert the name of whichever is used.

S20.4.3.8. APPEARANCE AND ODOR. Give a brief description, e.g., viscous, colorless, liquid with aromatic odor.

S20.4.4. INSTRUCTIONS FOR SECTION IV - FIRE AND EXPLOSION HAZARD DATA.

S20.4.4.1. FLASH POINT. State the temperature in degrees F. and C. at which a liquid will give off enough flammable vapor to ignite when tested by the closed cup method. When multi-component paint systems are used and mixed in the field, the flash point of the individual components shall be noted.

S20.4.4.2. FLAMMABLE OR EXPLOSIVE LIMITS. State the range of gas or vapor concentrations (percent by volume in air) which will burn or explode if an ignition source is present. LEL means the lower explosive limit, and UEL means the upper explosive limit. Knowledge of the LEL will aid in determining the volume of ventilation needed for an enclosed space to prevent fires and explosions.

S20.4.4.3. EXTINGUISHING MEDIA. List the firefighting media suitable for use on the burning material. For certain specific chemicals, special formulations, in addition to the standard agents, are available for extinguishing fires. These should be indicated by generic name. The standard firefighting agents are: water fog , foam, alcohol foam, CO_2, and dry chemical.

S20.4.4.4. SPECIAL FIREFIGHTING PROCEDURES. If water is unsuitable, specify the firefighting media to be used. Also list any necessary personal protective equipment.

S20.4.4.5. UNUSUAL FIRE AND EXPLOSION HAZARDS. Specify such hazards and special conditions that govern them.

S20.4.5. INSTRUCTIONS FOR SECTION V - HEALTH HAZARD DATA.

S20.4.5.1. THRESHOLD LIMIT VALUE. Threshold limit value (TLV) refers to current figures of the American Conference of Governmental Industrial Hygenists. The TLV for single elements and compounds shall be entered here. For mixtures, the threshold limit value for each significant ingredient shall be noted in the column provided in Section II of the form. (See Section II above for explanation.) Express these values in millions of particles per cubic foot of air (mppcf), or in milligrams of particulate per cubic meter of air (Mg/m^3) for dust; and in milligrams of particulate per cubic meter of air (Mg/m^3), or in parts per million parts of air by volume (ppm) for gases, vapors, mists, fumes, and all other contaminates except dust. State the unit in which the TLV is expressed.

S20.4.5.2. EFFECTS OF OVEREXPOSURE. Describe most common sensations that the exposed person will feel, and their appearance.

S20.4.5.3. EMERGENCY AND FIRST-AID PROCEDURES. State emergency procedures to be used. Inhalation, skin or eye contact and oral ingestion, should be considered in recommending first-aid measures. The victim should be examined by a doctor as soon as possible after exposure.

S20.4.6. INSTRUCTIONS FOR SECTION VI - REACTIVITY DATA.

S20.4.6.1. STABILITY. Indicate, by cross or check, whether stable or unstable under reasonably foreseeable conditions of storage, use, or misuse. If unstable, list those conditions which may cause a dangerous reaction. Examples: Shock from dropping; temperature above 150°F. (65.6°C.).

S20.4.6.2. INCOMPATABILITY. Provide information on such common materials and contaminates with which the product may reasonably come into contact, to produce a reaction which would release large amounts of energy. If none or unknown, so state. State whether the material is an oxidizing material, acid, caustic alkali or corrosive. Identify container materials that will react and therefore must not be used.

S20.4.6.3. HAZARDOUS DECOMPOSITION PRODUCTS. List hazardous materials produced in dangerous amounts by burning, oxidation, or by heating in welding or burning, Thermal decomposition products, such as CO, CO_2, and hydrochloric acid from vinyl chloride plastics are examples.

S20.4.6.4. HAZARDOUS POLYMERIZATION. Hazard polymerization is that which takes place at a rate which releases large amounts of energy. Indicate by check or cross whether or not hazardous polymerization can occur. If so, list those reasonably foreseeable storage conditions which would start polymerization. Include the expected time period in which the inhabitors may be used up.

S20.4.7. INSTRUCTION FOR SECTION VII-SPILL OR LEAK PROCEDURES
Indicate any applicable precautions as: avoiding breathing gases and vapors; contact with liquids and solids; removing sources of ignition; any special equipment and personnel protective equipment required for cleaning up, such as glass or plastic scoops and respiratory devices; and disposal of spilled solids or liquids, such as flushing with water, returning material to container or manufacturer, burning, etc. All disposal must be in accordance with applicable federal, state, and local air and water pollution regulations. Guidance may be obtained from cognizant Medical, Safety and Engineering authorities.

S20.4.8. INSTRUCTIONS FOR SECTION VIII - SPECIAL PROTECTION INFORMATION
Indicate the type of personal protective equipment and local exhaust or general ventilation to be used and the precautions to be taken when using the product for its intended purpose, such as elimination of ignition sources.

S20.4.9. INSTRUCTIONS FOR SECTION IX - SPECIAL PRECAUTIONS. Indicate any special precautions to be taken, such as in handling or storing, to avoid reaction hazards. When applicable, indicate safe storage life of product in relation to reactivity. Also indicate any other general precuations to be taken; identify equipment and containers required for transfer and storage, temperature controls; provide specific instructions for safe disposal of empty containers, for cleaning reusable containers, for neutralizing cleaning media for safe disposal, and specific recommendations for safe disposal of the product: burning, dilution, burial, etc., also indicate protective clothing required.

S20.4.10. INSTRUCTIONS FOR SECTION X - TRANSPORTATION DATA. 1/
The following transportation data entries are to be provided consistent with 49CFR Subtitle B Chapter 1:

Proper Shipping (Article) Navy	49CFR 172.1; "Article": Column 49 CFR 172.5
DOT Classification	"Classed as": Column 49CFR 172.5
DOT Label	49CFR 172.3 "Label Required" Column 49CFR 172.5. If exempt from labeling show "No Labeling Required" and cite authorizing paragraph.
DOT Marking	Specific requirements for 49CFR Subpart H such as THIS SIDE UP
DOT Placard	Placard notation required 49CFR 174.584 to follow entry of article on the billing.
DOT Container Specification	49CFR, is applicable

(Transportation regulations of 49CFR are republished in Rocco Graziano's Tariff and the Motor Carriers' Explosives and Dangerous Articles Tariff.)

Emergency Accident Precautions and Procedures. Provide brief instructions, such as: Turn off ignition; no smoking or flares; keep people away; flush area with water; use carbon dioxide or dry chemical fire extinguisher.

An MCA CHEM-CARD-Emergency Transportation Guide number may be cited to satisfy this requirement.

After the entry in either "Emergency Accident Precautions and Procedures" or "Precuations to be taken in Transportation", indicate the appropriate DOT container specifications number, e.g., DOT-5A.

1/ NOTE: The data elements specified above that are peculiar to DD Form 1813 shall be supplied as an attachment when Form OSHA-20 is submitted.

S20.5. SUBMISSION OF DATA. Mail completed form as directed in the contract or order, or in the absence of specific mailing instructions, mark the contract or order number under the NSN and send a copy to each of the following addresses:

Commanding General
Army Materiel Development and
Readiness Command (DARC-SF)
5001 Eisenhower Avenue
Alexandria, Virginia 22304

Commanding Officer
Navy Fleet Material Support Office
Mechanicsburg, Pennsylvania 17055

Commanding General
Air Force Logistics Command (DSPX)
Wright Patterson AFB, Ohio 45433

Director
Defense Supply Agency (DSAH-OW)
Cameron Station
Alexandria, Virginia 22314

General Services Administration
Federal Supply Service (FMH)
Washington, D.C. 20406

S20.6. AVAILABILITY OF FORMS.

S20.6.1 Form OSHA-20 must be printed, reproduced, or copied locally.

S20.6.2 DD Form 1813 shall be obtained from the local Contract Administration Services Component at the following addresses, or copied locally:

Director of Business Affairs
Business Service Center (1FI)
General Services Administration
W. McCormack Building
Office & Courthouse
Boston, Massachusetts 02109

Director of Business Affairs
Business Service Center (2FI)
General Services Administration
26 Federal Plaza
New York, New York 10007

Director of Business Affairs
Business Service Center (3FI)
7th and D Streets, SW
Washington, D.C. 20407

Director of Business Affairs
Business Service Center (4FI)
General Services Administration
Peachtree Street, NW
Atlanta, GA 30309

Director of Business Affairs
Business Service Center (6FI)
General Services Administration
East Bannister Road
Kansas City, MO 64131

Manager, Gulf Coast Business
Service Center
General Services Administration
FOB Courthouse, 515 Rusk Street
Houston, TX 77002

Director of Business Affairs
General Services Administration
525 Market Street
San Francisco, CA 94105

Director of Business Affairs
Business Service Center (10FI)
General Services Administration
440 Federal Building
915 Second Avenue
Seattle, WA 98174

Manager, Mid-Atlantic Business
Service Center
General Services Administration
March Street
Philadelphia, PA 19106

Director of Business Affairs
Business Service Center (5FI)
General Services Administration
South Dearborn Street, 36th Floor
Federal Building
Chicago, IL 60604

Director of Business Affairs
Business Service Center (7FI)
General Services Administration
619 Taylor Street
Fort Worth, TX 76102

Director of Business Affairs
Business Service Center (8FI)
General Services Administration
Building 41, Denver Federal Center
Denver, CO 80225

Manager, Business Service Center
General Services Administration
300 North Los Angeles
Los Angeles, CA 90012

Commanding Officer
Navy Publications and Forms Center
5801 Tabor Avenue
Philadelphia, PA 19120

U.S. DEPARTMENT OF LABOR
Occupational Safety and Health Administration

Form Approved
OMB No. 44-R1387

MATERIAL SAFETY DATA SHEET

Required under USDL Safety and Health Regulations for Ship Repairing, Shipbuilding, and Shipbreaking (29 CFR 1915, 1916, 1917)

SECTION I

MANUFACTURER'S NAME	EMERGENCY TELEPHONE NO.
ADDRESS *(Number, Street, City, State, and ZIP Code)*	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
CHEMICAL FAMILY	FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS	%	TLV (Units)	ALLOYS AND METALLIC COATINGS	%	TLV (Units)
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)

SECTION III - PHYSICAL DATA

BOILING POINT (°F.)		SPECIFIC GRAVITY (H_2O=1)	
VAPOR PRESSURE (mm Hg.)		PERCENT, VOLATILE BY VOLUME (%)	
VAPOR DENSITY (AIR=1)		EVAPORATION RATE (_____ =1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

PAGE (1)

(Continued on reverse side)

Form OSHA-20
Rev. May 72

Figure 1

SECTION V - HEALTH HAZARD DATA
THRESHOLD LIMIT VALUE
EFFECTS OF OVEREXPOSURE
EMERGENCY AND FIRST AID PROCEDURES

SECTION VI - REACTIVITY DATA			
STABILITY	UNSTABLE		CONDITIONS TO AVOID
	STABLE		
INCOMPATABILITY *(Materials to avoid)*			
HAZARDOUS DECOMPOSITION PRODUCTS			
HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
	WILL NOT OCCUR		

SECTION VII - SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
WASTE DISPOSAL METHOD

SECTION VIII - SPECIAL PROTECTION INFORMATION		
RESPIRATORY PROTECTION *(Specify type)*		
VENTILATION	LOCAL EXHAUST	SPECIAL
	MECHANICAL *(General)*	OTHER
PROTECTIVE GLOVES	EYE PROTECTION	
OTHER PROTECTIVE EQUIPMENT		

SECTION IX - SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
OTHER PRECAUTIONS

PAGE (2)
GPO 930-540

Figure 1

Form OSHA-20
Rev. May 72

MATERIAL SAFETY DATA SHEET

Form Approved
Bureau Budget No. 45-R0338

SECTION I

MANUFACTURER'S NAME AND FSCM *(Federal Supply Code for Manufacturers)*	EMERGENCY PHONE NO.
ADDRESS *(Number, Street, City, State, and ZIP Code)*	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS
CHEMICAL FAMILY	FORMULA
FEDERAL STOCK NUMBER *(FSN)* / GROSS WEIGHT *(LBS)*	OUTSIDE PACKAGE DIMENSIONS *(Inches)*

[redacted]NATIONAL FIRE PROTECTION ASSOCIATION STD 704M SIGNAL

FLAMMABILITY_____ HEALTH_____ REACTIVITY_____ SPECIFIC HAZARD_____

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, AND SOLVENTS	%	THRESHOLD LIMIT VALUE *(Units)*	ALLOYS AND METALLIC COATINGS	%	THRESHOLD LIMIT VALUE *(Units)*
PIGMENTS			BASE METAL		
CATALYST			ALLOYS		
VEHICLE			METALLIC COATINGS		
SOLVENTS			FILLER METAL PLUS COATING OR CORE FLUX		
ADDITIVES			OTHERS		
OTHERS					

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	THRESHOLD LIMIT VALUE *(Units)*

SECTION III PHYSICAL DATA

BOILING POINT *(°F.)*		SPECIFIC GRAVITY *(H_2O=1)*	
VAPOR PRESSURE *(mm Hg.)*		PRECENT VOLATILE BY VOLUME *(%)*	
VAPOR DENSITY *(AIR = 1)*		EVAPORATION RATE (_____ = 1)	
SOLUBILITY IN WATER			
APPEARANCE AND ODOR			

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT *(Method used)*	FLAMMABLE LIMITS	LOWER EXPLOSIVE LIMIT	UPPER EXPLOSIVE LIMIT
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
UNUSUAL FIRE AND EXPLOSION HAZARDS			

DD FORM 1 JUN 71 1813 S/N 0102-026-1080 PLATE NO. 22473 (FRONT)

Figure 2

SECTION V HEALTH HAZARD DATA	THRESHOLD LIMIT VALUE			
	EFFECTS OF OVEREXPOSURE			
	EMERGENCY AND FIRST AID PROCEDURES			
SECTION VI REACTIVITY DATA	STABILITY	UNSTABLE		CONDITIONS TO AVOID
		STABLE		
	INCOMPATABILITY *(Materials to avoid)*			
	HAZARDOUS DECOMPOSITION PRODUCTS			
	HAZARDOUS POLYMERIZATION	MAY OCCUR		CONDITIONS TO AVOID
		WILL NOT OCCUR		
SECTION VII SPILL OR LEAK PROCEDURES	STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED			
	WASTE DISPOSAL METHOD			
SECTION VIII - SPECIAL PROTECTION INFORMATION	RESPIRATORY PROTECTION *(Specify type)*			
	VENTILATION	LOCAL EXHAUST		SPECIAL
		MECHANICAL *(General)*		OTHER
	PROTECTIVE GLOVES		EYE PROTECTION	
	OTHER PROTECTIVE EQUIPMENT			
SECTION IX SPECIAL PRECAUTIONS	PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING			
	OTHER PRECAUTIONS			
SECTION X TRANS. DATA	PROPER SHIPPING *(Article)* NAME			DOT CLASSIFICATION
	DOT LABEL	DOT MARKING	EMERGENCY ACCIDENT PRECAUTIONS AND PROCEDURES	
	DOT PLACARD	PRECAUTIONS TO BE TAKEN IN TRANSPORTATION		

PLATE NO. 22473 (BACK)

Figure 2

MILITARY CUSTODIANS:

Army - MU
Navy - SA
Air Force - 84

Review activities:

Army - WV, AT, ME, MI, EA, MD
Navy - TD, AS, SH
Air Force - 69
DSA - DH,CS, ES

User activities:

Army - WC
Navy - EC, OS, YD
Air Force - 05

Civil Agency Coordination Activities:

GSA - FSS
CPS
EPA
NIH
OSH
DOT

Preparing activity:

GSA-FSS

U. S. GOVERNMENT PRINTING OFFICE : 1976 - 210-814/1240

Orders for this publication are to be placed with General Services Administration, acting as an agent for the Superintendent of Documents. Single copies of this standard are available at the GSA Business Service Centers in Boston, New York, Philadelphia, Atlanta, Chicago, Kansas City, MO, Fort Worth, Denver, San Francisco, Los Angeles, and Seattle, WA. Additional copies may be purchased for 45 cents each from the General Services Administration, Specification Sales, Bldg., 197, Washington Navy Yard, Washington, DC 20407.

☆ U. S. GOVERNMENT PRINTING OFFICE : 1976—210-814/1240

FACSIMILE TRANSMITTAL
(&/or mail request)

PAGE 1 OF 6

DATE: 4 2 93

FROM: Deanna Matlock (SFR)

TO: (COMPANY NAME) Mitco

(IN CARE OF)

(ATTENTION:) Mr. Conroy

(STREET/POBOX)

(CITY/STATE/ZIP)

(PHONE NUMBER)

(FAX NUMBER) 516-338-2336

< X > MSDS
< > SPEC/DATA SHEET
// < > TOXICITY DATA
(IF AVAILABLE) < > OTHER LITERATURE
\\ < > BROCHURE

PRODUCT(S): Varcol 1

If you have any problems receiving the fax, please contact:

FROM: Sheila Richard Secretarial Assist. (713) 870-6172	Exxon Chemical Company Performance Products Intermediates Marketing	Houston, Texas

For future requests please call 1-800-231-6633.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS P.O. BOX 1272 HOUSTON, TEXAS 77001
A DIVISION OF EXXON CHEMICAL COMPANY A DIVISION OF EXXON CORPORATION

FIRST AID

EYE CONTACT

Flush eyes with large amounts of water, not less than 15 minutes. If irritation persists, get medical attention.

SKIN CONTACT.

Flush with large amounts of water, use soap if available. Remove gross, contaminated clothing, including shoes, and launder before reuse.

INHALATION.

Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.

INGESTION

If swallowed DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

ACUTE TOXICITY DATA IS AVAILABLE UPON REQUEST

WORKPLACE EXPOSURE LIMITS

OSHA REGULATION 29CFR1910.1000 REQUIRES THE FOLLOWING PERMISSIBLE EXPOSURE LIMITS:

A TWA of 100 ppm (525 mg/m3) for Stoddard Solvent
A TWA of 25 ppm (125 mg/m3) for Trimethyl Benzene

THE ACGIH RECOMMENDS THE FOLLOWING THRESHOLD LIMIT VALUES

a TWA of 100 ppm (525 mg/m3) for Stoddard Solvent
a TWA of 25 ppm (125 mg/m3) for Trimethyl Benzene

EXXON RECOMMENDS THE FOLLOWING OCCUPATIONAL EXPOSURE LIMITS.

100 ppm total hydrocarbon based on composition.

PRECAUTIONS

SPECIAL PRECAUTIONS:

Health studies have shown that many petroleum hydrocarbons pose potential human health risks which may vary from person to person. As a precaution exposure to liquids, vapors, mists or fumes should be minimized.

PERSONAL PROTECTION:

For open systems where contact is likely, wear safety glasses with side shields, long sleeves and chemical resistant gloves.
Where contact may occur, wear safety glasses with side shields.
Where concentrations in air may exceed the limits given in this section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH MSHA approved respirators may be necessary to prevent overexposure by inhalation.

VENTILATION

The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be stored and handled in a fume hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272, HOUSTON, TEXAS 77001
A Division of EXXON CHEMICAL COMPANY, A Division of EXXON CORPORATION

VARSOL 1 SOLVENT

PAGE 1
DATE PREPARED MAY 12, 1992
NO 92890627

SECTION 1 PRODUCT IDENTIFICATION & EMERGENCY INFORMATION

PRODUCT NAME. VARSOL 1 Solvent

CHEMICAL NAME
Not Applicable Blend CAS 8052-41-3

CHEMICAL FAMILY.
Petroleum Hydrocarbon

PRODUCT DESCRIPTION:
Clear colorless liquid with a petroleum odor

EMERGENCY TELEPHONE NUMBERS: EXXON CHEMICAL AMERICAS 713-870-6000
CHEMTREC 800-424-9300

SECTION 2 HAZARDOUS INGREDIENT INFORMATION

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse. This product is hazardous as defined in 29 CFR 1910.1200, based on the following compositional information

COMPONENT	OSHA HAZARD
Petroleum Hydrocarbons	Combustible
Stoddard Solvent	OSHA PEL, ACGIH TLV
Trimethylbenzene	OSHA PEL, ACGIH TLV

For additional information see Section 3.

SECTION 3 HEALTH INFORMATION & PROTECTION

NATURE OF HAZARD

EYE CONTACT:
Slightly irritating but does not injure eye tissue.

SKIN CONTACT:
Frequent or prolonged contact may irritate and cause dermatitis
Low order of toxicity.
Skin contact may aggravate an existing dermatitis condition

INHALATION:
High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to the eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death

INGESTION:
Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death
Minimal toxicity

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS P.O. BOX 3272 HOUSTON, TEXAS 77001
A DIVISION OF EXXON CHEMICAL COMPANY A DIVISION OF EXXON CORPORATION

VARSOL 1 SOLVENT

DATE PREPARED MAY 12, 1992
NO 92890627

SECTION 4 FIRE & EXPLOSION HAZARD

FLASHPOINT: 100 Deg F METHOD TCC NOTE: Minimum
FLAMMABLE LIMITS. LEL 2.1 UEL 13.3 @ 77 Deg F NOTE: Approximate
AUTOIGNITION TEMPERATURE. 490 Deg F NOTE: Approximate

GENERAL HAZARD:
Combustible liquid can form combustible mixtures at temperatures at or above the flashpoint
Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge
"Empty" containers retain product residue (liquid and/or vapor) and can be dangerous DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION: THEY MAY EXPLODE AND CAUSE INJURY OR DEATH
Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of

FIRE FIGHTING.
Use water spray to cool fire exposed surfaces and to protect personnel
Isolate "fuel" supply from fire.
Use foam, dry chemical, or water spray to extinguish fire
Avoid spraying water directly into storage containers due to danger of boilover
This liquid is volatile and gives off invisible vapors Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode

HAZARDOUS COMBUSTION PRODUCTS:
No unusual

SECTION 5 SPILL CONTROL PROCEDURE

LAND SPILL:
Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard For small spills implement cleanup procedures for large spills implement cleanup procedures and if in public area, keep public away and advise authorities Also, if this product is subject to CERCLA reporting (see Section 7) notify the National Response Center
Prevent liquid from entering sewers, watercourses, or low areas Contain spilled liquid with sand or earth Do not use combustible materials such as sawdust
Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent
Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS, P.O. BOX 3272 HOUSTON, TEXAS 77253
A DIVISION OF EXXON CHEMICAL COMPANY A DIVISION OF EXXON CORPORATION

VARSOL 1 SOLVENT

DATE PREPARED MAY 12, 1992
NO 92890627

WATER SPILL:
Remove from surface by skimming or with suitable adsorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-contained waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 6 NOTES

HAZARD RATING SYSTEMS:
This information is for people trained in
National Paint & Coatings Association's (NPCA)
Hazardous Materials Identification System (HMIS)
National Fire Protection Association (NFPA 704)
Identification of the Fire Hazards of Materials

	NPCA-HMIS	NFPA 704
HEALTH	1	0
FLAMMABILITY	2	2
REACTIVITY	0	0

KEY
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

SECTION 7 REGULATORY INFORMATION

DEPARTMENT OF TRANSPORTATION (DOT)
DOT PROPER SHIPPING NAME:
Petroleum Naphtha UN 1255
Combustible Liquid
DOT HAZARD CLASS: Combustible Liquid
DOT IDENTIFICATION NUMBER: UN 1255
NAME Naphtha, petroleum

FLASHPOINT: 100 Deg F METHOD TCC NOTE Minimum

TSCA:
This product is listed on the TSCA Inventory as a UVCB (Unknown, Variable Composition or Biological) Chemical at CAS Registry Number 8052-41-3

CERCLA:
If this product is accidentally spilled, it is not subject to any special reporting under the requirements of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA). We recommend you contact local authorities to determine if there may be other local reporting requirements.

SARA TITLE III:
Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories
Delayed Health, Fire
This product contains the following Section 313 Reportable Ingredients

COMPONENT	CAS NO	MAXIMUM %
1,2,4 Trimethylbenzene	95-63-6	4.0

EXXON CHEMICAL

MATERIAL SAFETY DATA SHEET

EXXON CHEMICAL AMERICAS P.O. BOX [illegible] HOUSTON, TEXAS [illegible]
A DIVISION OF EXXON CHEMICAL COMPANY, A DIVISION OF EXXON CORPORATION

VARSOL 1 SOLVENT

PAGE [illegible]
DATE PREPARED MAY [illegible], 1992
NO 92890627

SECTION 8 TYPICAL PHYSICAL & CHEMICAL PROPERTIES

SPECIFIC GRAVITY
0.80 at 60

SOLUBILITY IN WATER, WT % AT F
Less than [illegible] at 77

SP. GRAV. OF VAPOR, at 1 atm (Air 1)
3.5 [illegible]

EVAPORATION RATE, n-Bu Acetate 1.
Less than [illegible]

VAPOR PRESSURE, mmHg at F
2 at 68 Approximate

VISCOSITY OF LIQUID, CST AT F
1 at 77 Approximate

FREEZING/MELTING POINT, F
[illegible]

BOILING POINT, F
315 to 391

SECTION 9 REACTIVITY DATA

STABILITY
Stable

CONDITIONS TO AVOID INSTABILITY
Not Applicable

HAZARDOUS POLYMERIZATION
Will not occur

MATERIALS AND CONDITIONS TO AVOID INCOMPATIBILITY
Halogens, molten sulfur, strong oxidizing agents

HAZARDOUS DECOMPOSITION PRODUCTS
None

SECTION 10 STORAGE AND HANDLING

ELECTROSTATIC ACCUMULATION HAZARD
Use proper grounding procedure

STORAGE TEMPERATURE, F
Ambient

STORAGE/TRANSPORT PRESSURE, mmHg
Atmospheric

LOADING/UNLOADING TEMPERATURE F
Ambient

VISC AT LOADING/UNLOADING TEMP, cST:

REVISION SUMMARY:
[illegible] MAY 8, 1992 this MSDS [illegible] Section [illegible]
3

REFERENCE NUMBER:	DATE PREPARED:	SUPERSEDES ISSUE DATE:
HUMA [illegible]	MAY 12 1992	MAY 8 [illegible]

FOR ADDITIONAL PRODUCT INFORMATION IN A [illegible] TECHNICAL [illegible] REPRESENTATIVE
FOR ADDITIONAL HEALTH AND SAFETY INFORMATION CALL 713 870 6884

[illegible] OF RESPONSIBLE [illegible] MATERIAL DESCRIBED HERE MAY NOT BE [illegible] MAY BE USED IN COMBINATION WITH ANY OTHER MATERIAL OR IN ANY PROCESS [illegible] OF THE BEST OF OUR KNOWLEDGE [illegible] AND RELIABLE AT THE DATE [illegible] OF THE PRESENTATION [illegible] OF MERCHANTABILITY [illegible] FITNESS [illegible] INFORMATION [illegible] OF PATENT INFRINGEMENT

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300
Fax: (516) 338-2488

July 31, 1995

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Subject: Toxic Chemical Release Inventory
Reporting Form R

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our Prospect Avenue and Miller Place facilities.

Please note that as of September 30, 1994, the three properties on Long Island owned by the Perkin-Elmer Corporation, doing business as the Metco division of Perkin-Elmer, were sold by Perkin-Elmer to Sulzer Metco (US), Inc., a Delaware Corporation having a principal place of business at the Prospect Avenue facility. We hope that our delayed reporting has not caused any inconvenience.

Please call me if you have any questions or require clarification.

Very truly yours,

Joseph D. Reardon, Ph.D.
Global Quality
Phone: (516) 338-2316
FAX: (516) 338-2336

JR/clc
Enclosure

c: Mario H. Kyd, Sulzer Metco
Daniel Moraschetti, Sulzer Metco
Constance L. Conroy, Sulzer Metco

METCO AMDRY

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590 0201

FIRST CLASS

State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

Z 314 694 209

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to	State Emergency Response Comm.
Street and No.	Building 22, State Campus
P.O., State and ZIP Code	Albany, NY 12226-5000
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, March 1993

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 314 694 209

MAIL

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
State Emergency Response Commission
c/o State Emergency Management Office
Building 22, State Campus
Albany, NY 12226-5000

4a. Article Number
Z 314 694 209

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

5. Signature (Addressee)

6. Signature (Agent)

7. Date of Delivery

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 *U.S. GPO: 1992—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

WASHINGTON MILLS ELECTRO MINERALS COMPANY

MATERIAL SAFETY DATA SHEET

1.0 Chemical Product and Company Identification

Product Name: Blastite BT, Niagara Blast, Duratred, Ultra L1, *Duralum Products:* Polishing Grains & Powders, Buffing Powders, Microgrits, GW, LT/LTR, Redkote, Silkote, HRG, GW/HBD, GW/LBD, LBD, HC, XA, RF, RF DCF, LT P&C, XA K5RL 700 & F, K5 WT, K5 X, K5 RF DCF

Chemical Name: BROWN ALUMINUM OXIDE

Company Name: Washington Mills Electro Minerals Corp.
1801 Buffalo Ave.
P.O. Box 423
Niagara Falls, NY 14302
(716)278-6600 Fax (716)278-6664
Emergency/Technical (716)278-6763
CHEMTREC (800)424-9300

2.0 Composition/Information on Ingredients

Component	CAS No.	OSHA Exposure Limits (PEL)	ACGIH Rec. Limits (TLV)	Percent By Weight
Aluminum Oxide[1]	1344-28-1	15 mg/m^3	10 mg/m^3	92-99
Titanium Dioxide	13463-67-7	15 mg/m^3	10 mg/m^3	1 - 4
Iron Oxide	1309-37-1	10 mg/m^3	5 mg/m^3	0.1-1.5
Silicon Dioxide	7631-86-9	80 mg/m^3 % SiO_2	30 mg/m^3 % quartz + 3	0.2-1.7

Other oxides total less than 1%

[1]Non-fibrous form of aluminum oxide

3.0 Hazard Identification/ Potential Health Effects

Eye: May irritate eyes
Skin: Not absorbed through the skin. May cause abrasions.
Ingestion: No known adverse effects, but ingestion not recommended.
Inhalation: May cause coughing or shortness of breath.
Chronic Effects: May affect breathing capacity.

4.0 First Aid Measures

Eyes: Wash with large amounts of water. Get medical attention, if needed.
Skin: Wash with water. Obtain first aid or medical assistance if needed.
Ingestion: If swallowed, seek medical attention.
Inhalation: Remove to fresh air, apply artificial respiration as needed. Get medical attention if needed

5.0 Fire Fighting Measure

Flammable Properties: Non-flammable
Flash Point: None **Fire/Explosion Potential:** None
Upper and Lower Flammable Limits: None
Autoignition Temperature: None
Special Fire Fighting Procedures: None

6.0 Accidental Release Measures

Personal Precautions: Wear protective equipment. See Section 8.
Cleanup Measures: Normal cleanup procedures. Avoid generating dust. Dispose using standard landfill methods consistent with applicable Federal, State and Local laws.

7.0 Handling and Storage

Normal Storage: General storage, ambient air temperature and pressure.
Handling: Avoid generating dust. Handle with adequate ventilation for dust. See OSHA 29 CFR 1910-94 (Ventilation).

8.0 Exposure Controls, Personal Protection

Engineering Control: Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposures below PELs or TLVs.
Respiratory Protection: Recommended if TLVs or PELs are exceeded. Use NIOSH/MSHA approved respirators.
Skin and Hand Protection: Gloves as desired by user.
Eye and Face Protection: Use safety glasses with side shields. If there is potential for exposure to particles which could cause mechanical injury to the eye, wear goggles.

9.0 Physical and Chemical Properties

Appearance: Granular Brown to Black
Odor: Odorless
pH: N/A
Boiling Point: Sublimes
Melting Point: 2040 °C
Flash Point: None
Explosive Properties: None
Oxidizing Properties: None
Vapor Pressure: N/A
Vapor Density: N/A
Specific Gravity: 3.95
Water Solubility: Insoluble
Solubility In Other Solvent: Partially soluble in HF

10.0 Stability and Reactivity

Chemical Stability: Stable
Incompatibility: None
Polymerization: Will not occur
Conditions to Avoid: N/A

11.0 Toxicological Information

Not Available

12.0 Ecological Information

Not Available

13.0 Disposal Considerations

Approved landfill in accordance with all local, state and federal regulations.

14.0 Transportation Information

US DOT - Not regulated as a hazardous material

15.0 Regulatory Information

TSCA - The chemical components of this product are registered under the Toxic Substance Control Act (Title 40 CFR Part 710).

Prepared By: Margaret A. O'Brien,
Manager, Environmental, Health & Safety

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, Washington Mills Electro Minerals Corporation makes no expressed or implied warranty with respect to the accuracy of the information or the suitability of the recommendations and assumes no liability to any user thereof.

Profile No: CH13495 SUPER AGITENE
Generating Process: PARTS CLEANER
Category Code: FB2 Approval Date: 8/21/01 ExpirationDate: 8/22/02
DOT Information:
UN1993 WASTE FLAMMABLE LIQUIDS, N.O.S. PG III
Haz Class: 3 (PETROLEUM DISTILLATES) Hazard Zone:

Constituents and Concentration:		Apvd Fac	EPA No's
ALIPHATIC PETROLEUM DISTILLATE	70 - 80 %	BA	D001
DPM	1 - 10 %	BR	
		SG	

Profile No: CH189102 OIL SPILL CLEANUP/FILTERS
Generating Process:
Category Code: COB Approval Date: 12/7/00 ExpirationDate: 1/4/03
DOT Information:
NONE NON DOT REGULATED MATERIAL PG NONE
Haz Class: NONE (OILY DEBRIS) Hazard Zone:

Constituents and Concentration:		Apvd Fac	EPA No's
ABSORBENT PADS	70 - 100APPROXIMATE	BA	CR05
OIL	0 - 0PRESENT	BR	MA01
OIL FILTERS	0 - 30APPROXIMATE	SG	NONE
		WC	

Profile No: CH189107 METAL & CERAMIC POWDERS
Generating Process: POWDER COATING OPERATIONS
Category Code: CNI Approval Date: 12/8/00 ExpirationDate: 12/7/02
DOT Information:
NONE NON DOT REGULATED MATERIAL PG
Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
ALUMINUM OXIDE	0 -	0PRESENT	BA	CR05
CERAMIC OXIDE	100 -	100CONTAINS:	BR	MA99
MAGNESIUM OXIDE	0 -	0PRESENT	SG	NONE
MOLYBDENUM OXIDE	0 -	0PRESENT	WC	
SILICON	0 -	0PRESENT		
TITANIUM OXIDE	0 -	0PRESENT		
YTTRIUM OXIDE	0 -	0PRESENT		
ZIRCONIUM OXIDE	0 -	0PRESENT		

Profile No: CH189108 RCRA METAL & CERAMIC POWDER
Generating Process: POWDER COATING OPERATIONS
Category Code: CCS Approval Date: 12/7/00 ExpirationDate: 1/4/03
DOT Information:
NA3077 HAZARDOUS WASTE SOLID, N.O.S. PG III
Haz Class: 9 (CHROMIUM) Hazard Zone:

CH189108 (cont.)

Constituents and Concentration:			Apvd Fac	EPA No's
ALUMINUM OXIDE	0 -	0PRESENT	BA	D007
CERAMIC OXIDE	100 -	100CONTAINS:	BR	
CHROMIUM	5 -	100PPM	SG	
MAGNESIUM OXIDE	0 -	0PRESENT	WC	
SILICON	0 -	0PRESENT		
TITANIUM DIOXIDE	0 -	0PRESENT		
YTTRIUM OXIDE	0 -	0PRESENT		
ZIRCONIUM OXIDE	0 -	0PRESENT		

Profile No: CH189109 FILTERS/PPE/METAL & CERAMIC POWDER

Generating Process: MATERIAL FROM SPRAY COATING LINE

Category Code: CNI Approval Date: 12/8/00 ExpirationDate: 1/4/03

DOT Information:

NONE NON DOT REGULATED MATERIAL PG

Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
ALUMINUM OXIDE	0 -	0PRESENT	BA	CR05
CERAMIC OXIDE	10 -	10APPROXIMATE	BR	MA99
FILTERS	70 -	70APPROXIMATE	SG	NONE
MAGNESIUM OXIDE	0 -	0PRESENT	WC	
MOLYBDENUM OXIDE	0 -	0PRESENT		
PPE	20 -	20APPROXIMATE		

CH189109 (cont.)

Constituents and Concentration:			Apvd Fac	EPA No's
SILICON	0 -	0PRESENT		
TITANIUM OXIDE	0 -	0PRESENT		
YTTRIUM OXIDE	0 -	0PRESENT		
ZIRCONIUM OXIDE	0 -	0PRESENT		

Profile No: CH189110 GRIT BLAST MATERIAL

Generating Process: POWDER COAT OPERATIONS

Category Code: CNI Approval Date: 12/7/00 ExpirationDate: 12/7/01

DOT Information:

NONE NON DOT REGULATED MATERIAL PG

Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
ALUMINUM OXIDE	80 -	100APPROXIMATE	BA	CR05
GLASS BEADS	0 -	18APPROXIMATE	BR	MA99
STEEL SHOT	0 -	5APPROXIMATE	SG	NONE
			WC	

Profile No: CH189111 WASTE COMPRESSOR OIL

Generating Process: OIL CHANGE OUTS

Category Code: A31 Approval Date: 12/7/00 ExpirationDate: 1/7/03

DOT Information:

CH189111 (cont.)

NONE NON DOT REGULATED MATERIAL PG
Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
PETROLEUM OIL	100 -	100APPROXIMATE	BA	CR02
			BR	MA01
			SG	NONE
			WC	

Profile No: CH189112 MIXED SPENT ACIDS
Generating Process: CLEANING OF METAL
Category Code: B53 Approval Date: 12/8/00 ExpirationDate: 12/8/01
DOT Information:
UN3264 WASTE CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. PG II
Haz Class: 8 (HYDROCHLORIC ACID, NITRIC ACID) Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
CADMIUM	0 -	4 %	BR	D002
CHROMIUM	0 -	4 %	CH	D007
HYDROCHLORIC ACID	10 -	10APPROXIMATE	SG	
HYDROFLUORIC ACID	1 -	1APPROXIMATE	WC	
LEAD	0 -	4 %		
NITRIC ACID	5 -	5APPROXIMATE		
WATER	80 -	80APPROXIMATE		

Profile No: CH189132 PAINT RELATED MATERIAL
Generating Process: WASTE PAINTS/ADHESIVES
Category Code: FB2 Approval Date: 12/7/00 ExpirationDate: 5/2/02
DOT Information:
UN1263 WASTE PAINT RELATED MATERIAL PG III
Haz Class: 3 Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
ADHESIVES	30 -	40APPROXIMATE	BA	D001
METHANOL	20 -	40APPROXIMATE	BR	D035
METHYL ETHYL KETONE	0 -	40PRESENT	CH	F003
PAINT RESINS	30 -	40APPROXIMATE	SG	F005
THINNERS	10 -	40APPROXIMATE		
XYLENE	0 -	40PRESENT		

Profile No: CH189134 METAL/CERAMIC POWDER & WATER
Generating Process: POWDER COATING
Category Code: CNIS Approval Date: 12/7/00 ExpirationDate: 12/7/02
DOT Information:
NONE NON DOT REGULATED MATERIAL PG
Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
ALUMINUM OXIDE	0 -	0PRESENT	BA	CR04
CERAMIC OXIDE	90 -	100CONTAINS:	BR	MA99

CH189134 (cont.)

Constituents and Concentration:			Apvd Fac	EPA No's
MAGNESIUM OXIDE	0 -	0PRESENT	SG	NONE
MOLYBDENUM OXIDE	0 -	0PRESENT	WC	
SILICON	0 -	0PRESENT		
TITANIUM DIOXIDE	0 -	0PRESENT		
WATER	0 -	10APPROXIMATE		
YTTRIUM OXIDE	0 -	0PRESENT		
ZIRCONIUM OXIDE	0 -	0PRESENT		

Profile No: CH189135 FILTERS WITH RCRA METALS

Generating Process: CHANGING FILTERS

Category Code: CCSM Approval Date: 12/8/00 ExpirationDate: 12/8/01

DOT Information:

NA3077 HAZARDOUS WASTE SOLID, N.O.S. PG III

Haz Class: 9 (CHROMIUM) Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
CHROMIUM	1 -	10APPROXIMATE	BA	D007
FILTERS	90 -	100APPROXIMATE	BR	
			CH	
			SG	
			WC	

Profile No: CH189139 METCO MASKING COMPOUND
Generating Process: POWDER COATING PROCESS
Category Code: CNOS Approval Date: 12/7/00 ExpirationDate: 12/7/01
DOT Information:
NONE NON DOT REGULATED MATERIAL PG
Haz Class: NONE Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
SAPONIFIED OIL	40 -	60APPROXIMATE	BA	CR02
WATER	40 -	60APPROXIMATE	BR	MA01
			SG	NONE
			WC	

Profile No: CH189141 WATER SOLUBLE OIL
Generating Process:
Category Code: FB2 Approval Date: 12/7/00 ExpirationDate: 1/8/03
DOT Information:
NONE NON DOT REGULATED MATERIAL PG NONE
Haz Class: NONE (WATER SOLUBLE OIL) Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
WATER SOLUBLE OIL	100 -	100APPROXIMATE	BA	MA01
			BR	NONE
			CH	
			SG	

Profile No: CH189142 COPPER CLEANER/CHROMIC ACID
Generating Process:
Category Code: B24 Approval Date: 12/8/00 ExpirationDate: 12/8/01
DOT Information:
UN1755 WASTE CHROMIC ACID SOLUTION PG II
Haz Class: 8 Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
CHROMIC ACID	26.7 -	100APPROXIMATE	BR	D002
METALS	0.3 -	100APPROXIMATE	CH	D006
SLUDGE	5 -	100APPROXIMATE	SG	D007
WATER	67 -	100APPROXIMATE	WC	D008

Profile No: CH189144 NYLON TURNINGS
Generating Process:
Category Code: CNO Approval Date: 12/7/00 ExpirationDate: 1/4/03
DOT Information:
NONE NON DOT REGULATED MATERIAL PG NONE
Haz Class: NONE (NYLON TURNINGS) Hazard Zone:

Constituents and Concentration:			Apvd Fac	EPA No's
NYLON SOLIDS	95 -	100APPROXIMATE	BA	CR05
WATER SOLUBLE OIL	0 -	5APPROXIMATE	BR	MA01
			SG	NONE
			WC	

Certificate of Disposal

Clean Harbors - Baltimore, MD
1910 Russell Street
Baltimore, MD 21230
MDD980555189

Certificate of Treatment/Disposal - Storage and Transfer

MDC0942503
MDC0942504
MDC0942857
MDC0942637
MDC0944007
MDC0942935
MDC0944092
MDC0944093
MDC0944094
MDC0893872
BOL66030
BOL66125
BOL66191
BOL66349

The above described waste, received at the Clean Harbors facility listed above pursuant to the manifest(s) listed above, has been treated and/or disposed of by Clean Harbors, or another licensed facility approved by Clean Harbors, in accordance with applicable federal and state laws and regulations. Any waste received by Clean Harbors and subsequently shipped to another licensed facility has been or shall be identified as being generated by Clean Harbors in accordance with 40CFR 264.71(c).

Signed: Paul A. Mills Date: 1/21/2002

Title: Senior Tracking Manager

Certificate of Disposal

Clean Harbors - Cincinnati, OH
4879 Spring Grove Avenue
Cincinnati, OH 45232
OHD000816629

Certificate of Treatment/Disposal - Storage and Transfer

NYG2545488
NYG2545956
NYG2545965

The above described waste, received at the Clean Harbors facility listed above pursuant to the manifest(s) listed above, has been treated and/or disposed of by Clean Harbors, or another licensed facility approved by Clean Harbors, in accordance with applicable federal and state laws and regulations. Any waste received by Clean Harbors and subsequently shipped to another licensed facility has been or shall be identified as being generated by Clean Harbors in accordance with 40CFR 264.71(c).

Signed: Paul A. Mills

Date: 1/21/2002

Title: Senior Tracking Manager

Certificate of Disposal

Clean Harbors Bristol CT
51 Broderick Road
Bristol, CT 06010
CTD000604488

Certificate of Treatment/Disposal - Storage and Transfer

CTF1002938
CTF1002931
CTF0906382
CTF1002974
CTF1002986
CTF1002987
CTF1002423
CTF1002484
CTF1002514
CTF1002535

The above described waste, received at the Clean Harbors facility listed above pursuant to the manifest(s) listed above, has been treated and/or disposed of by Clean Harbors, or another licensed facility approved by Clean Harbors, in accordance with applicable federal and state laws and regulations. Any waste received by Clean Harbors and subsequently shipped to another licensed facility has been or shall be identified as being generated by Clean Harbors in accordance with 40CFR 264.71(c).

Signed: Paul A. Mello
Title: Senior Tracking Manager

Date: 1/21/2002

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
												Total 5.6610E-01 MBq	
SM 71204-45/SM	4	0.2124	379.6568	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-46/SM	4	0.2124	317.5147	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of: 1
3. Emergency Response Phone: 410-377-3742
4. Manifest Tracking Number: 001251049 JJK

5. Generator's Name and Mailing Address: SULZER METCO-US, 1101 PROSPECT AVE, WESTBURY, NY 11590
Generator's Phone: (516) 338-2331
Generator's Site Address (if different than mailing address):

6. Transporter 1 Company Name: REDRICK, DBA TRI-STATE MOTOR TRANSIT
U.S. EPA ID Number: MOD 095 038 998

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address: WASTE CONTROL SPECIALISTS, 9998 W. HWY 176, ANDREWS, TX 79714
Facility's Phone: (505) 394-4300
U.S. EPA ID Number:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, LIMITED QUANTITY OF MATERIAL, 7, UN2910	76	DM	8342	K	NONE		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: [illegible] Signature: [illegible] Month: 01 Day: Year: 04

GENERATOR

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials
Transporter 1 Printed/Typed Name: [illegible] Signature: [illegible] Month: 1 Day: 7 Year: 04
Transporter 2 Printed/Typed Name: Signature: Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy
18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:
18b. Alternate Facility (or Generator) U.S. EPA ID Number
Facility's Phone:
18c. Signature of Alternate Facility (or Generator) Month: Day: Year:
19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)
1. 2. 3. 4.
20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a
Printed/Typed Name Signature Month Day Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.--UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

HAZARD NOTICE: This material is for the thermal spraying process. Consult the METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.
Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.
Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.
2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.
Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning stinging.
Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.

Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.
Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.
Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney dysfunction.
Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.
Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.
Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.

In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and nonsparking tools.
IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1- 800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120°F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IS USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
	** Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 36°F
UN1263 PAINT

WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

METCO PERKIN ELMER

Material Safety Data Sheet

METCO PERKIN-ELMER
1101 PROSPECT AVENUE
P.O. BOX 1006
WESTBURY, NEW YORK 11590-0201
516-334-1300
EMERGENCY CONTACT CHEMTREC 800-424-9300
CALLS FROM OUTSIDE THE US 202-483-7616

Product: METCOLOY #5 WIRE

MSDS No: METCO / 50-220
Revision: 2
Date: August 2, 1991

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: METCOLOY #5 WIRE

Description: Thermal Spray Metallic Wire

Other Designations: STAINLESS STEEL WIRE

Original Date of Issue: Spetember 7, 1987

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name:	CAS Number:	Percent:	Exposure Limits:
Manganese *	7439-96-5	8.5 %	OSHA PEL: CL 5 mg/m³ (Dust) 1 mg/m³ (Fume) 3 mg/m³ (Fume) STEL ACGIH TLV: 5 mg/m³ (Dust) 1 mg/m³ (Fume)
Nickel *	7440-02-0	5 %	OSHA PEL: 1 mg/m³ N/A(Soluble as Ni) ACGIH TLV: 1 mg/m³ 0.1 mg/m³ (Soluble as Ni)
Silicon	7440-21-3	1 %	OSHA PEL: 10 mg/m³ (Total Dust) 5 mg/m³ (Respirable) ACGIH TLV: 10 mg/m³
Chromium	7440-47-3	18 %	OSHA PEL: 0.5 mg/m³ AGCIH TLV: 0.5 mg/m³
Iron	1309-37-1	67.5 %	OSHA PEL: 10 mg/m³ ACGIH TLV: 5 mg/m³

* INDICATES TOXIC CHEMICAL(S) SUBJECT TO THE REPORTING REQUIREMENTS OF SECTION 313 OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT (SARA) AND SUPPLIER NOTIFICATION REQUIREMENTS (40 CFR PART 372).

MSDS 50-220 continues on page 2

METCO PERKIN ELMER

Material Safety Data Sheet

METCO PERKIN-ELMER
1101 PROSPECT AVENUE
P.O. BOX 1006
WESTBURY, NEW YORK 11590-0201
516-334-1300
EMERGENCY CONTACT CHEMTREC 800-424-9300
CALLS FROM OUTSIDE THE US 202-483-7616

Product: METCOLOY #5 WIRE

MSDS No: METCO / 50-220
Revision: 2
Date: August 2, 1991

SECTION III. PHYSICAL DATA

Appearance & Odor: Wire; No Odor

Boiling point: N/A
Vapor pressure: N/A
Water solubility (%): Neg.
Vapor density (air=1): N/A

Evaporation rate: N/A
Specific gravity (H_2O=1): 7.8
Melting point: 2550-2650°F
% volatile by volume: N/A
Molecular weight: N/A

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): None **Limits: LEL %:** N/A **UEL %:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Unusual fire or explosion hazards: Moderate fire hazard in the form of dust when exposed to flame. Nickel and Silicon are classified as flammable solids.

Special fire-fighting procedures: Treat as a metallic fire.

SECTION V. REACTIVITY DATA

Material is stable Hazardous polymerization will not occur

Chemical incompatibilities: Oxidizers, Acid, Sulfur, $Ni(NO_3$; Wood, Combustibles.

Hazardous decomposition Products: Ozone and nitric oxide are formed by plasma flame (independent of powder).

SECTION VI. HEALTH HAZARD INFORMATION

Summary of risks:

MANGANESE: Hazard by inhalation. Chronic inhalation may cause neurological impairment.

NICKEL: Hazard by inhalation and skin contact. Inhalation may cause cancers of the lung and nasal sinuses. Skin contact may cause dermatitis.

SILICON: No known toxicity assoiated with inhalation of this form. Under normal use/conditions, silicon dioxide is formed. Inhalation may cause pneumoconiosis.

CHROMIUM: Hazard by inahalation and skin contact. Inhalation may cause pneumoconiosis, mucous membrane irritation, and/or ulceration. Skin contact may cause dermatitis, sensitization or chrome lesions.

IRON: Hazard by inhalation. Inhalation may cause benign pneumoconiosis.

 HEALTH HAZARD INFORMATION continues on page 3

METCO PERKIN-ELMER
1101 PROSPECT AVENUE
P.O. BOX 1006
WESTBURY, NEW YORK 11590-0201
516-334-1300
EMERGENCY CONTACT CHEMTREC 800-424-9300
CALLS FROM OUTSIDE THE US 202-483-7616

Product: METCOLOY #5 WIRE

MSDS No: METCO / 50-220
Revision: 2
Date: August 2, 1991

HEALTH HAZARD INFORMATION continued from page 2

Medical conditions which may be aggravated by contact: Consult a physician.

Target organs: Lungs, Skin, Central Nervous System, Respiratory System.

Primary entry route(s): Inhalation, Ingestion, Contact.

Signs & symptoms of overexposure:

Eye contact: Irritation.

Skin contact: Possible irritation.

Inhalation: Respiratory irritation.

Ingestion: Possible irritation.

First aid:

Eye contact: Flush eye with water. If irritation persists, consult a physician.

Skin contact: Wash with soap and water.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak procedures: Not applicable to wire.

Waste management / Disposal: Empty product containers, product waste, and cleaning media should be stored and disposed of according to the appropriate local, state, and federal regulatory guidelines.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Goggles: The following lens shades are recommended for the process indicated: Combustion spraying shade #5, plasma spraying up to 40 kW shade #10, and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

 SPECIAL PROTECTION INFORMATION continues on page 4

METCO PERKIN-ELMER
1101 PROSPECT AVENUE
P.O. BOX 1006
WESTBURY, NEW YORK 11590-0201
516-334-1300
EMERGENCY CONTACT CHEMTREC 800-424-9300
CALLS FROM OUTSIDE THE US 202-483-7616

Product: METCOLOY #5 WIRE

MSDS No: METCO / 50-220
Revision: 2
Date: August 2, 1991

SPECIAL PROTECTION INFORMATION continued from page 3

Gloves: Aluminized gloves are to be worn during arc spraying.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes. Respirators may also be worn when product handling generates dust.

Other: Ear protection must be worn when the operator is subjected to excessive noise levels (refer to the appropriate regulatory guidelines). An aluminized apron is to be worn during the plasma spray process.

Workplace considerations:

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety stations:
Eye wash station(s) is/are recommended.

Other: N/A

SECTION IX. SPECIAL PRECAUTIONS

Storage segregation: Store away from incompatibles.

Special handling / storage: Store product containers in a clean, cool, and dry area. Store in a manner to minimize punctures and breakage of containers.

Other precautions: Eye protection is recommended when handling wire. Avoid ingestion, inhalation, and excessive skin contact.

Prepared/revised by: METCO

August 2, 1991

THE INFORMATION CONTAINED HEREIN IS BASED ON AVAILABLE DATA AND TESTS AND IS BELIEVED TO BE ACCURATE. IT IS PREPARED SOLEY FOR YOUR CONSIDERATION AND VERIFICATION SINCE CONDITIONS OF USE, STORAGE AND HANDLING MAY VARY.

Form Approved OMB No.: 2070-0093

Approval Expires: 01/94

(Important: Type or print; read instructions before completing form.)

EPA U.S. Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

Public reporting burden for this collection of information is estimated to vary from 30 to 34 hours per response, with an average of 32 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (PM-223), US EPA, 401 M St., SW, Washington, D.C. 20460 Attn: TRI Burden and to the Office of Information and Regulatory Affairs, Office of Management and Budget Paperwork Reduction Project (2070-0093), Washington, D.C. 20603.

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for your optional use.)

1.	1.1 Are you claiming the chemical identity on page 3 trade secret? [ ] Yes (Answer question 1.2; Attach substantiation forms.) [ ] No (Do not answer 1.2; Go to question 1.3.)	1.2 If "Yes" in 1.1, is this copy: [ ] Sanitized [ ] Unsanitized	1.3 Reporting Year 19 ____

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official

Signature | Date signed

3. FACILITY IDENTIFICATION

3.1	Facility or Establishment Name	
	Street Address	
	City	County
	State	Zip Code
	TRI Facility Identification Number	
3.2	This report contains information for (Check only one): a. [ ] An entire facility b. [ ] Part of a facility.	
3.3	Technical Contact	Telephone Number (include area code)
3.4	Public Contact	Telephone Number (include area code)
3.5	SIC Code (4 digit) a. b. c. d. e. f.	
3.6	Latitude: Degrees Minutes Seconds	Longitude: Degrees Minutes Seconds
3.7	Dun & Bradstreet Number(s) a.	b.
3.8	EPA Identification Number(s) (RCRA I.D. No.) a.	b.
3.9	NPDES Permit Number(s) a.	b.
3.10	Receiving Streams or Water Bodies (enter one name per box) a.	b.
	c.	d.
	e.	f.
3.11	Underground Injection Well Code (UIC) Identification Number(s) a.	b.

WHERE TO SEND COMPLETED FORMS:

1. EPCRA REPORTING CENTER
   P.O. BOX 23779
   WASHINGTON, DC 20026-3779
   ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix G)

4. PARENT COMPANY INFORMATION

4.1	Name of Parent Company	4.2	Parent Company's Dun & Bradstreet Number

OMB No. 2050-0075
Expires November 1989

EPA

Constance:
Sent this booklet in case you don't have the one sent with the original pkg.
JFL

National Survey of Hazardous Waste Generators

INSTRUCTIONS

Read this booklet before answering any questionnaires. It contains example questions, lists of RCRA and other waste codes, and other important information.

Need help? Call the Survey Helpline (1-800-635-8850).

INSTRUCTIONS

CONTENTS

	Page
Plan for Completing the National Survey of Hazardous Waste Generators	1
Introduction	3
Why Is This Detailed Survey Needed?	3
Overview of Questionnaires	4
Which Questionnaires Should This Facility Complete?	4
Who Should Complete These Questionnaires?	4
How Are These Questionnaires Organized?	5
1. Questionnaire Format	5
2. Question Types	5
3. Question Format	7
4. Answer Columns	8
5. Double-Counting of Waste	9
6. Units of Measure	9
7. Rounding	10
8. Reporting Time Period	10
9. Operating Status of Hazardous Waste Management Units and Processes	10
10. Regulatory Status of Treatment, Storage, and Recovery Units	10
11. Regulatory Status of Hazardous Waste	11
Definitions	12
Appendixes	
A Process Codes and Air Pollution Control Device Codes	A-1
B Standard Industrial Classification (SIC) Codes	B-1
C RCRA and Other Waste Codes	C-1
D Hazardous Constituent Codes	D-1
E Example Questions	E-1

PLAN FOR COMPLETING THE NATIONAL SURVEY OF HAZARDOUS WASTE GENERATORS

READ THIS SHEET FIRST It outlines a plan to follow in completing the questionnaires that will save you time and help us get the data we need!

FIRST ANSWER THE FOLLOWING TWO QUESTIONS:

1. **WHAT HAZARDOUS WASTES ARE GENERATED ONSITE?**

   This survey requires that you report all waste and wastewaters in the following categories as hazardous waste:

   - Any waste considered hazardous waste under RCRA. This includes hazardous wastewater pretreated prior to discharge under a National Pollutant Discharge Elimination System (NPDES) permit or prior to discharge to a publicly owned treatment works (POTW); hazardous waste generated in a production process or waste treatment process; and hazardous waste that is a characteristic waste, even though it may lose its hazardous waste characteristic through mixing with other wastewater or by treatment.
   - Any waste considered hazardous by your state.
   - Wastes containing polychlorinated biphenyls (PCBs).
   - Wastes containing asbestos.
   - Wastes containing dioxins/furans.
   - Radioactive waste mixed with hazardous waste.
   - Hazardous waste that is managed in units and processes exempt from RCRA permitting requirements (see below).

2. **WHAT TYPES OF HAZARDOUS WASTE UNITS AND TREATMENT AND RECYCLING PROCESSES ARE OPERATED ONSITE?**

   This survey requires that you report all units and processes that are used onsite to manage—accumulate, treat, store, or recycle—hazardous waste, INCLUDING THOSE THAT ARE EXEMPT FROM RCRA PERMITTING REQUIREMENTS. This includes:

   - Wastewater treatment processes, including pretreatment, in tanks that are permitted or regulated under the Clean Water Act.
   - Elementary neutralization.
   - Recovery for reuse; e.g., solvents, organic liquids, metals.
   - Reuse of hazardous waste as fuel in industrial boilers, furnaces, and kilns.
   - Fuel blending of hazardous waste.
   - Tanks used for the accumulation, treatment, recovery for reuse, or storage of hazardous waste.

   Processes and units that operated onsite during 1986, that are currently operating onsite, or that are planned to operate onsite before January 1992 need to be reported.

   You are NOT required to provide information on hazardous waste that was managed in a closed-loop recovery system or a totally enclosed treatment unit.

   If you are unsure as to whether or not a waste is hazardous or if a unit or process should be reported, call the Survey Helpline.

BASED ON YOUR ANSWERS TO THESE TWO QUESTIONS, YOU ARE NOW READY TO COMPLETE THE QUESTIONNAIRES:

- Read this Instructions booklet **before** completing any questionnaires.
- Based on your answer to Question 2, decide which questionnaires you need to complete for your facility. If your facility uses tanks for treatment or recycling processes, you need to complete Questionnaire GI, "Tank Systems" in addition to the appropriate treatment or recycling questionnaire.
- Complete Questionnaire GA, "General Facility Information." This questionnaire requires that you complete a schematic of your facility showing all hazardous waste management operations. Carefully follow the instructions provided. The number that you assign each tank in the schematic is used throughout the questionnaires in this survey to identify which tank is used with a particular process.
- Complete the questions in Questionnaire GB, "Hazardous Waste Characterization" for EACH hazardous waste or hazardous wastewater you identified in Question 1. Report separately hazardous wastes that have the same RCRA waste code but were generated from different sources. If you generate more than five different hazardous wastes, call the Survey Helpline and we will provide you with additional answer spaces.
- Complete the other questionnaires that you have identified as being necessary for your facility to complete. If you do not have enough answer spaces to provide information on EACH unit or process, call the Survey Helpline and we will provide you with additional answer spaces.
- Review each questionnaire for completeness, accuracy, and clarity before returning; this will reduce our need to take your time to clarify the data. Make a photocopy of the completed questionnaires. Keep the copies for your records and return the originals all at the same time in the enclosed envelope. It is not necessary to return any questionnaires you were not required to complete.

NOTE: Complete ONLY Questionnaires GA and GB if your facility completed EPA's National Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities, that was mailed to TSDR facilities in the summer of 1987.

Please return within 60 days of receipt your completed questionnaires. Your response is required under Section 3007 of RCRA.

NEED HELP?
CALL THE HAZARDOUS WASTE SURVEY HELPLINE (1-800-635-8850)
between 9 a.m. and 5 p.m. (EST)

INTRODUCTION

The Office of Solid Waste (OSW) of the U.S. Environmental Protection Agency (EPA) is conducting this national survey of hazardous waste generators. EPA has retained the Research Triangle Institute (RTI) as its survey contractor.

EPA is requiring your response under the authority of Section 3007 of the Resource Conservation and Recovery Act (RCRA). Under Section 3007, EPA may require generators to furnish information about their hazardous waste management activities for use in regulatory development. **PLEASE COMPLETE AND RETURN THESE QUESTIONNAIRES WITHIN 60 DAYS OF RECEIVING THEM.**

The remainder of this booklet gives general information about the accompanying questionnaires. Read it **BEFORE** you begin to answer the questionnaires. It contains example questions, lists of RCRA and other waste codes, and other important information that you will need to consult as you answer the questions. **All persons completing the questionnaires should read this instruction booklet. If additional copies of this booklet are needed, call the Survey Helpline (1-800-635-8850).**

WHY IS THIS DETAILED SURVEY NEEDED?

The primary purpose of this survey is to quantify and to characterize hazardous waste generation and management. EPA is interested in the quantities and characteristics of all hazardous waste generated, including characteristic and listed waste under RCRA; wastewaters, including that which is pretreated prior to discharging under a National Pollutant Discharge Elimination System (NPDES) permit or prior to discharging to a publicly owned treatment works (POTW); and waste considered hazardous by the States.

EPA is also interested in all hazardous waste management practices, including those processes that are exempt from RCRA permitting requirements. This includes:

- Wastewater treatment processes, including pretreatment, in tanks that are permitted or regulated under the Clean Water Act.
- Elementary neutralization.
- Recovery for reuse; e.g., solvents, organic liquids, metals.
- Reuse of hazardous waste as fuel in industrial boilers, furnaces, and kilns.
- Fuel blending of hazardous waste.

EPA currently faces many important issues, among which are the land disposal restrictions, regulation of hazardous waste tanks, and Superfund requirements that the States determine their hazardous waste management capabilities. We do not currently have the detailed data we need to make these complicated decisions.

This survey is part of an EPA effort to assemble a detailed data base for developing and evaluating hazardous waste regulations. The focus of this survey is to gather the following:

- Information to provide a basis for regulatory development, including regulatory impact analyses for regulations required by the Hazardous and Solid Waste Amendments (HSWA).
- Volume and characteristics of all hazardous waste generated, including hazardous wastewater and state-regulated wastes.
- Waste management capacity for the land disposal capacity decisions.
- Tank system information for possible tank requirement revisions.
- Individual state hazardous waste management capacities.
- Information on hazardous waste minimization.
- Information on Solid Waste Management Units (SWMUs).

The level of detail required is due to the complexity of the decisions we must make to implement the 1984 amendments. For example, we need volume information for each of the RCRA waste codes because the 1984 amendments require land disposal restrictions based on waste codes.

EPA has made a commitment to use the data obtained from this survey. Please answer the questions as quickly and accurately as possible.

OVERVIEW OF QUESTIONNAIRES

EPA has developed a set of nine specialized questionnaires for this survey. Seven of the nine questionnaires are designed to collect information on a different aspect of the exempt hazardous waste management activities conducted at your facility. The other two questionnaires ask for information on this facility's hazardous waste generation activities and on the types of hazardous waste generated onsite during 1986.

The complete set of questionnaires for this survey includes the following:

- Questionnaire GA, General Facility Information
- Questionnaire GB, Hazardous Waste Characterization
- Questionnaire GC, Fuel Blending
- Questionnaire GD, Reuse as Fuel
- Questionnaire GE, Wastewater Treatment
- Questionnaire GF, Metals Recovery for Reuse
- Questionnaire GG, Solvent and Liquid Organic Recovery for Reuse
- Questionnaire GH, Other Recovery Processes
- Questionnaire GI, Tank Systems.

WHICH QUESTIONNAIRES SHOULD THIS FACILITY COMPLETE?

All facilities need to complete Questionnaire GA, "General Facility Information" and Questionnaire GB, "Hazardous Waste Characterization." Then, based on the types of hazardous waste management activities that were conducted onsite during 1986, that are currently being conducted onsite, or that are planned to be conducted onsite before January 1992, complete the appropriate questionnaires and return them in the enclosed envelope. It is not necessary to return any questionnaires you were not required to complete.

Complete ONLY Questionnaires GA and GB if your facility completed EPA's National Survey of Hazardous Waste Treatment, Storage, Disposal, and Recycling Facilities, that was mailed to TSDR facilities in the summer of 1987.

WHO SHOULD COMPLETE THESE QUESTIONNAIRES?

Each questionnaire your facility is required to answer should be completed by a person knowledgeable about that particular hazardous waste management activity.

The last question in each questionnaire provides space to enter the name, title, telephone number, and mailing address of the person who completes the questionnaire. The person listed at that point will serve as a contact for clarifications or additional information, if necessary.

It is essential that the person completing each questionnaire for your facility read this instruction booklet **BEFORE** answering any questions. If you need additional copies of this booklet, call the Survey Helpline (1-800-635-8850).

HOW ARE THESE QUESTIONNAIRES ORGANIZED?

The following paragraphs describe what you need to know about the questionnaires **BEFORE** you begin to answer them, including questionnaire format, question types and formats, and answer space formats that are common to all questionnaires. Additional instructions are printed both in the introductions at the beginning of each questionnaire and along with the questions themselves. **If you have any questions about this survey, the questionnaires, or this instruction booklet, call the Survey Helpline (1-800-635-8850).**

1. **Questionnaire Format** The first page of each questionnaire is an introduction that explains the questionnaire's organization and other important features. **ALWAYS read the introduction BEFORE answering any of the questions.**

   Questionnaire GA, "General Facility Information" asks for general information on the hazardous waste generation and management activities at the facility. Questionnaire GB, "Hazardous Waste Characterization" asks for information on EACH hazardous waste that was generated onsite during 1986.

   Questionnaires GC through GH are divided into TWO PARTS, based on the operational status of the units, processes, or operations that the questionnaires ask about. The first part of each questionnaire asks about the units, processes, or operations that are **currently used** onsite to manage hazardous waste. The second part of each questionnaire asks about the units, processes, or operations that are **planned** to manage hazardous waste onsite before January 1992.

   Questionnaire GI, "Tank Systems" asks for information on the accumulation of hazardous waste in tanks and on the piping that is connected to hazardous waste tanks. It also requires that you complete a separate Tank Description Form for each hazardous waste tank that is currently used onsite to manage hazardous waste or that is planned to manage hazardous waste onsite before January 1992.

   At the end of each questionnaire are two lined pages labeled "FACILITY NOTES" for you to use in clarifying or explaining your answers, if necessary. To use these pages, write "see note" beside each question that you wish to clarify or explain. Then turn to the note pages, enter the question number(s), and write your comments beside the number(s).

2. **Question Types** All the questionnaires contain several types of questions, including multiple choice, short answer, combinations of these two, and more complex types that require you to complete a table.

   Most questions are of the multiple choice variety, which merely requires that you circle a numeric code beside one, or sometimes more than one, answer that most closely describes some aspect of the hazardous waste operations at your facility:

8. **When does this facility expect to resume use of this unit?** *(Circle one)*		
1987	01	01
1988	02	02
Don't know	03	03

   Some short answer questions require that you enter a code, value, percent, or quantity using one or more whole numbers:

16. **When this wastewater treatment process was in operation during 1986, what percentage of its maximum capacity was typically being utilized?**	☐☐☐ %	☐☐☐ %

Other short answer questions require that you describe some aspect of your operations in a few words:

Question	Hazardous Waste No. 1	Hazardous Waste No. 2
34. **Describe the waste minimization practices that were implemented PRIOR TO 1986 for this hazardous waste.**	_____ _____ _____ _____ _____	_____ _____ _____ _____ _____

Combination questions require that you enter one or more whole numbers **AND** circle a numeric code:

Question	Reuse as Fuel Unit No. 1	Reuse as Fuel Unit No. 2
25. **What plans does your facility have to make changes to this unit that would increase/decrease its capacity to reuse hazardous waste—liquids, solids, or sludges—as fuel?** "Capacity change" for a unit is the maximum quantity of hazardous waste that would be added or deleted from the quantity that could have been reused as fuel during 1986 due to changes. DO NOT INCLUDE capacity changes related to changes in facility operations, such as adding or discontinuing shifts.		
a. **Liquid Feed** i. Type of capacity change planned for this unit *(Circle one)*		
Capacity increase	01	01
Capacity decrease	02	02
No capacity change planned/unit does not have liquid feed *(Circle 03 and skip to Question 25b for this unit)*	03 *(Skip to Q.25b)*	03 *(Skip to Q.25b)*
ii. Describe the capacity change	_____	_____
iii. Size of planned capacity change (net change only, not new total capacity)	☐☐☐☐☐☐☐	☐☐☐☐☐☐☐
iv. Unit of measure for capacity change *(Circle one)*		
Tons per year	01	01
Gallons per year	02	02

To help you answer each of these question types, Appendix E of this instruction booklet contains examples of completed questions. If you do not fully understand how to respond to any question in any of the questionnaires that you received, call the Survey Helpline (1-800-635-8850).

3. **Question Format** Most of the information that you will need to answer each type of question is printed right along with it. As shown in the following example, **different styles of type are used to print different kinds of information**:

> 1. **Does this facility have onsite fuel blending operations in any of the following categories that are used to blend hazardous waste as fuel?**
> - **Currently operating to blend hazardous waste as fuel.**
> - **Temporarily not operating, that is, they have been used onsite in the past to blend hazardous waste as fuel AND they will be used onsite in the future to blend hazardous waste as fuel.**
> - **No longer operational, that is, they were used onsite DURING 1986 to blend hazardous waste as fuel BUT they will never be used onsite in the future to blend hazardous waste as fuel.**
>
> *(Circle one)*
>
> 01 Yes *(Go to next question)*
> 02 No *(Skip to Question 21 on page 10)*

ALL QUESTIONS are printed in **bold, black type**:

> 1. **Does this facility have onsite fuel blending operations in any of the following categories that are used to blend hazardous waste as fuel?**
> - **Currently operating to blend hazardous waste as fuel.**
> - **Temporarily not operating, that is, they have been used onsite in the past to blend hazardous waste as fuel AND they will be used onsite in the future to blend hazardous waste as fuel.**
> - **No longer operational, that is, they were used onsite DURING 1986 to blend hazardous waste as fuel BUT they will never be used onsite in the future to blend hazardous waste as fuel.**

ALL INSTRUCTIONS are printed in *light italics:*

> *(Circle one)*

ALL ADDITIONAL INFORMATION is printed in regular black type:

> Assume NO CHANGE IN YOUR EQUIPMENT and an unlimited supply of waste of the same typical mix that was blended during 1986. In addition, consider the number of hours per day and days per year each blending unit can operate due to necessary downtime for maintenance and other factors such as other processes that may use the same tank. Also, consider the number of hours or shifts this facility would/could operate.

ALL ANSWER SPACES are printed in regular black type:

> 01 Yes
> 02 No

Finally, SKIP PATTERN INSTRUCTIONS—which have been provided to route you *through* the questionnaire and, if appropriate, *around* blocks of questions that are not relevant for your facility—are also printed in *light italics and enclosed in parentheses:*

(Go to next question)
(Skip to Question 21 on page 10)

4. **Answer Columns** Most of the questionnaires have multiple columns of answer spaces designed to permit answers for more than one unit, process, or hazardous waste. Some answer space columns are labeled 1 through 5; others are labeled A and B. These multiple answer space columns ALWAYS appear in gray opposite the questions. In the example below, there are five columns of answer spaces that will permit up to five answers for each question:

Question	Reuse as Fuel Unit No. 1	Reuse as Fuel Unit No. 2	Reuse as Fuel Unit No. 3	Reuse as Fuel Unit No. 4	Reuse as Fuel Unit No. 5
18. What was the quantity of NONHAZARDOUS waste—liquids, sludges, and solids—reused as fuel in this unit during 1986? *(Enter the quantities and circle a unit of measure, if none, enter zero.)*					
a. Liquids					
i. Quantity					
ii. Unit of measure *(Circle one)*					
Tons	01	01	01	01	01
Gallons	02	02	02	02	02
b. Sludges					
i. Quantity					
ii. Unit of measure *(Circle one)*					
Tons	01	01	01	01	01
Gallons	02	02	02	02	02
c. Solids					
i. Quantity, tons					
19. What was the quantity of HAZARDOUS waste—liquids, sludges, and solids—reused as fuel in this unit during 1986? *(Enter the quantities and circle a unit of measure, if none, enter zero.)*					
a. Liquids					
i. Quantity					
ii. Unit of measure *(Circle one)*					
Tons	01	01	01	01	01
Gallons	02	02	02	02	02
b. Sludges					
i. Quantity					
ii. Unit of measure *(Circle one)*					
Tons	01	01	01	01	01
Gallons	02	02	02	02	02
c. Solids					
i. Quantity, tons					

To minimize errors in recording your answers in these multiple answer columns, answer the questions in only one column at a time (i.e., only one unit, process, or hazardous waste at a time). For example, if you have two hazardous wastewater treatment processes onsite, you should answer ALL of the questions for one before you answer ANY of the questions for the other.

If you do not have enough answer spaces to provide information on EACH unit, process, or hazardous waste at your facility, call the Survey Helpline (1-800-635-8850) and we will provide you with additional answer spaces specially designed and labeled for your facility. **DO NOT PHOTOCOPY ANY QUESTIONNAIRES TO CREATE MORE ANSWER SPACES.**

5. **Double-Counting of Waste** Most of these questionnaires ask several questions about the quantities of hazardous and nonhazardous waste that were managed—treated, stored, or recovered—onsite during 1986. With a few well-marked exceptions, these questions are asked in a way that allows you to DOUBLE-COUNT waste that was treated, stored, or recovered more than once.

   Thus, all waste that was managed more than once or with more than one unit, process, or operation (e.g., waste that was treated more than once OR that was both stored and treated) **should be reported in each questionnaire that is relevant.** Double-counting waste quantities helps identify and accurately quantify the types and amounts of hazardous waste treatment, storage, and recovery capacity available at your facility. We recognize, of course, that double-counted quantities should not be added to determine a total quantity of waste managed at your facility.

6. **Units of Measure** With a few exceptions, report all the waste quantities in the questionnaires using either one of two units of measure—tons or gallons. In many cases, you need only circle a numeric code—01 for tons or 02 for gallons—to indicate a unit of measure.

   If you have to combine several quantities of waste that have different forms (e.g., liquids, solids, sludges, and gases) in order to report a single quantity, you will have to convert from one unit of measure to another. Use the following information to make these conversions, as necessary:

   - 1 ton = 2,000 pounds
   - 1 ton = 240 gallons*
   - 1 gallon = 8.34 pounds*
   - 1,000 gallons = 4.1 tons*
   - 1 cubic yard = 202 gallons*
   - 1 cubic yard = 0.83 tons*
   - 1 acre = 43,560 square feet
   - 1 square mile = 640 acres

   **These equations use the conversion factor for water; if you have a more accurate conversion factor for your waste, use it instead.*

   To report gases in tons, use the following equation:

   1 million standard cubic feet = 1.39(molecular weight) tons

   This equation means that a volume of one million standard cubic feet of gas can be converted to ton units of weight by multiplying the number of million standard cubic feet by 1.39, then multiplying the result by the molecular weight of the gas. The molecular weight of a mixed gas is proportionate to the molecular weight of its individual components. Provided below are the molecular weights of several gases:

Hydrogen = 2	Nitrogen = 28
Carbon monoxide = 28	Carbon dioxide = 44
Methane = 16	Water vapor = 18
Oxygen = 32	Air = 29

   If you have any questions about these conversion factors, call the Survey Helpline (1-800-635-8850).

7. **Rounding** All numeric answers reported in these questionnaires should be rounded to the nearest whole number. **Do not report any fractions or decimals in these questionnaires.** For example, 1.23 should be rounded to 1, and 1.87 should be rounded to 2. (An exception to this is Question 20g from Questionnaire GB, which asks you to report the specific gravity of each hazardous waste generated onsite.)

   Similarly, any waste quantity reported in these questionnaires should be rounded to the nearest whole ton or gallon. **However, any waste quantity less than 1 ton or gallon should be reported as 1.** For example, 200 pounds (0.1 ton) should be rounded to 1 ton, and 0.75 gallon should be rounded to 1 gallon.

8. **Reporting Time Period**
   - Waste quantity information should be reported for the 12 months ending December 31, 1986.
   - Design and operating status information should describe your facility's current operations, even if they are different than they were during the 12 months ending December 31, 1986.

9. **Operating Status of Hazardous Waste Management Units and Processes** Report all hazardous waste management units and processes in the following categories:
   - Units and processes that were operational onsite during 1986, even if they are no longer operational in 1987 and will not be used onsite in the future to manage hazardous waste.
   - Units and processes that are currently operating or temporarily not operating onsite to manage hazardous waste. This includes units and processes that were added onsite at a facility during 1987.
   - Units and processes that are planned to manage hazardous waste onsite before January 1992. This includes units or processes that are in place but not yet operating (including those that were previously used to manage nonhazardous waste but that will be used to manage hazardous waste); units or processes that are under construction or that are being reconfigured; and units or processes that are being planned—those for which you know rough startup date, type of unit or process, and approximate capacity.

10. **Regulatory Status of Treatment, Storage, and Recovery Units** When you report the number and type of hazardous waste treatment, storage, or recovery units, processes, or operations onsite, **REPORT INFORMATION ON ALL UNITS, PROCESSES, OR OPERATIONS THAT ARE USED TO MANAGE HAZARDOUS WASTE, INCLUDING THOSE EXEMPT FROM PERMITTING REQUIREMENTS UNDER THE RESOURCE CONSERVATION AND RECOVERY ACT (RCRA).**

    The units in which the following treatment and recovery operations occur are usually exempt from RCRA permitting requirements. However, **THESE OPERATIONS MUST BE REPORTED:**
    - Wastewater treatment processes, including pretreatment, in tanks that are permitted or regulated under the Clean Water Act.
    - Elementary neutralization.
    - Recovery for reuse; e.g., solvents, organic liquids, metals.
    - Reuse of hazardous waste as fuel in industrial boilers, furnaces, and kilns.
    - Fuel blending of hazardous waste.

    DO NOT REPORT ANY HAZARDOUS WASTE MANAGED IN A CLOSED-LOOP RECOVERY SYSTEM. To be considered a "closed-loop" recovery system, a recovery unit must meet ALL of the following criteria:
    - Secondary materials must be returned to the original process.
    - The production process to which these secondary materials are returned must be a **primary production process**.
    - The secondary material must be returned as feedstock to the original production process and must be **recycled as part of the process**.

Additional information on closed-loop recovery can be found in volume 50 of the *Federal Register*, page 639.

DO NOT REPORT ANY HAZARDOUS WASTE THAT WAS MANAGED IN A TOTALLY ENCLOSED TREATMENT UNIT. A treatment unit is totally enclosed if it is directly connected to an industrial production process and is constructed and operated in a manner that prevents the release of any hazardous waste or any constituent thereof into the environment during treatment.

11. **Regulatory Status of Hazardous Waste** Report all waste in the following categories as hazardous waste:
    - Any waste considered hazardous waste under RCRA. This includes hazardous wastewater pretreated prior to discharge under a NPDES permit or prior to discharge to a POTW; hazardous waste generated in a production process or waste treatment process; and hazardous waste that is a characteristic waste, even though it may lose its hazardous waste characteristic through mixing with other wastewater or by treatment.
    - Any waste considered hazardous by your state.
    - Waste containing polychlorinated biphenyls (PCBs).
    - Waste containing asbestos.
    - Waste containing dioxins/furans.
    - Radioactive waste mixed with hazardous waste.

DEFINITIONS

The following definitions were developed for this survey and apply throughout all the questionnaires enclosed with this instruction booklet. If you have any questions about how these definitions apply to your facility, call the Survey Helpline (1-800-635-8850).

ACCUMULATION The holding of hazardous waste that was generated onsite in tanks or in container accumulation or storage areas for periods of 90 days or less in accordance with the accumulation rule (40 CFR 262.34).

CHARACTERISTIC WASTE RCRA "D" wastes that exhibit ignitable, corrosive, reactive, or toxic characteristics.

COMMERCIAL Any hazardous waste treatment, storage, disposal, or recovery unit, process, or operation is considered to be commercial if it is generally available to manage the waste of other facilities **not under the same ownership as this facility**. Units, processes, or operations that are offered commercially are usually made available for a fee or other remuneration. However, units, processes, or operations offered commercially **include** those used to reclaim, reuse, or recover materials from hazardous waste that has been purchased for that purpose. Any unit, process, or operation offered **only** to other facilities **under the same ownership as this facility** is not considered to be commercial. A hazardous waste treatment, storage, disposal, or recovery process or operation does not have to be the primary activity at a facility for it to be considered commercial.

DOWNGRADIENT The direction of groundwater flow.

KARST TERRAIN Irregular topography characterized by sink holes (abrupt, often circular depressions in the land surface), streamless valleys, and streams that disappear underground—all developed by action of surface and underground water in soluble rock, such as limestone.

MANAGEMENT Activities conducted onsite to treat, store, dispose, recover for reuse, or accumulate hazardous waste. For this survey, *management* **does not include** transportation or generation.

PROCESS One or more units of equipment acting together to perform a single operation on a waste stream.

RCRA The Resource Conservation and Recovery Act of 1976, the federal statute that regulates the treatment, accumulation, storage, disposal, and recycling of hazardous waste.

RECYCLING Any reuse, reclamation, or recovery activity to recover material or energy resources from hazardous waste.

SEASONAL HIGH WATER TABLE The upper surface of the saturated zone during the time of year when the groundwater level is closest to the ground surface.

STORAGE The temporary holding, OTHER THAN ACCUMULATION, of hazardous waste in tanks, containers, surface impoundments, or waste piles, after which it is treated, disposed, recovered for reuse, or stored elsewhere.

SURFACE IMPOUNDMENT A natural topographic depression, man-made excavation, or diked area formed primarily of earthern materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an underground injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

SYSTEM One or more processes that work together to treat a waste stream.

TANK A stationary device, designed to contain hazardous waste and constructed primarily of nonearthen materials that provide structural support. FOR THIS SURVEY, a hazardous waste tank is a unit (other than incinerators, surface impoundments, boilers, and furnaces) that is used for the accumulation, treatment, recovery for reuse, or storage of hazardous waste. The following are examples of units that should be considered tanks: holding tanks, equalization tanks, clarifiers, filter presses, blending tanks, distillation towers, accumulation/storage tanks, and sumps.

DEFINITIONS (continued)

TANK SYSTEMS Tanks used to treat, store, recover for reuse, or accumulate hazardous waste, including ancillary equipment. Ancillary equipment includes any device such as piping, fittings, flanges, valves, pumps, or instrumentation that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between a hazardous waste storage and treatment tank(s) to a point of disposal onsite, or to a point of shipment for disposal offsite.

TREATMENT Any activity, including pretreatment, designed to change the character or composition of any hazardous waste so as to render it nonhazardous; safer to transport, store, or dispose; amenable for recovery; or reduced in volume.

UNIT A single piece of equipment used to treat, store, recover for reuse, or dispose of hazardous waste.

WASTE PILE Any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

WETLAND An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland generally includes swamps, marshes, bogs, and similar areas.

100-YEAR FLOODPLAIN Any land area that is subject to a one percent or greater chance of flooding in any given year from any source (or any land area that is subject to flooding once every 100 years).

The following list was developed specifically for this survey and is provided here to help you complete the schematics in Questionnaire GA, "General Facility Information" and several questions in Questionnaire GB, "Hazardous Waste Characterization" and Questionnaire GI, "Tank Systems." It should not be confused with the list of EPA waste handling codes (40 CFR 265, Appendix I, Table 2, July 1, 1984).

PROCESS CODES

TREATMENT AND RECYCLING

Incineration/thermal treatment

1I Liquid injection
2I Rotary (or rocking) kiln
3I Rotary kiln with a liquid injection unit
4I Two stage
5I Fixed hearth
6I Multiple hearth
7I Fluidized bed
8I Infra-red
9I Fume/vapor
10I Pyrolytic destructor *(See Note 1)*
11I Other incineration/thermal treatment

Reuse as fuel

1RF Cement kiln
2RF Aggregate kiln
3RF Asphalt kiln
4RF Other kiln
5RF Blast furnace
6RF Sulfur recovery furnace
7RF Smelting, melting, or refining furnace
8RF Coke oven
9RF Other industrial furnace
10RF Industrial boiler
11RF Utility boiler *(See Note 2)*
12RF Process heater
13RF Other reuse as fuel unit

Fuel blending

1FB Fuel blending

Solidification

1S Cement or cement/silicate processes
2S Pozzolanic processes
3S Asphaltic processes
4S Thermoplastic techniques
5S Organic polymer techniques
6S Jacketing (macro-encapsulation)
7S Other solidification

Recovery of solvents and liquid organics for reuse

1SR Fractionation
2SR Batch still distillation
3SR Solvent extraction
4SR Thin-film evaporation
5SR Filtration
6SR Phase separation
7SR Dessication
8SR Other solvent recovery (including pretreatment)

Recovery of metals

1MR Electrolytic
2MR Ion exchange
3MR Reverse osmosis
4MR Solvent extraction
5MR Secondary smelting
6MR Liming
7MR Evaporation
8MR Filtration
9MR Sodium borohydride
10MR Other metals recovery (including pretreatment)

Wastewater treatment

Equalization
1WT Equalization

Cyanide oxidation
2WT Alkaline chlorination
3WT Ozone
4WT Electrochemical
5WT Other cyanide oxidation

General oxidation (including disinfection)
6WT Chlorination
7WT Ozonation
8WT UV radiation
9WT Other general oxidation

Chemical precipitation *(See Note 3)*
10WT Lime
11WT Sodium hydroxide
12WT Soda ash
13WT Sulfide
14WT Other chemical precipitation

Chromium reduction
15WT Sodium bisulfite
16WT Sulfur dioxide
17WT Ferrous sulfate
18WT Other chromium reduction

Complexed metals treatment (other than chemical precipitation by pH adjustment)
19WT Complexed metals treatment

Emulsion breaking
20WT Thermal
21WT Chemical
22WT Other emulsion breaking

Adsorption
23WT Carbon adsorption
24WT Ion exchange
25WT Resin adsorption
26WT Other adsorption

Stripping
27WT Air stripping
28WT Steam stripping
29WT Other stripping

(continued)

TREATMENT AND RECYCLING (continued)

Evaporation
30WT Thermal
31WT Solar
32WT Vapor recompression
33WT Other evaporation

Filtration
34WT Diatomaceous earth
35WT Sand
36WT Multimedia
37WT Other filtration

Sludge dewatering
38WT Gravity thickening
39WT Vacuum filtration
40WT Pressure filtration (belt, plate and frame, or leaf)
41WT Centrifuge
42WT Other sludge dewatering

Air flotation
43WT Dissolved air flotation
44WT Partial aeration
45WT Air dispersion
46WT Other air flotation

Oil skimming
47WT Gravity separation
48WT Coalescing plate separation
49WT Other oil skimming

Other liquid phase separation
50WT Decanting
51WT Other liquid phase separation

Biological treatment
52WT Activated sludge
53WT Fixed film—trickling filter
54WT Fixed film—rotating contactor
55WT Lagoon or basin, aerated
56WT Lagoon, facultative
57WT Anaerobic
58WT Other biological treatment

Other wastewater treatment
59WT Wet air oxidation
60WT Neutralization
61WT Nitrification
62WT Denitrification
63WT Flocculation and/or coagulation
64WT Settling (clarification)
65WT Reverse osmosis
66WT Other wastewater treatment

OTHER PROCESSES (TREATMENT OR RECOVERY)

1TR Other treatment
2TR Other recovery for reuse

ACCUMULATION

1A Containers
2A Tanks

STORAGE

1ST Container (i.e., barrel, drum)
2ST Tank
3ST Waste pile
4ST Surface impoundment
5ST Other storage

DISPOSAL

1D Landfill
2D Land treatment
3D Surface impoundment (to be closed as a landfill)
4D Underground injection well

NOTES:

1. A pyrolytic destructor is not considered an incinerator but will be included in this questionnaire for data gathering purposes.
2. A utility boiler is a boiler operated by a company whose primary business is to produce electrical power and/or steam for public consumption.
3. Chemical precipitation is a treatment operation whereby the pH of a waste is adjusted to the range necessary for removal (precipitation) of contaminants. However, if the pH is adjusted *solely* to achieve a neutral pH, THE OPERATION SHOULD BE CONSIDERED NEUTRALIZATION (60WT).

AIR POLLUTION CONTROL DEVICE CODES

1AP	Cyclone	18AP	Earth cover
2AP	Quench	19AP	Wind screen
3AP	Boiler	20AP	Synthetic cover
4AP	Flare	21AP	Synthetic membrane
5AP	Baghouse	22AP	Floating synthetic membrane
6AP	Condenser	23AP	Internal floating roof
7AP	High impact scrubber	24AP	External floating roof
8AP	Venturi scrubber	25AP	Enclosure with control device
9AP	Packed bed scrubber	26AP	Enclosure without control device
10AP	Wet scrubber	27AP	Submerged loading
11AP	Wet ionizing scrubber	28AP	Non-vented tanks
12AP	Mist eliminator	29AP	Refrigeration/condensation emission device
13AP	Carbon adsorption device	30AP	Chemical stabilization
14AP	Vapor/fume incinerator	31AP	Vented gas collection
15AP	Electrostatic precipitator	32AP	Wetting
16AP	Wet electrostatic precipitator	33AP	Other
17AP	Daily earth cover		

INSTRUCTIONS	APPENDIX B: STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES	PAGE B-1

The following list of Standard Industrial Classification (SIC) Codes should be used to complete several questions from Questionnaire GA, "General Facility Information" and Questionnaire GB, "Hazardous Waste Characterization."

SIC Code	Industry
Agricultural Production—Crops	
0111	Wheat
0112	Rice
0115	Corn
0116	Soybeans
0119	Cash grains, nec
0131	Cotton
0132	Tobacco
0133	Sugar crops
0134	Irish potatoes
0139	Field crops, except cash grains, nec
0161	Vegetables and melons
0171	Berry crops
0172	Grapes
0173	Tree nuts
0174	Citrus fruits
0175	Deciduous tree fruits
0179	Fruits and tree nuts, nec
0181	Ornamental nursery products
0182	Food crops grown under cover
0189	Horticultural specialties, nec
0191	General farms, primarily crops
Agricultural Production—Livestock	
0211	Beef cattle feedlots
0212	Beef cattle, except feedlots
0213	Hogs
0214	Sheep and goats
0219	General livestock, nec
0241	Dairy farms
0251	Broiler, fryer, and roaster chickens
0252	Chicken eggs
0253	Turkeys and turkey eggs
0254	Poultry hatcheries
0259	Poultry and eggs, nec
0271	Fur-bearing animals and rabbits
0272	Horses and other equines
0279	Animal specialties, nec
0291	General farms, primarily livestock
Agricultural Services	
0711	Soil preparation services
0721	Crop planting and protection
0722	Crop harvesting
0723	Crop preparation services for market
0724	Cotton ginning
0729	General crop services
0741	Veterinary services, farm livestock
0742	Veterinary services, specialties
0751	Livestock services, except specialties
0752	Animal specialty services
0761	Farm labor contractors
0762	Farm management services
0781	Landscape counseling and planning
0782	Lawn and garden services
0783	Ornamental shrub and tree services
Forestry	
0811	Timber tracts
0821	Forest nurseries and seed gathering
0843	Extraction of pine gum
0849	Gathering of forest products, nec
0851	Forestry services
Fishing, Hunting, and Trapping	
0912	Finfish
0913	Shellfish
0919	Miscellaneous marine products
0921	Fish hatcheries and preserves
0971	Hunting, trapping, game propagation
Mining	
1011	Iron ores
1021	Copper ores
1031	Lead and zinc ores
1041	Gold ores
1044	Silver ores
1051	Bauxite and other aluminum ores
1061	Ferroalloy ores, except vanadium
1081	Metal mining services
1092	Mercury ores
1094	Uranium, radium, vanadium ores
1099	Metal ores, nec
1111	Anthracite
1112	Anthracite mining services
1211	Bituminous coal and lignite
1213	Bituminous and lignite services
1311	Crude petroleum and natural gas
1321	Natural gas liquids
1381	Drilling oil and gas wells
1382	Oil and gas exploration services
1389	Oil and gas field services, nec
1411	Dimension stone
1422	Crushed and broken limestone
1423	Crushed and broken granite
1429	Crushed and broken stone, nec
1442	Construction sand and gravel
1446	Industrial sand
1452	Bentonite
1453	Fire clay
1454	Fuller's earth
1455	Kaolin and ball clay
1459	Clay and related minerals, nec
1472	Barite
1473	Fluorspar
1474	Potash, soda and borate minerals

Note: nec = not elsewhere classified.

SIC Code	Industry
1475	Phosphate rock
1476	Rock salt
1477	Sulfur
1479	Chemical and fertilizer mining, nec
1481	Nonmetallic minerals services
1492	Gypsum
1496	Talc, soapstone, and pyrophyllite
1499	Nonmetallic minerals, nec
Construction	
1521	Single-family housing construction
1522	Residential construction, nec
1531	Operative builders
1541	Industrial buildings and warehouses
1542	Nonresidential construction, nec
1611	Highway and street construction
1622	Bridge, tunnel, and elevated highway
1623	Water, sewer, and utility lines
1629	Heavy construction, nec
1711	Plumbing, heating, air conditioning
1721	Painting, paper hanging, decorating
1731	Electrical work
1741	Masonry and other stonework
1742	Plastering, drywall, and insulation
1743	Terrazzo, tile, marble, mosaic work
1751	Carpentering
1752	Floor laying and floor work, nec
1761	Roofing and sheet metal work
1771	Concrete work
1781	Water well drilling
1791	Structural metal erection
1793	Glass and glazing work
1794	Excavating and foundation work
1795	Wrecking and demolition work
1796	Installing building equipment, nec
1799	Special trade contractors, nec
Food Products	
2011	Meat packing plants
2013	Sausages and other prepared meats
2016	Poultry dressing plants
2017	Poultry and egg processing
2021	Creamery butter
2022	Cheese, natural and processed
2023	Condensed and evaporated milk
2024	Ice cream and frozen desserts
2026	Fluid milk
2032	Canned specialties
2033	Canned fruits and vegetables
2034	Dehydrated fruits, vegetables, soups
2035	Pickles, sauces, and salad dressings
2037	Frozen fruits and vegetables
2038	Frozen specialties
2041	Flour and other grain mill products
2043	Cereal breakfast foods
2044	Rice milling
2045	Blended and prepared flour
2046	Wet corn milling
2047	Dog, cat, and other pet food
2048	Prepared feeds, nec
2051	Bread, cake, and related products
2052	Cookies and crackers
2061	Raw cane sugar
2062	Cane sugar refining
2063	Beet sugar
2065	Confectionery products
2066	Chocolate and cocoa products
2067	Chewing gum
2074	Cottonseed oil mills
2075	Soybean oil mills
2076	Vegetable oil mills, nec
2077	Animal and marine fats and oils
2079	Shortening and cooking oils
2082	Malt beverages
2083	Malt
2084	Wines, brandy, and brandy spirits
2085	Distilled liquor, except brandy
2086	Bottled and canned soft drinks
2087	Flavoring extracts and syrups, nec
2091	Canned and cured seafoods
2092	Fresh or frozen packaged fish
2095	Roasted coffee
2097	Manufactured ice
2098	Macaroni and spaghetti
2099	Food preparations, nec
Tobacco	
2111	Cigarettes
2121	Cigars
2131	Chewing and smoking tobacco
2141	Tobacco stemming and redrying
Textile Mill Products	
2211	Weaving mills, cotton
2221	Weaving mills, synthetics
2231	Weaving and finishing mills, wool
2241	Narrow fabric mills
2251	Women's hosiery, except socks
2252	Hosiery, nec
2253	Knit outerwear mills
2254	Knit underwear mills
2257	Circular knit fabric mills
2258	Warp knit fabric mills
2259	Knitting mills, nec
2261	Finishing plants, cotton
2262	Finishing plants, synthetics

Note: nec = not elsewhere classified.

SIC Code	Industry
2269	Finishing plants, nec
2271	Woven carpets and rugs
2272	Tufted carpets and rugs
2279	Carpets and rugs, nec
2281	Yarn mills, except wool
2282	Throwing and winding mills
2283	Wool yarn mills
2284	Thread mills
2291	Felt goods, except woven felts and hats
2292	Lace goods
2293	Paddings and upholstery filling
2294	Processed textile waste
2295	Coated fabrics, not rubberized
2296	Tire cord and fabric
2297	Nonwoven fabrics
2298	Cordage and twine
2299	Textile goods, nec
Apparel and Related Textiles	
2311	Men's and boys' suits and coats
2321	Men's and boy's shirts and nightwear
2322	Men's and boys' underwear
2323	Men's and boys' neckwear
2327	Men's and boys' separate trousers
2328	Men's and boys' work clothing
2329	Men's and boys' clothing, nec
2331	Women's and misses' blouses and waists
2335	Women's and misses' dresses
2337	Women's and misses' suits and coats
2339	Women's and misses' outerwear, nec
2341	Women's and children's underwear
2342	Brassieres and allied garments
2351	Millinery
2352	Hats and caps, except millinery
2361	Children's dresses and blouses
2363	Children's coats and suits
2369	Children's outerwear, nec
2371	Fur goods
2381	Fabric dress and work gloves
2384	Robes and dressing gowns
2385	Waterproof outergarments
2386	Leather and sheep lined clothing
2387	Apparel belts
2389	Apparel and accessories, nec
2391	Curtains and draperies
2392	House furnishings, nec
2393	Textile bags
2394	Canvas and related products
2395	Pleating and stitching
2396	Automotive and apparel trimmings
2397	Schiffli machine embroideries
2399	Fabricated textile products, nec

SIC Code	Industry
Lumber and Wood Products	
2411	Logging camps and logging contractors
2421	Sawmills and planing mills, general
2426	Hardwood dimension and flooring
2429	Special product sawmills, nec
2431	Millwork
2434	Wood kitchen cabinets
2435	Hardwood veneer and plywood
2436	Softwood veneer and plywood
2439	Structural wood members, nec
2441	Nailed wood boxes and shook
2448	Wood pallets and skids
2449	Wood containers, nec
2451	Mobile homes
2452	Prefabricated wood buildings
2491	Wood preserving
2492	Particleboard
2499	Wood products, nec
Furniture and Fixtures	
2511	Wood household furniture
2512	Upholstered household furniture
2514	Metal household furniture
2515	Mattresses and bedsprings
2517	Wood TV and radio cabinets
2519	Household furniture, nec
2521	Wood office furniture
2522	Metal office furniture
2531	Public building and related furniture
2541	Wood partitions and fixtures
2542	Metal partitions and fixtures
2591	Drapery hardware and blinds and shades
2599	Furniture and fixtures, nec
Paper Products	
2611	Pulp mills
2621	Paper mills, except building paper
2631	Paperboard mills
2641	Paper coating and glazing
2642	Envelopes
2643	Bags, except textile bags
2645	Die-cut paper and board
2646	Pressed and molded pulp goods
2647	Sanitary paper products
2648	Stationery products
2649	Converted paper products, nec
2651	Folding paperboard boxes
2652	Set-up paperboard boxes
2653	Corrugated and solid fiber boxes
2654	Sanitary food containers
2655	Fiber cans, drums, and similar products
2661	Building paper and board mills

Note: nec = not elsewhere classified.

SIC Code	Industry
Printing and Publishing Industries	
2711	Newspapers
2721	Periodicals
2731	Book publishing
2732	Book printing
2741	Miscellaneous publishing
2751	Commercial printing, letterpress
2752	Commercial printing, lithographic
2753	Engraving and plate printing
2754	Commercial printing, gravure
2761	Manifold business forms
2771	Greeting card publishing
2782	Blankbooks and looseleaf binders
2789	Bookbinding and related work
2791	Typesetting
2793	Photoengraving
2794	Electrotyping and stereotyping
2795	Lithographic platemaking services
Chemical Products	
2800	General chemical manufacturing
2812	Alkalies and chlorine
2813	Industrial gases
2816	Inorganic pigments
2818	Organic pesticide products
2819	Industrial inorganic chemicals, nec
2821	Plastics materials and resins
2822	Synthetic rubber
2823	Cellulosic man-made fibers
2824	Organic fibers, noncellulosic
2831	Biological products
2833	Medicinals and botanicals
2834	Pharmaceutical preparations
2841	Soap and other detergents
2842	Polishes and sanitation goods
2843	Surface active agents
2844	Toilet preparations
2851	Paints and allied products
2861	Gum and wood chemicals
2865	Cyclic crudes and intermediates
2869	Industrial organic chemicals, nec
2873	Nitrogenous fertilizers
2874	Phosphatic fertilizers
2875	Fertilizers, mixing only
2879	Agricultural chemicals, nec
2891	Adhesives and sealants
2892	Explosives
2893	Printing ink
2895	Carbon black
2899	Chemical preparations, nec
Petroleum and Coal Products	
2911	Petroleum refining
2951	Paving mixtures and blocks
2952	Asphalt felts and coatings
2992	Lubricating oils and greases
2999	Petroleum and coal products, nec
Rubber and Plastic Products	
3011	Tires and inner tubes
3021	Rubber and plastics footwear
3031	Reclaimed rubber
3041	Rubber and plastics hose and belting
3069	Fabricated rubber products, nec
3079	Miscellaneous plastics products
Leather Products	
3111	Leather tanning and finishing
3131	Boot and shoe cut stock and findings
3142	House slippers
3143	Men's footwear, except athletic
3144	Women's footwear, except athletic
3149	Footwear, except rubber, nec
3151	Leather gloves and mittens
3161	Luggage
3171	Women's handbags and purses
3172	Personal leather goods, nec
3199	Leather goods, nec
Stone, Clay, and Glass Products	
3211	Flat glass
3221	Glass containers
3229	Pressed and blown glass, nec
3231	Products of purchased glass
3241	Cement, hydraulic
3251	Brick and structural clay tile
3253	Ceramic wall and floor tile
3255	Clay refractories
3259	Structural clay products, nec
3261	Vitreous plumbing fixtures
3262	Vitreous china food utensils
3263	Fine earthenware food utensils
3264	Porcelain electrical supplies
3269	Pottery products, nec
3271	Concrete block and brick
3272	Concrete products, nec
3273	Ready-mixed concrete
3274	Lime
3275	Gypsum products
3281	Cut stone and stone products
3291	Abrasive products
3292	Asbestos products
3293	Gaskets, packing, and sealing devices
3295	Minerals, ground or treated
3296	Mineral wool
3297	Nonclay refractories
3299	Nometallic mineral products, nec

Note: nec = not elsewhere classified.

SIC Code	Industry
Primary Metal Industries	
3312	Blast furnaces and steel mills
3313	Electrometallurgical products
3315	Steel wire and related products
3316	Cold finishing of steel shapes
3317	Steel pipe and tubes
3321	Gray iron foundries
3322	Malleable iron foundries
3324	Steel investment foundries
3325	Steel foundries, nec
3331	Primary copper
3332	Primary lead
3333	Primary zinc
3334	Primary aluminum
3339	Primary nonferrous metals, nec
3341	Secondary nonferrous metals
3351	Copper rolling and drawing
3353	Aluminum sheet, plate, and foil
3354	Aluminum extruded products
3355	Aluminum rolling and drawing, nec
3356	Nonferrous rolling and drawing, nec
3357	Nonferrous wire drawing and insulating
3361	Aluminum foundries
3362	Brass, bronze, and copper foundries
3369	Nonferrous foundries, nec
3398	Metal heat treating
3399	Primary metal products, nec
Metal Fabrications	
3411	Metal cans
3412	Metal barrels, drums, and pails
3421	Cutlery
3423	Hand and edge tools, nec
3425	Hand saws and saw blades
3429	Hardware, nec
3431	Metal sanitary ware
3432	Plumbing fittings and brass goods
3433	Heating equipment, except electric
3441	Fabricated structural metal
3442	Metal doors, sash, and trim
3443	Fabricated plate work (boiler shops)
3444	Sheet metal work
3446	Architectural metal work
3448	Prefabricated metal buildings
3449	Miscellaneous metal work
3451	Screw machine products
3452	Bolts, nuts, rivets, and washers
3462	Iron and steel forgings
3463	Nonferrous forgings
3465	Automotive stampings
3466	Crowns and closures
3469	Metal stampings, nec
3470	Coating, engraving, and allied services
3471	Plating and polishing
3479	Metal coating and allied services
3482	Small arms ammunition
3483	Ammunition, except for small arms, nec
3484	Small arms
3489	Ordnance and accessories, nec
3493	Steel springs, except wire
3494	Valves and pipe fittings
3495	Wire springs
3496	Miscellaneous fabricated wire products
3497	Metal foil and leaf
3498	Fabricated pipe and fittings
3499	Fabricated metal products, nec
Nonelectrical Machinery	
3511	Turbines and turbine generator sets
3519	Internal combustion engines, nec
3523	Farm machinery and equipment
3524	Lawn and garden equipment
3531	Construction machinery
3532	Mining machinery
3533	Oil field machinery
3534	Elevators and moving stairways
3535	Conveyors and conveying machinery
3536	Hoists, cranes, and monorails
3537	Industrial trucks and tractors
3541	Machine tools, metal cutting types
3542	Machine tools, metal forming types
3544	Special dies, tools, jigs, and fixture
3545	Machine tool accessories
3546	Power driven hand tools
3547	Rolling mill machinery
3549	Metalworking machinery, nec
3551	Food products machinery
3552	Textile machinery
3553	Woodworking machinery
3554	Paper industries machinery
3555	Printing trades machinery
3559	Special industry machinery, nec
3561	Pumps and pumping equipment
3562	Ball and roller bearings
3563	Air and gas compressors
3564	Blowers and fans
3565	Industrial patterns
3566	Speed changers, drives, and gears
3567	Industrial furnaces and ovens
3568	Power transmission equipment, nec
3569	General industrial machinery, nec
3572	Typewriters
3573	Electronic computing equipment
3574	Calculating and accounting machines
3576	Scales and balances, except laboratory
3579	Office machines, nec
3581	Automatic merchandising machines

Note: nec = not elsewhere classified.

SIC Code	Industry
3582	Commercial laundry equipment
3585	Refrigeration and heating equipment
3586	Measuring and dispensing pumps
3589	Service industry machinery, nec
3592	Carburetors, pistons, rings, valves
3599	Machinery, except electrical, nec
Electrical and Electronic Machinery, Equipment, and Supplies	
3612	Transformers
3613	Switchgear and switchboard apparatus
3621	Motors and generators
3622	Industrial controls
3623	Welding apparatus, electrical
3624	Carbon and graphite products
3629	Electrical industrial apparatus, nec
3631	Household cooking equipment
3632	Household refrigerators and freezers
3633	Household laundry equipment
3634	Electric housewares and fans
3635	Household vacuum cleaners
3636	Sewing machines
3639	Household appliances, nec
3641	Electric lamps
3643	Current-carrying wiring devices
3644	Noncurrent-carrying wiring devices
3645	Residential lighting fixtures
3646	Commerical lighting fixtures
3647	Vehicular lighting equipment
3648	Lighting equipment, nec
3651	Radio and TV receiving sets
3652	Phonograph records
3661	Telephone and telegraph apparatus
3662	Radio and TV communication equipment
3671	Electron tubes, receiving type
3672	Cathode ray television picture tubes
3673	Electron tubes, transmitting
3674	Semiconductors and related devices
3675	Electronic capacitors
3676	Electronic resistors
3677	Electronic coils and transformers
3678	Electronic connectors
3679	Electronic components, nec
3691	Storage batteries
3692	Primary batteries, dry and wet
3693	X-ray apparatus and tubes
3694	Engine electrical equipment
3699	Electrical equipment and supplies, nec
Transportation Equipment	
3711	Motor vehicles and car bodies
3713	Truck and bus bodies
3714	Motor vehicle parts and accessories
3715	Truck trailers
3716	Motor homes on purchased chassis
3721	Aircraft
3724	Aircraft engines and engine parts
3728	Aircraft equipment, nec
3731	Ship building and repairing
3732	Boat building and repairing
3743	Railroad equipment
3751	Motorcycles, bicycles, and parts
3761	Guided missiles and space vehicles
3764	Space propulsion units and parts
3769	Space vehicle equipment, nec
3792	Travel trailers and campers
3795	Tanks and tank components
3799	Transportation equipment, nec
Instruments	
3811	Engineering and scientific instruments
3822	Environmental controls
3823	Process control instruments
3824	Fluid meters and counting devices
3825	Instruments to measure electricity
3829	Measuring and controlling devices, nec
3832	Optical instruments and lenses
3841	Surgical and medical instruments
3842	Surgical appliances and supplies
3843	Dental equipment and supplies
3851	Ophthalmic goods
3861	Photographic equipment and supplies
3873	Watches, clocks, and watchcases
Miscellaneous Manufacturing	
3911	Jewelry, precious metal
3914	Silverware and plated ware
3915	Jewelers' materials and lapidary work
3931	Musical instruments
3942	Dolls
3944	Games, toys, and children's vehicles
3949	Sporting and athletic goods, nec
3951	Pens and mechanical pencils
3952	Lead pencils and art goods
3953	Marking devices
3955	Carbon paper and inked ribbons
3961	Costume jewelry
3962	Artificial flowers
3963	Buttons
3964	Needles, pins, and fasteners
3991	Brooms and brushes
3993	Signs and advertising displays
3995	Burial caskets
3996	Hard surface floor coverings
3999	Manufacturing industries, nec

Note: nec = not elsewhere classified.

SIC Code	Industry
Railroad Transportation	
4011	Railroads, line-haul operating
4013	Switching and terminal devices
4041	Railway express service
Local Passenger Transportation	
4111	Local and suburban transit
4119	Local passenger transportation, nec
4121	Taxicabs
4131	Intercity highway transportation
4141	Local passenger charter service
4142	Charter service, except local
4151	School buses
4171	Bus terminal facilities
4172	Bus service facilities
Trucking	
4212	Local trucking, without storage
4213	Trucking, except local
4214	Local trucking and storage
4221	Farm product warehousing and storage
4222	Refrigerated warehousing
4224	Household goods warehousing
4225	General warehousing and storage
4226	Special warehousing and storage, nec
4231	Trucking terminal facilities
4311	U.S. Postal Service
Water Transportation	
4411	Deep sea foreign transportation
4421	Noncontiguous area transportation
4422	Coastwise transportation
4423	Intercoastal transportation
4431	Great Lakes transportation
4441	Transportation on rivers and canals
4452	Ferries
4453	Lighterage
4454	Towing and tugboat service
4459	Local water transportation, nec
4463	Marine cargo handling
4464	Canal operation
4469	Water transportation services, nec
Air Transportation	
4511	Certified air transportation
4521	Noncertified air transportation
4582	Airports and flying fields
4583	Air terminal services
Pipelines	
4612	Crude petroleum pipelines
4613	Refined petroleum pipelines
4619	Pipelines, nec
Transportation Services	
4712	Freight forwarding
4722	Passenger transportation arrangement
4723	Freight transportation arrangement
4742	Railroad car rental with service
4743	Railroad car rental without service
4782	Inspection and weighing services
4783	Packing and crating
4784	Fixed facilities for vehicles, nec
4789	Transportation services, nec
Communications	
4811	Telephone communication
4821	Telegraph communication
4832	Radio broadcasting
4833	Television broadcasting
4899	Communication services, nec
Electrical, Gas, and Sanitary Services	
4911	Electric services
4922	Natural gas transmission
4923	Gas transmission and distribution
4924	Natural gas distribution
4925	Gas production and/or distribution
4931	Electric and other services combined
4932	Gas and other services combined
4939	Combination utility services, nec
4941	Water supply
4952	Sewerage systems
4953	Refuse systems
4959	Sanitary services, nec
4961	Steam supply
4971	Irrigation systems
Wholesale Trade	
5012	Automobiles and other motor vehicles
5013	Automotive parts and supplies
5014	Tires and tubes
5021	Furniture
5023	Home furnishings
5031	Lumber, plywood, and millwork
5039	Construction materials, nec
5041	Sporting and recreational goods
5042	Toys and hobby goods and supplies
5043	Photographic equipment and supplies
5051	Metals service centers and offices
5052	Coal and other minerals and ores
5063	Electrical apparatus and equipment
5064	Electrical appliances, TV and radios
5065	Electronic parts and equipment
5072	Hardware
5074	Plumbing and hydronic heating supplies
5075	Warm air heating and air conditioning

Note: nec = not elsewhere classified.

SIC Code	Industry
5078	Refrigeration equipment and supplies
5081	Commercial machines and equipment
5082	Construction and mining machinery
5083	Farm machinery and equipment
5084	Industrial machinery and equipment
5085	Industrial supplies
5086	Professional equipment and supplies
5087	Service establishment equipment
5088	Transportation equipment and supplies
5093	Scrap and waste materials
5094	Jewelry, watches, and precious stones
5099	Durable goods, nec
5111	Printing and writing paper
5112	Stationery supplies
5113	Industrial and personal service paper
5122	Drugs, proprietaries, and sundries
5133	Piece goods
5134	Notions and other dry goods
5136	Men's clothing and furnishings
5137	Women's and children's clothing
5139	Footwear
5141	Groceries, general line
5142	Frozen foods
5143	Dairy products
5144	Poultry and poultry products
5145	Confectionery
5146	Fish and seafoods
5147	Meats and meat products
5148	Fresh fruits and vegetables
5149	Groceries and related products, nec
5152	Cotton
5153	Grain
5154	Livestock
5159	Farm-product raw materials, nec
5161	Chemicals and allied products
5171	Petroleum bulk stations and terminals
5172	Petroleum products, nec
5181	Beer and ale
5182	Wines and distilled beverages
5191	Farm supplies
5194	Tobacco and tobacco products
5198	Paints, varnishes, and supplies
5199	Nondurable goods, nec
Retail Trade	
5211	Lumber and other building materials
5231	Paint, glass, and wallpaper stores
5251	Hardware stores
5261	Retail nurseries and gardens
5271	Mobile home dealers
5311	Department stores
5331	Variety stores
5399	Miscellaneous general merchandise stores
5411	Grocery stores
5422	Freezer and locker meat provisioners
5423	Meat and fish (seafood) markets
5431	Fruit stores and vegetable markets
5441	Candy, nut, and confectionery stores
5451	Dairy products stores
5462	Retail bakeries, baking and selling
5463	Retail bakeries, selling only
5499	Miscellaneous food stores
5511	New and used car dealers
5521	Used car dealers
5531	Auto and home supply stores
5541	Gasoline service stations
5551	Boat dealers
5561	Recreation and utility trailer dealers
5571	Motorcycle dealers
5599	Automotive dealers, nec
5611	Men's and boys' clothing and furnishings
5621	Women's ready-to-wear stores
5631	Women's accessory and specialty stores
5641	Children's and infants' wear stores
5651	Family clothing stores
5661	Shoe stores
5681	Furriers and fur shops
5699	Miscellaneous apparel and accessories
5712	Furniture stores
5713	Floor covering stores
5714	Drapery and upholstery stores
5719	Miscellaneous home furnishings stores
5722	Household appliance stores
5732	Radio and television stores
5733	Music stores
5812	Eating places
5813	Drinking places
5912	Drugstores and proprietary stores
5921	Liquor stores
5931	Used merchandise stores
5941	Sporting goods and bicycle shops
5942	Book stores
5943	Stationery stores
5944	Jewelry stores
5945	Hobby, toy, and game shops
5946	Camera and photographic supply stores
5947	Gift, novelty, and souvenir shops
5948	Luggage and leather goods stores
5949	Sewing, needlework, and piece goods
5961	Mail order houses
5962	Merchandising machine operators
5963	Direct selling organizations
5982	Fuel and ice dealers, nec
5983	Fuel oil dealers
5984	Liquefied petroleum gas dealers

Note: nec = not elsewhere classified.

SIC Code	Industry
5992	Florists
5993	Cigar stores and stands
5994	News dealers and newsstands
5999	Miscellaneous retail stores, nec
Financial	
6011	Federal Reserve banks
6022	State banks, Federal Reserve
6023	State banks, not Federal Reserve, FDIC
6024	State banks, not Federal Reserve, not FDIC
6025	National banks, Federal Reserve
6026	National banks, not Federal Reserve, FDIC
6027	National banks, not FDIC
6028	Private banks, not incorporated, not FDIC
6032	Mutual savings banks, Federal Reserve
6033	Mutual savings banks, nec
6034	Mutual savings banks, not FDIC
6042	Nondeposit trusts, Federal Reserve
6044	Nondeposit trusts, not FDIC
6052	Foreign exchange establishments
6054	Safe deposit companies
6055	Clearinghouse associations
6056	Corporations for banking abroad
6059	Functions related to banking, nec
6112	Rediscounting, not for agricultural
6113	Rediscounting, for agricultural
6122	Federal savings and loan associations
6123	State associations, insured
6124	State associations, noninsured, FHLB
6125	State associations, noninsured, nec
6131	Agricultural credit institutions
6142	Federal credit unions
6143	State credit unions
6144	Nondeposit industrial loan companies
6145	Licensed small loan lenders
6146	Installment sales finance companies
6149	Miscellaneous personal credit institutions
6153	Short-term business credit
6159	Miscellaneous business credit institutions
6162	Mortgage bankers and correspondents
6163	Loan brokers
6211	Security brokers and dealers
6221	Commodity contracts brokers, dealers
6231	Security and commodity exchanges
6281	Security and commodity services
Insurance	
6311	Life insurance
6321	Accident and health insurance
6324	Hospital and medical service plans
6331	Fire, marine, and casualty insurance
6351	Surety insurance
6361	Title insurance
6371	Pension, health, and welfare funds
6399	Insurance carriers, nec
6411	Insurance agents, brokers, and service
Real Estate	
6512	Nonresidential building operators
6513	Apartment building operators
6514	Dwelling operators, except apartments
6515	Mobile home site operators
6517	Railroad property lessors
6519	Real property lessors, nec
6531	Real estate agents and managers
6541	Title abstract offices
6552	Subdividers and developers, nec
6553	Cemetery subdividers and developers
6611	Combined real estate, insurance, etc.
Holding and Other Investment Offices	
6711	Holding offices
6722	Management investment, open-end
6723	Management investment, closed-end
6724	Unit investment trusts
6725	Face-amount certificate offices
6732	Educational, religious, etc. trusts
6733	Trusts, nec
6792	Oil royalty traders
6793	Commodity traders
6794	Patent owners and lessors
6798	Real estate investment trusts
6799	Investors, nec
Hotels and Personal Services	
7011	Hotels, motels, and tourist courts
7021	Rooming and boarding houses
7032	Sporting and recreational camps
7033	Trailering parks for transients
7041	Membership-basis organization hotels
7211	Power laundries, family and commercial
7212	Garment pressing and cleaners' agents
7213	Linen supply
7214	Diaper service
7215	Coin-operated laundries and cleaning
7216	Dry cleaning plants, except rug
7217	Carpet and upholstery cleaning
7218	Industrial launderers
7219	Laundry and garment services, nec
7221	Photographic studios, portrait
7231	Beauty shops
7241	Barber shops
7251	Shoe repair and hat cleaning shops
7261	Funeral service and crematories
7299	Miscellaneous personal services

Note: nec = not elsewhere classified.

SIC Code	Industry
Business Services	
7311	Advertising agencies
7312	Outdoor advertising services
7313	Radio, TV, publisher representatives
7319	Advertising, nec
7321	Credit reporting and collection
7331	Direct mail advertising services
7332	Blueprinting and photocopying
7333	Commerical photography and art
7339	Stenographic and reproduction, nec
7341	Window cleaning
7342	Disinfecting and exterminating
7349	Building maintenance services, nec
7351	News syndicates
7361	Employment agencies
7362	Temporary help supply services
7369	Personnel supply services, nec
7372	Computer programming and software
7374	Data processing services
7379	Computer related services, nec
7391	Research and development laboratories
7392	Management and public relations
7393	Detective and protective services
7394	Equipment rental and leasing
7395	Photofinishing laboratories
7396	Trading stamp services
7397	Commercial testing laboratories
7399	Business services, nec
Automotive Repair, Services, and Garages	
7512	Passenger car rental and leasing
7513	Truck rental and leasing
7519	Utility trailer rental
7523	Parking lots
7525	Parking structures
7531	Top and body repair shops
7534	Tire retreading and repair shops
7535	Paint shops
7538	General automotive repair shops
7539	Automotive repair shops, nec
7542	Car washes
7549	Automotive services, nec
Miscellaneous Repair Services	
7622	Radio and television repair
7623	Refrigeration service and repair
7629	Electrical repair shops, nec
7631	Watch, clock, and jewelry repair
7641	Reupholstery and furniture repair
7692	Welding repair
7694	Armature rewinding shops
7699	Repair services, nec

SIC Code	Industry
Entertainment	
7813	Motion picture production, except TV
7814	Motion picture production for TV
7819	Services allied to motion pictures
7823	Motion picture film exchanges
7824	Film or tape distribution for TV
7829	Motion picture distribution services
7832	Motion picture theaters except drive-in
7833	Drive-in motion picture theaters
7911	Dance halls, studios, and schools
7922	Theatrical producers and services
7929	Entertainers and entertainment groups
7932	Billiard and pool establishments
7933	Bowling alleys
7941	Sports clubs and promoters
7948	Racing, including track operation
7992	Public golf courses
7993	Coin-operated amusement devices
7996	Amusement parks
7997	Membership sports and recreation clubs
7999	Amusement and recreation, nec
Health Services	
8011	Offices of physicians
8021	Offices of dentists
8031	Offices of osteopathic physicians
8041	Offices of chiropractors
8042	Offices of optometrists
8049	Offices of health practitioners, nec
8051	Skilled nurse care facilities
8059	Nursing and personal care, nec
8062	General medical and surgical hospitals
8063	Psychiatric hospitals
8069	Specialty hospitals, except psychiatric
8071	Medical laboratories
8072	Dental laboratories
8081	Outpatient care facilities
8091	Health and allied services, nec
Legal, Educational, and Social Services	
8111	Legal services
8211	Elementary and secondary schools
8221	Colleges and universities, nec
8222	Junior colleges
8231	Libraries and information centers
8241	Correspondence schools
8243	Data processing schools
8244	Business and secretarial schools
8249	Vocational schools, nec
8299	Schools and educational services, nec
8321	Individual and family services
8331	Job training and related services
8351	Child day care services

Note: nec = not elsewhere classified.

SIC Code	Industry
8361	Residential care
8399	Social services, nec
8411	Museums and art galleries
8421	Botanical and zoological gardens
Professional Organizations	
8611	Business associations
8621	Professional organizations
8631	Labor organizations
8641	Civic and social associations
8651	Political organizations
8661	Religious organizations
8699	Membership organizations, nec
8811	Private households
Miscellaneous Services	
8911	Engineering and architectural services
8922	Noncommercial research organizations
8931	Accounting, auditing, and bookkeeping
8999	Services, nec
Government	
9111	Executive offices
9121	Legislative bodies
9131	Executive and legislative combined
9199	General government, nec

SIC Code	Industry
9211	Courts
9221	Police protection
9222	Legal counsel and prosecution
9223	Correctional institutions
9224	Fire protection
9229	Public order and safety, nec
9311	Finance, taxation, and monetary policy
9411	Administration of educational programs
9431	Administration of public health programs
9441	Administration of social and manpower programs
9451	Administration of veterans' affairs
9511	Air, water, and solid waste management
9512	Land, mineral, wildlife conservation
9531	Housing programs
9532	Urban and community development
9611	Administration of general economic programs
9621	Regulation, administration of transportation
9631	Regulation, administration of utilities
9641	Regulation of agricultural marketing
9651	Regulation miscellaneous commercial sectors
9661	Space research and technology
9711	National security
9721	International affairs
9999	Nonclassifiable establishment

Note: nec = not elsewhere classified.

The following list of codes is provided to assist you in completing the questions which ask about the types of hazardous waste generated and managed onsite at your facility. This list of codes has two parts:

- A list of **X waste codes** which was developed specifically for this survey to describe (1) Waste that is considered hazardous by some state or federal regulations, but not now considered hazardous by RCRA regulations and (2) Hazardous waste residuals from onsite hazardous waste management operations.
- A list of codes for the waste considered hazardous by federal RCRA regulations—**RCRA D, F, K, P, and U waste codes.**

If you generated or managed a type of waste that is considered hazardous by regulations in your state and a waste code is not provided or if you have any questions about this list of waste codes, please call the Survey Helpline (1-800-635-8850).

X WASTE CODES

This list of X waste codes was developed specifically for this survey. **These X codes are not official RCRA waste codes and should be used ONLY for this survey.**

Code	Waste description
Waste That Is Considered Hazardous by Some State and Federal Regulations, But Not by RCRA Regulations	
XPB1	Waste which has a concentration of polychlorinated biphenyls less than 50 parts per million
XPB2	Waste which has a concentration of polychlorinated biphenyls greater than or equal to 50 parts per million but less than 500 parts per million
XPB3	Waste which has a concentration of polychlorinated biphenyls greater than or equal to 500 parts per million
XASB	Waste containing asbestos
XOIL	Waste oil
XDXN	Waste containing dioxins/furans *(See Note 1)*
Hazardous Waste Residuals from Onsite Hazardous Waste Management Operations *(See Note 2)*	
XLEA	Leachate from hazardous waste landfills
XASH	Hazardous incinerator, boiler, or furnace ash
XSCR	Hazardous incinerator, boiler, or furnace scrubber water
XWWS	Hazardous wastewater treatment sludge *(See Note 3)*
XWWL	Hazardous wastewater treatment liquid *(See Note 3)*

NOTES:

1. Do not use XDXN to denote dioxin-containing wastes described by RCRA waste codes.
2. These waste codes were developed to describe hazardous waste **residuals** that result from the **onsite** management of many individual RCRA coded wastes which are no longer individually identifiable.
3. Do not use XWWS or XWWL to denote hazardous wastewater treatment sludges or liquids that contain wastes described by RCRA waste codes beginning with the letter F or K. Instead, list F or K waste codes separately and use XWWS and/or XWWL to denote all other constituents.

RCRA WASTE CODES

Code	Waste description
Characteristic Hazardous Waste *(A description of the characteristic hazardous wastes can be found at 40 CFR 261.21-261.24, July 1, 1986. Listed in the box below is the maximum concentration of contaminants for the characteristic of EP toxicity.)*	
D001	Ignitable waste
D002	Corrosive waste
D003	Reactive waste
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver
D012	Endrin(1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene)
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane,γ isomer)
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl]ethane)
D015	Toxaphene ($C_{10}H_{10}Cl_8$,technical chlorinated camphene,67-69% chlorine)
D016	2,4-D (2,4-dichlorophenoxyacetic acid)
D017	2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid)

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY

A solid waste exhibits the characteristic of EP toxicity if, using EP toxicity test methods, the extract from a representative sample of the waste contains any of the contaminants listed below at a concentration equal to or greater than the value given.

RCRA Waste Code	Contaminant	Maximum concentration (milligrams per liter)
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0
D012	Endrin(1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene)	0.02
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane,γ isomer)	0.4
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl]ethane)	10.0
D015	Toxaphene ($C_{10}H_{10}Cl_8$,technical chlorinated camphene,67-69% chlorine)	0.5
D016	2,4-D (2,4-dichlorophenoxyacetic acid)	10.0
D017	2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid)	1.0

Code	Waste description
Hazardous Waste from Nonspecific Sources	
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichlorethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons and all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2, trichloroethane, ortho-dichlorobenzene, and trichlorofluoromethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and a total of 10 percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents; all spent solvent mixtures/blends containing before use a total of 10% or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F006	Wastewater treatment sludges from certain electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
F007	Spent cyanide plating bath solutions from electroplating operations
F008	Residues from electroplating operations where cyanides are used in the process
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process
F010	Quenching bath residues and sludges from oil baths from metal heat treating operations where cyanides are used in the process
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges)
F019	Wastes from the chemical conversion coating of aluminum
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce derivatives
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)

(continued)

Code	Waste description
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having a carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.32.)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)
F027	2,4,6-Trichlorophenol
F027	2,3,4,6-Tetrachlorophenol
F027	Pentachlorophenol
F027	Phenol,2,4,5-trichloro
F027	2,4,5-T
F027	Phenol,pentachloro
F027	Silvex
F027	Phenol,2,3,4,5-tetrachloro
F027	Phenol,2,4,6-trichloro
F027	Propionic acid, 2-(2,4,5-trichlorophenoxy)
F027	2,4,5-Trichlorophenol
F027	2,4,5-Trichlorophenoxyacetic acid
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027
Hazardous Waste from Specific Sources	
K001	Bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments
K003	Wastewater treatment sludge from the production of molybdate orange pigments
K004	Wastewater treatment sludge from the production of zinc yellow pigments
K005	Wastewater treatment sludge from the production of chrome green pigments
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)
K007	Wastewater treatment sludge from the production of iron blue pigments
K008	Oven residue from the production of chrome oxide green pigments
K009	Distillation bottoms from the production of acetaldehyde from ethylene
K010	Distillation side cuts from the production of acetaldehyde from ethylene
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile
K015	Still bottoms from the distillation of benzyl chloride
K016	Heavy ends or distillation residues from the production of carbon tetrachloride
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin
K018	Heavy ends from the fractionation column in ethyl chloride production

(continued)

Code	Waste description
Hazardous Waste from Specific Sources	
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production
K021	Aqueous spent antimony catalyst waste from fluoromethanes production
K022	Distillation bottom tars from the production of phenol/acetone from cumene
K023	Distillation light ends from the production of phthalic anhydride from naphthalene
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene
K026	Stripping still tails from the production of methyl ethyl pyridines
K027	Centrifuge and distillation residues from toluene diisocyanate production
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene
K031	By-product salts generated in the production of MSMA and cacodylic acid
K032	Wastewater treatment sludge from the production of chlordane
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane
K035	Wastewater treatment sludges generated in the production of creosote
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton
K037	Wastewater treatment sludges from the production of disulfoton
K038	Wastewater from the washing and stripping of phorate production
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
K040	Wastewater treatment sludge from the production of phorate
K041	Wastewater treatment sludge from the production of toxaphene
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T
K043	2,6-Dichlorophenol waste from the production of 2,4-D
K044	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	Spent carbon from the treatment of wastewater containing explosives
K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds
K047	Pink/red water from TNT operations
K048	Dissolved air flotation (DAF) float from the petroleum refining industry
K049	Slop oil emulsion solids from the petroleum refining industry
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry
K051	API separator sludge from the petroleum refining industry
K052	Tank bottoms (leaded) from the petroleum refining industry
K060	Ammonia still lime sludge from coking operations
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	Spent pickle liquor from steel finishing operations of plants that produce iron or steel
K069	Emission control dust/sludge from secondary lead smelting
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production
K083	Distillation bottoms from aniline production
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds

(continued)

Code	Waste description
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
K087	Decanter tank tar sludge from coking operations
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene
K095	Distillation bottoms from the production of 1,1,1-trichloroethane
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane
K098	Untreated process wastewater from the production of toxaphene
K099	Untreated wastewater from the production of 2,4-D
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K103	Process residues from aniline extraction from the production of aniline
K104	Combined wastewater streams generated from nitrobenzene/aniline production
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes
K106	Wastewater treatment sludge from the mercury cell process in chlorine production
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene
K112	Reaction byproduct water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene
K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K114	Vicinals from the purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene
K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene1

Discarded Commercial Chemical Products, Off-Specification Species, Container Residuals, and Spill Residues Thereof—Acute Hazardous Waste *(An alphabetized listing can be found at 40 CFR 261.33, July 1, 1986.)*

P001	Warfarin, when present at concentrations greater than or equal to 0.3%
P001	3-(α-Acetonyl-benzyl)-4-hydroxycoumarin and salts, when present at concentrations greater than 0.3%
P002	Acetamide, N-(aminothioxomethyl)
P002	1-Acetyl-2-thiourea
P003	2-Propenal
P003	Acrolein
P004	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene
P004	Aldrin

(continued)

Code	Waste description
P005	2-Propen-1-ol
P005	Allyl alcohol
P006	Aluminum phosphide (r,t)
P007	3(2H)-Isoxazolone,5-(aminomethyl)-
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-α-Aminopyridine
P008	4-Pyridinamine
P008	4-Aminopyridine
P009	Phenol,2,4,6-trinitro-,ammonium salt (r)
P009	Ammonium picrate (r)
P010	Arsenic acid (t)
P011	Arsenic pentoxide (t)
P011	Arsenic (V) oxide (t)
P012	Arsenic (III) oxide (t)
P012	Arsenic trioxide (t)
P013	Barium cyanide
P014	Thiophenol
P014	Benzenethiol
P015	Beryllium dust (t)
P016	Methane,oxybis(chloro-
P016	Bis(chloromethyl) ether
P017	2-Propanone,1-bromo- (t)
P017	Bromoacetone (t)
P018	Strychnidin-10-one,2,3-dimethoxy-
P018	Brucine
P020	Dinoseb
P020	Phenol,2,4-dinitro-6-(1-methylpropyl)-
P021	Calcium cyanide
P022	Carbon bisulfide (t)
P022	Carbon disulfide (t)
P023	Acetaldehyde, chloro-
P023	Chloroacetaldehyde
P024	Benzenamine, 4-chloro-
P024	p-Chloroaniline
P026	Thiourea, (2-chlorophenyl)-
P026	1-(o-Chlorophenyl)thiourea
P027	Propanenitrile,3-chloro-
P027	3-Chloropropionitrile
P028	Benzene, (chloromethyl)-
P028	Benzyl chloride
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified (t)
P031	Cyanogen
P033	Cyanogen chloride
P033	Chlorine cyanide

(continued)

Code	Waste description
P034	4,6-Dinitro-o-cyclohexylphenol (t)
P034	Phenol,2-cyclohexyl-4,6-dinitro- (t)
P036	Dichlorophenylarsine
P036	Phenyl dichloroarsine
P037	Dieldrin
P037	1,2,3,4,10,10-Hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene
P038	Diethylarsine (t)
P038	Arsine, diethyl- (t)
P039	0,0-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate (t)
P039	Disulfoton (t)
P040	0,0-Diethyl 0-pyrazinyl phosphorothioate
P040	Phosphorothioic acid, 0,0-diethyl 0- pyrazinyl ester
P041	Diethyl-p-nitrophenyl phosphate
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P042	Epinephrine
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-
P043	Diisopropyl fluorophosphate
P043	Fluoridic acid, bis(1-methylethyl) ester
P043	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	Dimethoate (t)
P044	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl]ester (t)
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, 0-[(methylamino)carbonyl]oxime
P045	Thiofanox
P046	α,α-Dimethylphenethylamine (t)
P046	Ethanamine,1,1-dimethyl-2-phenyl- (t)
P047	4,6-Dinitro-o-cresol and salts
P047	Phenol, 2-methyl-4,6-dinitro- and salts
P047	Phenol,2'4-dinitro-6-methyl-, and salts
P048	2,4-Dinitrophenol
P048	Phenol,2,4-dinitro-
P049	2,4-Dithiobiuret
P049	Thioimidodicarbonic diamide
P050	Endosulfan
P050	5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro,cyclic sulfite
P051	1,2,3,4,10,10-Hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-oxtahydro-endo,endo-1,4:5,8-dimethanonaphthalene
P051	Endrin
P054	Ethylenimine
P054	Aziridine
P056	Fluorine
P057	Fluoroacetamide
P057	Acetamide,2-fluor-
P058	Fluoroacetic acid, sodium salt
P058	Acetic acid, fluoro-, sodium salt
P059	Heptachlor
P059	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-

(continued)

Code	Waste description
P060	Hexachlorohexahydro-endo,endo-dimethanonapthalene
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P062	Tetraphosphoric acid, hexaethyl ester
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P064	Methyl isocyanate
P064	Isocyanic acid, methyl ester
P065	Fulminic acid, mercury(II) salt (r,t)
P065	Mercury fulminate (r,t)
P066	Methomyl
P066	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
P067	2-Methylaziridine
P067	1,2-Propylenimine
P068	Hydrazine,methyl-
P068	Methyl hydrazine
P069	2-Methyllactonitrile
P069	Propanenitrile,2-hydroxy-2-methyl-
P070	Propanal, 2-methyl-2-(methylthio)-, 0[(methylamino)carbonyl]oxime
P070	Aldicarb
P071	0,0-Dimethyl 0-p-nitrophenyl phosphorothioate
P071	Methyl parathion
P072	α-Naphthylthiourea
P072	Thiourea, 1-naphthalenyl-
P073	Nickel tetracarbonyl
P073	Nickel carbonyl
P074	Nickel(II)cyanide
P074	Nickel cyanide
P075	Nicotine and salts (t)
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts
P076	Nitrogen (II) oxide (t)
P076	Nitric oxide (t)
P077	p-Nitroaniline (t)
P077	Benzenamine, 4-nitro-
P078	Nitrogen (IV) oxide
P078	Nitrogen dioxide
P081	Nitroglycerine (r,t)
P081	1,2,3-Propanetriol,trinitrate-(r)
P082	Dimethylnitrosamine
P082	N-Nitrosodimethylamine
P084	Ethenamine,N-methyl-N-nitroso-
P084	N-Nitrosomethylvinylamine
P085	Diphosphoramide,octamethyl-
P085	Octamethylpyrophosphoramide

(continued)

Code	Waste description
P087	Osmium tetroxide
P087	Osmium oxide
P088	Endothall
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	Parathion (t)
P089	Phosphorothioic acid,0,0-diethyl 0-(p-nitrophenyl) ester (t)
P092	Mercury,(acetato-0)phenyl-
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P093	Thiourea, phenyl-
P094	Phosphorothioic acid, 0,0-diethyl S-(ethylthio)methyl ester (t)
P094	Phorate (t)
P095	Phosgene (t)
P095	Carbonyl chloride
P096	Hydrogen phosphide
P096	Phosphine
P097	Famphur
P097	Phosphorothioic acid, 0,0-dimethyl 0-[p-((dimethylamino)-sulfonyl)phenyl]ester
P098	Potassium cyanide
P099	Potassium silver cyanide
P101	Ethyl cyanide
P101	Propanenitrile
P102	Propargyl alcohol
P102	2-Propyn-1-ol
P103	Selenourea
P103	Carbamimidoselenoic acid
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P107	Strontium sulfide (t)
P108	Strychnidin-10-one, and salts (t)
P108	Strychnine and salts (t)
P109	Dithiopyrophosphoric acid, tetraethyl ester
P109	Tetraethyldithiopyrophosphate
P110	Plumbane,tetraethyl-
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P111	Pyrophosphoric acid, tetraethyl ester
P112	Methane,tetranitro- (r)
P112	Tetranitromethane (r)
P113	Thallium(III) oxide
P113	Thallic oxide
P114	Thallium(I) selenide
P115	Sulfuric acid, thallium(I) salt
P115	Thallium(I)sulfate

(continued)

Code	Waste description
P116	Hydrazinecarbothioamide
P116	Thiosemicarbazide
P118	Methanethiol,trichloro-
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P119	Ammonium vanadate
P120	Vanadium pentoxide
P120	Vanadium(V) oxide
P121	Zinc cyanide
P122	Zinc phosphide (r,t)
P122	Zinc phosphide, when present at concentrations greater than 10%
P123	Toxaphene
P123	Camphene, octachloro-

Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof—Toxic Waste *(An alphabetized listing can be found at 40 CFR 261.33, July 1, 1986.)*

U001	Ethanal (i)
U001	Acetaldehyde (i)
U002	2-Propanone (i)
U002	Acetone (i)
U003	Ethanenitrile (i,t)
U003	Acetonitrile (i,t)
U004	Ethanone,1-phenyl-
U004	Acetophenone
U005	2-Acetylaminofluorene
U005	Acetamide, N-9H-fluoren-2-yl-
U006	Ethanoyl chloride (c,r,t)
U006	Acetyl chloride (c,r,t)
U007	2-Propenamide
U007	Acrylamide
U008	2-Propenoic acid (i)
U008	Acrylic acid (i)
U009	2-Propenenitrile
U009	Acrylonitrile
U010	Mitomycin C
U010	Azirino(2′3′:3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocarbonyl) oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,
U011	1H-1,2,4-Triazol-3-amine
U011	Amitrole
U012	Benzenamine (i,t)
U012	Aniline (i,t)
U014	Auramine
U014	Benzenamine, 4,4′-carbonimidoylbis(N,N-dimethyl-

(continued)

Code	Waste description
U015	L-Serine, diazoacetate (ester)
U015	Azaserine
U016	Benz[c]acridine
U016	3,4-Benzacridine
U017	Benzal chloride
U017	Benezene, (dichloromethyl)-
U018	Benz[a]anthracene
U018	1,2-Benzanthracene
U019	Benzene (i,t)
U020	Benzenesulfonyl chloride (c,r)
U020	Benzenesulfonic acid chloride (c,r)
U021	Benzidine
U021	(1,1′-Biphenyl)-4,4′-diamine
U022	Benzo[a]pyrene
U022	3,4-Benzopyrene
U023	Benzotrichloride (c,r,t)
U023	Benzene, (trichloromethyl)-(c,r,t)
U024	Bis(2-chloroethoxy) methane
U024	Ethane,1,1′-[methylenebis(oxy)]bis[2-chloro-
U025	Dichloroethyl ether
U025	Ethane,1,1′-oxybis[2-chloro-
U026	2-Naphthylamine,N,N-bis(2-chloromethyl)-
U026	Chlornaphazine
U027	Propane,2,2′-oxybis[2-chloro-
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U028	1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]ester
U029	Methane, bromo-
U029	Methyl bromide
U030	4-Bromophenyl phenyl ether
U030	Benzene, 1-bromo-4-phenoxy-
U031	1-Butanol (i)
U031	N-Butyl alchohol (i)
U032	Calcium chromate
U032	Chromic acid, calcium salt
U033	Carbonyl fluoride (r,t)
U033	Carbon oxyfluoride (r,t)
U034	Chloral
U034	Acetaldehyde, trichloro-
U035	Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-
U035	Chlorambucil
U036	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octa-chloro-3a,4,7,7a-tetrahydro-
U036	Chlordane, technical
U037	Chlorobenzene
U037	Benzene, chloro-

(continued)

Code	Waste description
U038	Ethyl 4,4′-dichlorobenzilate
U038	Benzeneacetic acid, 4-chloro-α-(4-chloro-phenyl)-α-hydroxy, ethyl ester
U039	Phenol,4-chloro-3-methyl-
U039	4-Chloro-m-cresol
U041	Oxirane,2-(chloromethyl)-
U041	1-Chloro-2,3-expoxypropane
U042	Ethene,2-chloroethoxy-
U042	2-Chloroethyl vinyl ether
U043	Ethene,chloro
U043	Vinyl chloride
U044	Methane, trichloro-
U044	Chloroform
U045	Methane, chloro-(i,t)
U045	Methyl chloride (i,t)
U046	Methane, chloromethoxy-
U046	Chloromethyl methyl ether
U047	Naphthalene, 2-chloro-
U047	β-Chloronaphthalene
U048	Phenol,2-chloro-
U048	o-Chlorophenol
U049	4-Chloro-o-toluidine,hydrochloride
U049	Benzenamine, 4-chloro-2-methyl-
U050	1,2-Benzphenanthrene
U050	Chrysene
U051	Creosote
U052	Cresylic acid
U052	Cresols
U053	2-Butenal
U053	Crotonaldehyde
U055	Cumene (i)
U055	Benzene, (1-methylethyl)-(i)
U056	Cyclohexane (i)
U056	Benzene, hexahydro- (i)
U057	Cyclohexanone (i)
U058	2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloroethyl)amino]-tetrahydro-2 oxide
U058	Cyclophosphamide
U059	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-α-L-lyxohexopyranosyl)oxyl]-7,8,9,10--tetrahydro-6,8,11-trihydroxy-1-methoxy-
U059	Daunomycin
U060	Dichloro diphenyl dichloroethane
U060	DDD
U061	DDT
U061	Dichloro diphenyl trichloroethane
U062	Diallate
U062	S-(2,3-Dichloroallyl) diisopropylthiocarbamate

(continued)

Code	Waste description
U063	Dibenz[a,h]anthracene
U063	1,2:5,6-Dibenzanthracene
U064	Dibenz[a,i]pyrene
U064	1,2:7,8-Dibenzopyrene
U066	Propane,1-2-dibromo-3-chloro-
U066	1,2-Dibromo-3-chloropropane
U067	Ethylene dibromide
U067	Ethane, 1,2-dibromo-
U068	Methane, dibromo-
U068	Methylene bromide
U069	Dibutyl phthalate
U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U070	o-Dichlorobenzene
U070	Benzene, 1,2-dichloro-
U071	m-Dichlorobenzene
U071	Benzene, 1,3-dichloro-
U072	p-Dichlorobenzene
U072	Benzene, 1,4-dichloro
U073	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dichloro
U073	3,3′-Dichlorobenzidine
U074	2-Butene,1,4-dichloro-(i,t)
U074	1,4-Dichloro-2-butene (i,t)
U075	Methane, dichlorodifluoro-
U075	Dichlorodifluoromethane
U076	Ethylidene dichloride
U076	Ethane,1,1-dichloro-
U077	Ethylene dichloride
U077	Ethane,1,2-dichloro-
U078	Ethene,1-1-dichloro-
U078	1,1-Dichloroethylene
U079	Ethene, trans-1,2-dichloro-
U079	1,2-Dichloroethylene
U080	Methane, dichloro-
U080	Methylene chloride
U081	Phenol,2,4-dichloro-
U081	2,4-Dichlorophenol
U082	Phenol,2,6-dichloro-
U082	2,6-Dichlorophenol
U083	Propylene dichloride
U083	1,2-Dichloropropane
U084	Propene,1,3-dichloro-
U084	1,3-Dichloropropene
U085	2,2′-Bioxirane (i,t)
U085	1,2:3,4-Diepoxybutane (i,t)

(continued)

Code	Waste description
U086	Hydrazine, 1,2-diethyl-
U086	N,N-Diethylhydrazine
U087	Phosphorodithioic acid,0,0-diethyl-, S-methyl-ester
U087	0,0-Diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U089	4,4′-Stilbenediol,α,α′-diethyl-
U089	Diethylstilbestrol
U090	Dihydrosafrole
U090	Benzene,1,2-methylenedioxy-4-propyl-
U091	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethoxy-
U091	3,3′-Dimethoxybenzidine
U092	Methanamine, N-methyl-(i)
U092	Dimethylamine (i)
U093	Dimethylaminoazobenzene
U093	Benzenamine, N,N-dimethyl-4-phenylazo-
U094	7,12-Dimethylbenz[a]anthracene
U094	1,2-Benzanthracene,7,12-dimethyl-
U095	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethyl-
U095	3,3′-Dimethylbenzidine
U096	Hydroperoxide, 1-methyl-phenylethyl-(r)
U096	α,α-Dimethylbenzylhydroperoxide (r)
U097	Carbamoyl chloride,dimethyl-
U097	Dimethylcarbamoyl chloride
U098	Hydrazine,1,1-dimethyl-
U098	1,1-Dimethylhydrazine
U099	Hydrazine, 1,2-dimethyl-
U099	1,2-Dimethylhydrazine
U101	Phenol,2,4-dimethyl-
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U102	1-2-Benzenedicarboxylic acid, dimethyl ester
U103	Sulfuric acid, dimethyl ester
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U105	Benzene, 1-methyl-2,4-dinitro-
U106	2,6-Dinitrotoluene
U106	Benzene, 1-methyl-2,6-dinitro
U107	Di-n-octyl phthalate
U107	1-2-Benzenedicarboxylic acid, di-n-octyl ester
U108	1,4-Diethylene dioxide
U108	1,4-Dioxane
U109	Hydrazine, 1,2-diphenyl-
U109	1,2-Diphenylhydrazine

(continued)

Code	Waste description
U110	1-Propanamine,N-propyl-(i)
U110	Dipropylamine (i)
U111	N-Nitroso-N-propylamine
U111	Di-N-propylnitrosamine
U112	Ethyl acetate (i)
U112	Acetic acid, ethyl ester (i)
U113	2-Propenoic acid, ethyl ester (i)
U113	Ethyl acrylate (i)
U114	Ethylenebis(dithiocarbamic acid), salts and esters
U114	1,2-Ethanediylbiscarbamodithioic acid
U115	Oxirane (i,t)
U115	Ethylene oxide (i,t)
U116	Ethylene thiourea
U116	2-Imidazolidinethione
U117	Ethyl ether (1)
U117	Ethane,1,1'-oxybis- (i)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U118	Ethyl methacrylate
U119	Ethyl methanesulfonate
U119	Methanesulfonic acid, ethyl ester
U120	Fluoranthene
U120	Benzo[j,k]fluorene
U121	Trichloromonofluoromethane
U121	Methane, trichlorofluoro-
U122	Formaldehyde
U122	Methylene oxide
U123	Formic acid (c,t)
U123	Methanoic acid (c,t)
U124	Furan (i)
U124	Furfuran (i)
U125	Furfural (i)
U125	2-Furancarboxaldehyde (i)
U126	1-Propanol,2,3-epoxy-
U126	Glycidylaldehyde
U127	Hexachlorobenzene
U127	Benzene, hexachloro-
U128	Hexachlorobutadine
U128	1,3-Butadiene,1,1,2,3,4,4-hexachloro-
U129	Hexachlorocyclohexane (γ isomer)
U129	Lindane
U130	Hexachlorocyclopentadine
U130	1,3-Cyclopentadiene,1,2,3,4,5,5-hexa- chloro-
U131	Hexachloroethane
U131	Ethane,1,1,1,2,2,2-hexachloro-

(continued)

Code	Waste description
U132	Hexachlorophene
U132	2,2-Methylenebis(3,4,6-trichlorophenol)
U133	Hydrazine (r,t)
U133	Diamine (r,t)
U134	Hydrogen fluoride (c,t)
U134	Hydrofluoric acid (c,t)
U135	Sulfur hydride
U135	Hydrogen sulfide
U136	Hydroxydimethylarsine oxide
U136	Cacodylic acid
U137	1,10-(1,2-Phenylene)pyrene
U137	Ideno[1,2,3-cd]pyrene
U138	Methane, iodo-
U138	Methyl iodide
U139	Ferric dextran
U139	Iron dextran
U140	1-Propanol,2-methyl- (i,t)
U140	Isobutyl alcohol (i,t)
U141	Isosafrole
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U142	Kepone
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one
U143	Lasiocarpine
U144	Lead acetate
U144	Acetic acid, lead salt
U145	Phosphoric acid, lead salt
U145	Lead phosphate
U146	Lead subacetate
U147	2,5-Furandione
U147	Maleic anhydride
U148	Maleic hydrazide
U148	1,2-Dihydro-3,6-pyradizinedione
U149	Propanedinitrile
U149	Malononitrile
U150	Melphalan
U150	Alanine, 3-[p-bis(2-chloroethyl)amino] phenyl-,L-
U151	Mercury
U152	Propenenitrile,2-methyl- (i,t)
U152	Methacrylonitrile (i,t)
U153	Thiomethanol (i,t)
U153	Methanethiol (i,t)
U154	Methanol (i)
U154	Methyl alcohol (i)
U155	Pyridine, 2-[(2-dimethylamino)ethyl]-2-phenylamino-
U155	Methapyrilene

(continued)

Code	Waste description
U156	Methyl chlorocarbonate (i,t)
U156	Carbonochloridic acid, methyl ester (i,t)
U157	3-Methylcholanthrene
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U158	4,4′-Methylenebis(2-chloroaniline)
U158	Benzenamine,4,4′-methylenebis(2-chloro-
U159	Methyl ethyl ketone (i,t)
U159	2-Butanone (i,t)
U160	Methyl ethyl ketone peroxide (r,t)
U160	2-Butanone peroxide (r,t)
U161	4-Methyl-2-pentanone (i)
U161	Methyl isobutyl ketone (i)
U162	2-Propenoic acid, 2-methyl-, methyl ester (i,t)
U162	Methyl methacrylate (i,t)
U163	Guanidine, N-nitroso-N-methyl-N′-nitro-
U163	N-methyl-N′-nitro-N-nitrosoguanidine
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U164	Methylthiouracil
U165	Naphthalene
U166	1,4,Naphthoquinone
U166	1,4-Naphthalenedione
U167	1-Naphthylamine
U167	α-Naphthylamine
U168	2-Naphthylamine
U168	β-Naphthylamine
U169	Nitrobenzene (i,t)
U169	Benzene, nitro- (i,t)
U170	Phenol,4-nitro-
U170	p-Nitrophenol
U171	Propane,2-nitro-(i,t)
U171	2-Nitropropane (i,t)
U172	N-Nitrosodi-N-butylamine
U172	1-Butanamine, N-butyl-N-nitroso-
U173	Ethanol,2,2-(nitrosoimino)bis-
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U174	Ethanamine, N-ethyl-N-nitroso-
U176	N-Nitroso-N-ethylurea
U176	Carbamide,N-ethyl-N-nitroso-
U177	N-Nitroso-N-methylurea
U177	Carbamide,N-methyl-N-nitroso-
U178	N-Nitroso-N-methylurethane
U178	Carbamic acid, methylnitroso-, ethyl ester
U179	N-Nitrosopiperidine
U179	Pyridine,hexahydro-N-nitroso-

(continued)

Code	Waste description
U180	Nitrosopyrrolidine
U180	Pyrrole, tetrahydro-N-nitroso-
U181	5-Nitro-o-toluidine
U181	Benzenamine,2-methyl-5-nitro
U182	Paraldehyde
U182	1,3,5-Trioxane,2,4,6-trimethyl-
U183	Pentachlorobenzene
U183	Benzene, pentachloro-
U184	Pentachloroethane
U184	Ethane, pentachloro-
U185	Pentachloronitrobenzene
U185	Benzene, pentachloronitro-
U186	1,3-Pentadiene (i)
U186	1-Methylbutadiene (i)
U187	Phenacetin
U187	Acetamide, N-(4-ethoxyphenyl)-
U188	Phenol
U188	Benzene, hydroxy-
U189	Phosphorus sulfide (r)
U189	Sulfur phosphide (r)
U190	Phthalic anhydride
U190	1,2-Benzenedicarboxylic acid anhydride
U191	2-Picoline
U191	Pyridine, 2-methyl-
U192	Pronamide
U192	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide
U193	1,2-Oxathiolane, 2,2-dioxide
U193	1,3-Propane sultone
U194	1-Propanamine (i,t)
U194	N-Propylamine (i,t)
U196	Pyridine
U197	p-Benzoquinone
U197	1,4-Cyclohexadienedione
U200	Reserpine
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester
U201	Resorcinol
U201	1,3-Benzenediol
U202	Saccharin and salts
U202	1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts
U203	Safrole
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium disulfide (r,t)
U205	Sulfur selenide (r,t)

(continued)

Code	Waste description
U206	Streptozotocin
U206	D-Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-
U207	1,2,4,5-Tetrachlorobenzene
U207	Benzene, 1,2,4,5-tetrachloro-
U208	1,1,1,2-Tetrachloroethane
U208	Ethane,1,1,1,2-tetrachloro-
U209	1,1,2,2-Tetrachloroethane
U209	Ethane,1-1-2-2-tetrachloro-
U210	Tetrachloroethylene
U210	Ethene,1,1,2,2-tetrachloro
U211	Methane, tetrachloro-
U211	Carbon tetrachloride
U213	Tetrahydrofuran (i)
U213	Furan, tetrahydro- (i)
U214	Thallium(I) acetate
U214	Acetic acid, thallium(I) salt
U215	Thallium(I) carbonate
U215	Carbonic acid, dithallium(I) salt
U216	Thallium(I) chloride
U217	Thallium(I) nitrate
U218	Thioacetamide
U218	Ethanethioamide
U219	Thiourea
U219	Carbamide, thio-
U220	Toluene
U220	Benzene, methyl-
U221	Toluenediamine
U221	Diaminotoluene
U222	o-Toluidine hydrochloride
U222	Benzenamine, 2-methyl-, hydrochloride
U223	Toluene diisocyanate (r,t)
U223	Benzene, 1,3-diisocyanatomethyl- (r,t)
U225	Methane, tribromo-
U225	Bromoform
U226	1,1,1-Trichloroethane
U226	Methylchloroform
U227	1,1,2-Trichloroethane
U227	Ethane,1,1,2-trichloro-
U228	Trichloroethylene
U228	Trichloroethene
U232	2,4,5-Trichloracetic acid, salts, and esters
U233	2,4,5-Trichlorophenoxypropionic acid, salts, and esters
U234	sym-Trinitrobenzene (r,t)
U234	Benzene,1,3,5-trinitro- (r,t)

(continued)

Code	Waste description
U235	1-Propanol,2,3-dibromo-,phosphate (3:1)
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U236	2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl-(1,1′-biphenyl)-4,4′-diyl)]-bis(azo)bis(5-amino-4-hydroxy), tetrasodium salt
U237	Uracil mustard
U237	Uracil, 5-[bis(2-chloroethyl)-amino]-
U238	Ethyl carbarmate (urethan)
U238	Carbamic acid, ethyl ester
U239	Xylene (i)
U239	Benzene, dimethyl- (i,t)
U240	2,4-D, salts and esters
U240	2,4-Dichlorophenoxyacetic acid, salts, and esters
U243	1-Propene,1,1,2,3,3,3-hexachloro-
U243	Hexachloropropene
U244	Thiram
U244	Bis(dimethylthiocarbamoyl) disulfide
U246	Bromine cyanide
U246	Cyanogen bromide
U247	Ethane, 1,1,1,-trichloro-2-2-bis(p-methoxyphenyl)
U247	Methoxychlor
U248	Warfarin, when present at concentrations of 0.3% or less
U248	3-(α-Acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations of 0.3% or less
U249	Zinc phosphide, when present at concentrations of 10% or less
U328	2-Amino-L-methylbenzene
U328	o-Toluidine
U353	4-Amino-L-methylbenzene
U353	p-Toluidine
U359	2-Ethoxyethanol
U359	Ethylene glycol monoethyl ether

The following list of codes should be used to complete Question 26 from Questionnaire GB, "Hazardous Waste Characterization." The hazardous constituents listed are from 40 CFR §261, Appendix VIII, with several additions for hazardous constituents of listed wastes. Hazardous constituents labeled as N.O.S. (not otherwise specified) should only be used if the member of the general class is unknown.

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y001	Acenaphthalene	Acenaphthylene	208-96-8
Y002	Acenaphthene	Acenaphthylene, 1,2-dihydro	83-32-9
Y003	Acetone	2-Propanone	67-64-1
Y004	Acetonitrile	Same	75-05-8
Y005	Acetophenone	Ethanone, 1-phenyl	98-86-2
Y006	2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3
Y007	Acetyl chloride	Same	75-36-5
Y008	1-Acetyl-2-thiourea	Acetamide, N-(aminothioxymethyl)-	591-08-2
Y009	Acrolein	2-Propenal	107-02-8
Y010	Acrylamide	2-Propenamide	79-06-1
Y011	Acrylonitrile	2-Propenenitrile	107-13-1
Y012	Aflatoxins	Aflatoxin	1402-68-2
Y013	Aldicarb	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	116-06-3
Y014	Aldrin	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1α,4α,4aβ,5α,8α,8aβ)-	309-00-2
Y015	Allyl alcohol	2-Propen-1-ol	107-18-6
Y016	Allyl chloride	1-Propane, 3-chloro-	107-05-1
Y017	Aluminum phosphide	Same	20859-73-8
Y018	4-Aminobiphenyl	(1,1′-Biphenyl)-4-amine	92-67-1
Y019	5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4
Y020	4-Aminopyridine	4-Pyridineamine	504-24-5
Y021	Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5
Y022	Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6
Y023	Aniline	Benzenamine	62-53-3
Y024	Anthracene	Same	120-12-7
Y025	Antimony and compounds, N.O.S.	Antimony	7440-36-0
Y026	Aramite	Sulfurous acid, 2-chloroethyl-2-[4-(1,1-dimethylethyl) phenoxy]-1-methylethyl ester)	140-57-8
Y027	Arsenic and compounds, N.O.S.	Arsenic	7440-38-2
Y028	Arsenic acid	Arsenic acid AsH_3O_4	7778-39-4
Y029	Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2
Y030	Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3
Y031	Auramine	Benzamine, 4,4′-carbonimidoylbis[N,N-dimethyl-	492-80-8
Y032	Azaserine	L-Serine, diazoacetate (ester)	115-02-5
Y033	Barium and compounds, N.O.S.	Barium	7440-39-3
Y034	Barium cyanide	Same	542-62-1
Y035	Benz[c]acridine	Same	225-51-4
Y036	Benz[a]anthracene	Same	56-55-3
Y037	Benzal chloride	Benzene, (dichloromethyl)-	98-87-3
Y038	Benzene	Same	71-43-2
Y039	Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5
Y040	Benzidine	[1,1′-Biphenyl]-4,4′-diamine	92-87-5
Y041	Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2
Y042	Benzo[j]fluoranthene	Same	205-82-3
Y043	Benzo[k]fluoranthene	Benzo[k]fluorathene	207-08-9
Y044	Benzo[ghi]perylene	Same	191-24-2
Y045	Benzo[a]pyrene	Same	50-32-8
Y046	p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4
Y047	Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7
Y048	Benzyl chloride	Benzene, (chloromethyl)-	100-44-7
Y049	Beryllium and compounds, N.O.S.	Beryllium	7440-41-7
Y050	Bis(2-chloromethoxy)ethane	Ethane, 1,1′-[methylenebis(oxy)]bis[2-chloro-	111-91-1
Y051	Bis(2-chloroethyl) ether	Ethane, 1,1′-oxybis[2-chloro-	111-44-4
Y052	Bis(2-chloroisopropyl) ether	Propane, 2,2′-oxybis[2-chloro-	39638-32-9
Y053	Bis(chloromethyl) ether	Methane, oxybis[chloro-	542-88-1
Y054	Bis(2-ethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7
Y055	Bromoacetone	2-Propanone, 1-bromo-	598-31-2
Y056	Bromoform	Methane, tribromo-	75-25-2
Y057	4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3
Y058	Brucine	Strychnidin-10-one, 2,3-dimethoxy	357-57-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y059	Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7
Y060	n-Butyl alcohol	1-Butanol	71-36-3
Y061	Cacodylic acid	Arsenic acid, dimethyl-	75-60-5
Y062	Cadmium and compounds, N.O.S.	Cadmium	7440-43-9
Y063	Calcium chromate	Chromic acid, calcium salt	13765-19-0
Y064	Calcium cyanide	Same	592-01-8
Y065	Carbon disulfide	Carbon bisulfide	75-15-0
Y066	Carbon oxyfluoride	Carbonic difluoride	353-50-4
Y067	Carbon tetrachloride	Methane, tetrachloro-	56-23-5
Y068	Chloral	Acetaldehyde, trichloro-	75-87-6
Y069	Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino-	305-03-3
Y070	Chlordane, α and γ isomers	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9
Y071	Chlorinated benzenes, N.O.S.	—	—
Y072	Chlorinated ethane, N.O.S.	—	—
Y073	Chlorinated fluorocarbons, N.O.S.	—	—
Y074	Chlorinated naphthalene, N.O.S.	—	—
Y075	Chlorinated phenol, N.O.S.	—	—
Y076	Chlornaphazine	2-Naphthalenamine, N,N-bis(2-chloroethyl)-	494-03-1
Y077	Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0
Y078	Chloroalkyl ethers, N.O.S.	—	—
Y079	p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8
Y080	Chlorobenzene	Benzene, chloro-	108-90-7
Y081	Chlorobenzilate	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	510-15-6
Y082	p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7
Y083	1-Chloro-2,3-epoxypropane	Oxirane, (chloromethyl)-	106-89-8
Y084	2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8
Y085	Chloroform	Methane, trichloro-	67-66-3
Y086	Chloromethyl methyl ether	Methane, chlormethoxy-	107-30-2
Y087	β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7
Y088	o-Chlorophenol	Phenol, 2-chloro-	95-57-8
Y089	1-(o-Chlorophenyl) thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1
Y090	Chloroprene	2-Chloro-1,3-butadiene	126-99-8
Y091	3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7
Y092	Chromium and compounds, N.O.S.	Chromium	7440-47-3
Y093	Chrysene	Same	218-01-9
Y094	Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8
Y095	Coal tars	—	8005-45-2
Y096	Copper cyanide	Copper cyanide CuCN	544-92-3
Y097	Creosote	Same	8001-58-9
Y098	Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3
Y099	Crotonaldehyde	2-Butenal	4170-30-3
Y100	Cyanides (soluble salts and complexes), N.O.S.	—	57-12-5
Y101	Cyanogen	Ethanedinitrile	460-19-5
Y102	Cyanogen bromide	Same	506-68-3
Y103	Cyanogen chloride	Same	506-77-4
Y104	Cycasin	β-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7
Y105	Cyclohexanone	Same	108-94-1
Y106	2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5
Y107	Cyclophosphamide	2H-1,3,2,-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide	50-18-0
Y108	2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	94-75-7
Y109	Daunomycin	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-α-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-	20830-81-3
Y110	DDD	Benzene 1,1′-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8
Y111	DDE	Benzene 1,1′-(dichloroethenylindene)bis[4-chloro-	72-55-9
Y112	DDT	Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-chloro-	50-29-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y113	Diallate	Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl) ester	2303-16-4
Y114	Dibenz[a,h]acridine	Same	226-36-8
Y115	Dibenz[a,j]acridine	Same	224-42-0
Y116	Dibenz[a,h]anthracene	Same	53-70-3
Y117	7H-Dibenzo[c,g]-carbazole	Same	194-59-2
Y118	Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	194-65-4
Y119	Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-0
Y120	Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-9
Y121	1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-8
Y122	Dibutylphthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-2
Y123	o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-1
Y124	m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-1
Y125	p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-7
Y126	Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-6
Y127	3,3′-Dichlorobenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dichloro-	91-94-1
Y128	1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-0
Y129	Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-8
Y130	1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-5
Y131	Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-2
Y132	1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-4
Y133	2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-2
Y134	2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-0
Y135	Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-6
Y136	Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-7
Y137	Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-3
Y138	Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-8
Y139	1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-6
Y140	Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	60-57-1
Y141	1,2:3,4-Diepoxybutane	2,2′-Bioxirane	1464-53-5
Y142	Diethylarsine	Arsine, diethyl-	692-42-2
Y143	1,4-Diethyleneoxide	1,4-Dioxane	123-91-1
Y144	N,N′-Diethylhydrazine	Hydrazine, 1,2-diethyl	1615-80-1
Y145	O,O-Diethyl S-methyldithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58-2
Y146	Diethyl-p-nitro phenyl phosphate	Phosphoric acid, diethyl-4-nitrophenyl ester	311-45-5
Y147	Diethylphthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66-2
Y148	O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97-2
Y149	Diethylstilbesterol	Phenol, 4,4′-(1,2-diethyl-1,2-ethenediyl)bis,(E)-	56-53-1
Y150	Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-6
Y151	3,4-Dihydroxy-α-(methylamino) methyl benzyl alcohol	(+ −)-1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-	329-65-7
Y152	Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-4
Y153	Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-	60-51-5
Y154	3,3′-Dimethoxybenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3-3′-dimethoxy-	119-90-4
Y155	p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-7
Y156	7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-6
Y157	3,3′-Dimethylbenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dimethyl-	119-93-7
Y158	Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-7
Y159	1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-7
Y160	1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-8
Y161	α,α-Dimethylphenethylamine	Benzeneethanamine, α,α-dimethyl-	122-09-8
Y162	2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-9
Y163	Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-3
Y164	Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-1
Y165	Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-5
Y166	4,6-Dinitro-o-cresol and salts	Phenol, 2-methyl-4,6-dinitro- and salts	534-52-1
Y167	2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-5
Y168	2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-2

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y169	2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2
Y170	Dinoseb	Phenol,2-(1-methylpropyl)-4,6-dinitro-	88-85-7
Y171	Di-n-octylphthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0
Y172	Diphenylamine	Benzenamine, N-phenyl-	122-39-4
Y173	1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7
Y174	Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7
Y175	Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-[ethylthio)ethyl] ester	298-04-4
Y176	Dithiobiuret	Thioimidodicarbonic diamide	541-53-7
Y177	Endosulfan	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide	115-29-7
Y178	Endothal	7-Oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid	145-73-3
Y179	Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-	72-20-8
Y180	Ethyl acetate	Acetic acid ethyl ester	141-78-6
Y181	Ethyl benzene	Benzene, ethyl	100-41-4
Y182	Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6
Y183	Ethyl cyanide	Propanenitrile	107-12-0
Y184	Ethyl ether	Ethane,1,1′-oxybis	60-29-7
Y185	Ethylenebisdithiocarbamic acid, salts and esters	Carbamodithioic acid, 1,2-ethanediylbis, salts and esters	111-54-6
Y186	Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4
Y187	Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2
Y188	Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy	110-80-5
Y189	Ethyleneimine	Aziridine	151-56-4
Y190	Ethylene oxide	Oxirane	75-21-8
Y191	Ethylenethiourea	2-Imidazolidinethione	96-45-7
Y192	Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3
Y193	Ethyl methacrylate	2-Propenoic acid, 2-methyl-,ethyl ester	97-63-2
Y194	Ethylmethane sulfonate	Methanesulfonic acid, ethyl ester	62-50-0
Y195	Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl] phenyl] O,O-dimethyl ester	52-85-7
Y196	Fluoranthene	Same	206-44-0
Y197	Fluorene	9H-Fluorene	86-73-7
Y198	Fluorine	Same	7782-41-4
Y199	Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7
Y200	Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8
Y201	Formaldehyde	Same	50-00-0
Y202	Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4
Y203	Halomethane, N.O.S.	—	—
Y204	Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8
Y205	Heptachlor epoxide	2,5-Methano-2H-indeno[1,2b]oxirene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-α,β and γ isomers	1024-57-3
Y206	Hexachlorobenzene	Benzene, hexachloro-	118-74-1
Y207	Hexachlorobutadiene	1,3-Butadiene, hexachloro-	87-68-3
Y208	Hexachlorocyclopentadiene	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	77-47-4
Y209	Hexachlorodibenzo-p-dioxins	—	—
Y210	Hexachlorodibenzofurans	—	—
Y211	Hexachloroethane	Ethane, hexachloro-	67-72-1
Y212	Hexachlorophene	Phenol, 2,2′-methylenebis[3,4,6-trichloro-	70-30-4
Y213	Hexachloropropene	1-Propene, hexachloro-	1888-71-7
Y214	Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethylester	757-58-4
Y215	Hydrazine	Same	302-01-2
Y216	Hydrogen cyanide	Hydrocyanic acid	74-90-8
Y217	Hydrogen fluoride	Hydrofluoric acid	7664-39-3
Y218	Hydrogen sulfide	Same	7783-06-4
Y219	Indeno[1,2,3-cd]pyrene	Same	193-39-5
Y220	Iron dextran	Same	9004-66-4

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y221	Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1
Y222	Isodrin	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydrol-1α,4α,4aβ,5β,8β,8aβ	465-73-6
Y223	Isosafrole	1,3-Benzodioxole,5-(1-propenyl)-	120-58-1
Y224	Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0
Y225	Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S-(1α(Z), 7(2s,3R),7aα]]-	303-34-4
Y226	Lead and compounds, N.O.S.	—	7439-92-1
Y227	Lead acetate	Acetic acid, lead(2+) salt	301-04-2
Y228	Lead phosphate	Phosphoric acid, lead(2+) salt	7446-27-7
Y229	Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6
Y230	Lindane	Cyclohexane, 1,2,3,4,5,6-Hexachloro-	58-89-9
Y231	Maleic anhydride	2,5-Furandione	108-31-6
Y232	Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1
Y233	Malononitrile	Propanedinitrile	109-77-3
Y234	Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148-82-3
Y235	Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4
Y236	Mercury and compounds, N.O.S.	Same	7439-97-6
Y237	Methacrylonitrile	2-Propanenitrile, 2-methyl-	126-98-7
Y238	Methanol	Same	67-56-1
Y239	Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienylmethyl)-	91-80-5
Y240	Methomyl	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester	16752-77-5
Y241	Methoxychlor	Benzene, 1,1′-(2,2,2-trichloroethylidene)[4-methoxy-	72-43-5
Y242	Methyl bromide	Methane, bromo-	74-83-9
Y243	Methyl chloride	Methane, chloro-	74-87-3
Y244	Methyl chlorocarbonate	Carbonchloridic acid, methyl ester	79-22-1
Y245	Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6
Y246	3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5
Y247	4,4-Methylenebis(2-chloroaniline)	Benzenamine, 4,4′-methylenebis(2-chloro-	101-14-4
Y248	Methylene bromide	Methane, dibromo-	74-95-3
Y249	Methylene chloride	Methane, dichloro-	75-09-2
Y250	Methyl ethyl ketone (MEK)	2-Butanone	78-93-3
Y251	Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4
Y252	Methyl hydrazine	Hydrazine, methyl-	60-34-4
Y253	Methyl iodide	Methane, iodo-	74-88-4
Y254	Methyl isobutyl ketone	2-Pentanone, 4-methyl	108-10-1
Y255	Methyl isocyanate	Methane, isocyanato-	624-83-9
Y256	2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5
Y257	Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6
Y258	Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3
Y259	Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0
Y260	Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2
Y261	Mitomycin C	Azirino[2′,3′:3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-[1aR-(1aα,8β,8aα,8bα)]-	50-07-7
Y262	MNNG	Guanidine, N-methyl-N′-nitro-N-nitroso-	70-25-7
Y263	Mustard gas	Ethane, 1,1′-thiobis[2-chloro-	505-60-2
Y264	Naphthalene	Same	91-20-3
Y265	1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4
Y266	α-Naphthylamine	1-Naphthalenamine	134-32-7
Y267	β-Naphthylamine	2-Naphthalenamine	91-59-8
Y268	α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4
Y269	Nickel and compounds, N.O.S.	Same	7440-02-0
Y270	Nickel carbonyl	Nickel carbonyl, (T-4)-	13463-39-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y271	Nickel cyanide	Same	557-19-7
Y272	Nicotine and salts	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	54-11-5
Y273	Nitric oxide	Nitrogen oxide NO	10102-43-9
Y274	p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6
Y275	Nitrobenzene	Benzene, nitro-	98-95-3
Y276	Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0
Y277	Nitrogen mustard and hydrochloride salt	Ethanamine, 2-chloro-,N-(2-chloroethyl)-N-methyl-, and hydrochloride salt	51-75-2
Y278	Nitrogen mustard N-oxide and hydrochloride salt	Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydrochloride salt	126-85-2
Y279	Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0
Y280	p-Nitrophenol	Phenol, 4-nitro-	100-02-7
Y281	2-Nitropropane	Propane, 2-nitro-	79-46-9
Y282	4-Nitroquinoline-1-oxide	Quinoline, 4-nitro-1-oxide	56-57-5
Y283	Nitrosamine, N.O.S.	—	35576-91-1
Y284	N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3
Y285	N-Nitrosodiethanolamine	Ethanol, 2,2′-(nitrosoimino)bis-	1116-54-7
Y286	N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5
Y287	N-Nitrosodimethylamine	Methamine, N-methyl-N-nitroso-	62-75-9
Y288	N-Nitroso-N-ethyl urea	Urea, N-ethyl-N-nitroso-	759-73-9
Y289	N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6
Y290	N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5
Y291	N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-,ethyl ester	615-53-2
Y292	N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0
Y293	N-Nitrosomorpholine	Morpholine, N-nitroso-	59-89-2
Y294	N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8
Y295	N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4
Y296	Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2
Y297	N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9
Y298	5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8
Y299	Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9
Y300	Osmium tetroxide	Osmium oxide (OsO_4)	20816-12-0
Y301	Paraldehyde	1,3,5-Trioxane,2,4,6-trimethyl-	123-63-7
Y302	Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2
Y303	Pentachlorobenzene	Benzene, pentachloro-	608-93-5
Y304	Pentachlorodibenzo-p-dioxins	—	—
Y305	Pentachlorodibenzofurans	—	—
Y306	Pentachloroethane	Ethane, pentachloro-	76-01-7
Y307	Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8
Y308	Pentachlorophenol	Phenol, pentachloro-	87-86-5
Y309	Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2
Y310	Phenanthrene	Same	85-01-8
Y311	Phenol	Same	108-95-2
Y312	Phenylenediamine	Benzenediamine	25265-76-3
Y313	Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4
Y314	Phenylthiourea	Thiourea, phenyl-	103-85-5
Y315	Phosgene	Carbonic dichloride	75-44-5
Y316	Phosphine	Same	7803-51-2
Y317	Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl] ester	298-02-2
Y318	Phthalic acid esters, N.O.S.	—	—
Y319	Phthalic anhydride	1,3-Isobenzofurandione	85-44-9
Y320	2-Picoline	Pyridine, 2-methyl-	109-06-8
Y321	Polychlorinated biphenyls, N.O.S.	—	1336-36-3
Y322	Potassium cyanide	Same	151-50-8
Y323	Potassium silver cyanide	Argentate(1-), bis(cyano-C)-,potassium	506-61-6
Y324	Pronamide	Benzamide,3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5
Y325	1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4
Y326	n-Propylamine	1-Propanamine	107-10-8
Y327	Propargyl alcohol	2-Propyn-1-ol	107-19-7

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y328	Propylene dichloride	Propane, 1,2-dichloro-	78-87-5
Y329	1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8
Y330	Propylthiouracil	4(1H)-Pyrimidinone,2,3-dihydro-6-propyl-2-thioxo-	51-52-5
Y331	Pyrene	Same	129-00-0
Y332	Pyridine	Same	110-86-1
Y333	Reserpinen	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester	50-55-5
Y334	Resorcinol	1,3-Benzenediol	108-46-3
Y335	Saccharin and salts	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and salts	81-07-2
Y336	Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7
Y337	Selenium dioxide	Selenious acid	7783-00-8
Y338	Selenium and compounds, N.O.S.	Selenium	7782-49-2
Y339	Selenium sulfide	Same	7446-34-6
Y340	Selenourea	Same	630-10-4
Y341	Silver and compounds, N.O.S.	Silver	7440-22-4
Y342	Silver cyanide	Same	506-64-9
Y343	Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1
Y344	Sodium cyanide	Same	143-33-9
Y345	Streptozotocin	D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883-66-4
Y346	Strontium sulfide	Same	1314-96-1
Y347	Strychnine and salts	Strychnidin-10-one, and salts	57-24-9
Y348	Styrene	Benzene,ethenyl-	100-42-5
Y349	TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6
Y350	1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3
Y351	Tetrachlorodibenzo-p-dioxins	—	—
Y352	Tetrachlorodibenzofurans	—	—
Y353	Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7
Y354	1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6
Y355	1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5
Y356	Tetrachloroethylene	Ethene, tetrachloro-	127-18-4
Y357	2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2
Y358	Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5
Y359	Tetraethyl lead	Plumbane, tetraethyl-	78-00-2
Y360	Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3
Y361	Tetranitromethane	Methane, tetranitro-	509-14-8
Y362	Thallium and compounds, N.O.S.	Thallium	7440-28-0
Y363	Thallic oxide	Thallium (III) oxide	1314-32-5
Y364	Thallium (I) acetate	Acetic acid, thallium(1 +) salt	563-68-8
Y365	Thallium (I) carbonate	Carbonic acid, dithallium(1 +) salt	6533-73-9
Y366	Thallium (I) chloride	Thallium chloride	7791-12-0
Y367	Thallium (I) nitrate	Nitric acid, thallium(1 +) salt	10102-45-1
Y368	Thallium selenite	Thallium selenide	12039-52-0
Y369	Thallium (I) sulfate	Sulfuric acid, thallium salt	10031-59-1
Y370	Thioacetamide	Ethanethioamide	62-55-5
Y371	Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl]oxime	39196-18-4
Y372	Thiomethanol	Methanethiol	74-93-1
Y373	Thiophenol	Benzenethiol	108-98-5
Y374	Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6
Y375	Thiourea	Same	62-56-6
Y376	Thiram	Thioperoxydicarbonic diamide, Tetramethyl-	137-26-8
Y377	Toluene	Benzene, methyl-	108-88-3
Y378	Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8
Y379	2,4-Toluenediamine	1,3-Benzenediamine, 4-methyl-	95-80-7
Y380	2,6-Toluenediamine	1,3-Benzenediamine, 2-methyl-	823-40-5
Y381	3,4-Toluenediamine	1,2-Benzenediamine, 4-methyl-	496-72-0
Y382	Toluene diisocyanate	Benzene, 2,4-diisocyanato-1-methyl-	584-84-9
Y383	p-Toluidine	Benzenamine, 4-methyl-	106-49-0
Y384	o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5
Y385	Toxaphene	Same	8001-35-2
Y386	Trans-1,4-Dichloro-2-butene	2-Butene,1,4-dichloro-, (E)	110-57-6

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y387	1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1
Y388	1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5
Y389	Trichloroethylene	Ethene, trichloro	79-01-6
Y390	Trichloromethanethiol	Methanethiol, trichloro-	75-70-7
Y391	Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4
Y392	1,1,2-Trichloro-1,2,2-Trifluoroethane	Ethane,1,1,2-trichloro-1,2,2-trifluoro-	76-13-1
Y393	2,4,5-Trichlorophenol	Phenol,2,4,5-trichloro-	95-95-4
Y394	2,4,6-Trichlorophenol	Phenol,2,4,6-trichloro-	88-06-2
Y395	2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5
Y396	Trichloropropane, N.O.S.	—	—
Y397	1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4
Y398	O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1
Y399	sym-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4
Y400	Trinitrotoluene	Benzene, 2-methyl-1,3,5-trinitro	118-96-7
Y401	Tris(1-aziridinyl)phosphine sulfide	Aziridine, 1,1′,1″-phosphinothioylidynetris-	52-24-4
Y402	Tris(2,3-dibromopropyl)phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7
Y403	Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl[1,1′-biphenyl]-4,4′-diyl)bis (azo)]bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1
Y404	Uracil mustard	2,4(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1
Y405	Same as CAS name	Undecamethylenediamine,N,N′-bis(2-chlorobenzyl)-, dihydrochloride	2056-25-9
Y406	Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1
Y407	Vinyl chloride	Ethene, chloro-	75-01-4
Y408	Warfarin	2H-1 Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-	81-81-2
Y409	Xylene, N.O.S.	Benzene, dimethyl-	1330-20-7
Y410	Zinc cyanide	Same	557-21-1
Y411	Zinc phosphide	Zinc phosphide P_2Zn_3	1314-84-7

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

Appendix E provides completed pages from several of the questionnaires. These examples are based on an electroplating facility which performs cadmium plating of fasteners. Figure 1 provides a general facility-wide schematic showing all hazardous waste management operations at this facility. Figure 2 provides a detailed schematic of the facility's wastewater treatment system. A brief description of this facility's wastewater treatment system is provided below.

The facility discharges spent cadmium cyanide plating baths (RCRA hazardous F007 waste) twice a year into the wastewater treatment system. While following standard operating procedures, rinse waters from cadmium plating operations can contain concentrations of cadmium exceeding 1 ppm, and should therefore be classified as RCRA hazardous D006 waste. Based on normal operating procedures, the facility estimated that the rinse waters meet D006 criteria approximately 60 percent of operating time. By definition, the sludge that their wastewater treatment system generates is a RCRA hazardous F006 waste. The facility also conducts degreasing operations prior to plating which generates RCRA hazardous F001 waste.

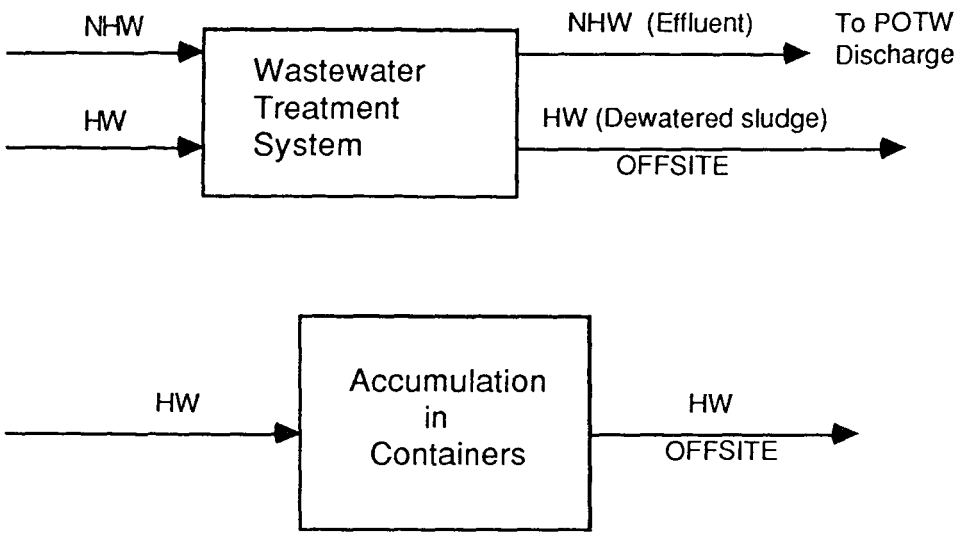
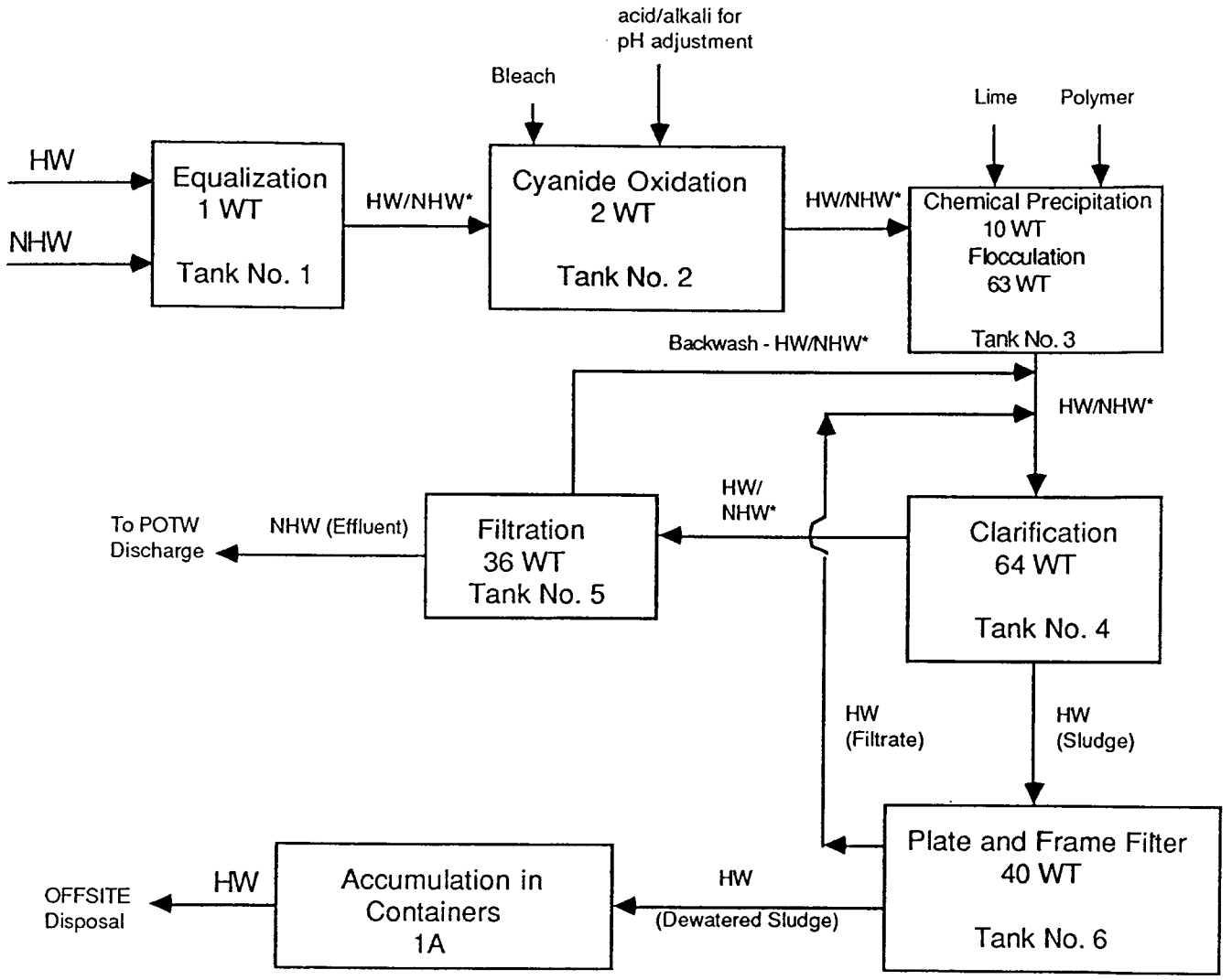


Figure 1. Example of a facility-wide schematic showing all hazardous waste management operations at a facility. (See Figure 2 for a detailed schematic of the wastewater treatment system.)



*Because spent plating baths are only discharged to the system twice a year and rinse waters only meet the D006 criteria intermittently, the indicated effluents will not always be hazardous.

Figure 2. Example of a wastewater treatment system.

Complete Questions 1 through 46 for EACH hazardous waste or wastewater that was generated onsite at this facility during 1986. Refer to the box on page 1 of this booklet for the types of wastes that should be reported in this survey. Hazardous waste treatment residuals generated onsite and hazardous wastes that were generated onsite during the closure of surface impoundments or waste piles must also be reported. Report separately hazardous wastes that have the same RCRA waste code but were generated from different sources. To minimize errors in recording your answers in the multiple answer columns, answer the questions for only one hazardous waste at a time. A space has been provided at the top of each answer column for you to enter the name of the hazardous waste so that the information for each hazardous waste is recorded in the correct column. Call the Survey Helpline (1-800-635-8850) if you need additional answer spaces or if you have any questions.

Question	Hazardous Waste No. 1	Hazardous Waste No. 2
1. What RCRA waste code or codes best describe this hazardous waste? *See Appendix C of the Instructions booklet for a list of RCRA and other waste codes. If you generate a waste that is considered hazardous by regulations in your state and a waste code is not provided, call the Survey Helpline (1-800-635-8850).*	a. F007 b. c. d. e.	a. F006 b. c. d. e.
Use the list of Waste Description Codes on the inside front cover of this questionnaire to answer Questions 2 and 3. If a code requires you to specify, do so in the space provided. **2. What Waste Description Code best describes this hazardous waste?**	A07 (specify)	A07 (specify)
3. What other Waste Description Codes describe this hazardous waste? *(If no other Waste Description Codes describe this waste, enter "NA.")*	a. B07 (specify) b. (specify) c. (specify)	a. B41 (specify) b. (specify) c. (specify)

NOTE: This is from page 2 of Questionnaire GB.

Hazardous Waste No. 3	Hazardous Waste No. 4	Hazardous Waste No. 5
a. D006	a. F001	a.
b.	b.	b.
c.	c.	c.
d.	d.	d.
e.	e.	e.
B07 (specify)	A01 (specify)	(specify)
a. NA (specify)	a. B59 (specify)	a. (specify)
b. (specify)	b. (specify)	b. (specify)
c. (specify)	c. (specify)	c. (specify)

NOTE: This is from page 3 of Questionnaire GB.

HAZARDOUS WASTE MANAGEMENT

Question	Hazardous Waste No. 1 F007	Hazardous Waste No. 2 F006
11. What was the general sequence of management operations this hazardous waste went through ONSITE during 1986? *(Enter process codes from Appendix A of the Instructions booklet to describe the general or typical sequence of management operations for this hazardous waste. Include in your answer any exempt processes this hazardous waste went through.)*	1st 01WT 2nd 02WT 3rd 10WT 4th 63WT 5th 64WT 6th 36WT 7th 8th 9th 10th	1st 64WT 2nd 40WT 3rd 001A 4th 5th 6th 7th 8th 9th 10th
12. Was this waste discharged to a POTW WITHOUT prior treatment during 1986? *(Circle one)* Yes No	 01 (02)	 01 (02)
13. Was this waste discharged to a POTW following treatment during 1986? *(Circle one)* Yes No	 (01) 02	 01 (02)
14. Was this waste discharged under a NPDES permit WITHOUT prior treatment during 1986? *(Circle one)* Yes No	 01 (02)	 01 (02)
15. Was this waste discharged under a NPDES permit following treatment during 1986? *(Circle one)* Yes No	 01 (02)	 01 (02)

NOTE: This is from page 8 of Questionnaire GB.

Hazardous Waste No. 3 D006	Hazardous Waste No. 4 F001	Hazardous Waste No. 5
1st 0 1 W T	1st 0 0 1 A	1st
2nd	2nd	2nd
3rd	3rd	3rd
4th	4th	4th
5th	5th	5th
6th	6th	6th
7th	7th	7th
8th	8th	8th
9th	9th	9th
10th	10th	10th
01 / 02	01 / 02	01 / 02
01 / 02	01 / 02	01 / 02
01 / 02	01 / 02	01 / 02
01 / 02	01 / 02	01 / 02

NOTE: This is from page 9 of Questionnaire GB.

PHYSICAL/CHEMICAL FORM, CHEMICAL CHARACTERISTICS, AND CONSTITUENTS

NOTE: *The basis for your answers to Questions 20 and 21 may be either waste testing or general knowledge of the waste. You must provide all available information, but YOU DO NOT HAVE TO CONDUCT ADDITIONAL TESTING TO RESPOND TO THIS SURVEY. If you do not have the information available to enter values for the parameters listed, enter one of the following codes:*

"P" — Present, value of parameter unknown.

"DK" — Do not know.

In some cases, the parameters listed will not apply to every waste. For example, cyanide and pH are typically measured for wastewaters but not for waste solvents; while Btu and flash point are primarily measured for organic wastes. If the parameter does not apply, enter "NA," for not applicable.

For variable waste streams, enter the typical value in the answer space and provide an explanation and range in the "Facility Notes."

For each parameter listed, indicate the basis for the data you provide by entering a "1" for analysis based on testing or a "2" for an estimate.

Question	Hazardous Waste No. 1 F007	Basis for Data	Hazardous Waste No. 2 F006	Basis for Data
20. What is the physical/chemical form of this hazardous waste? *For each parameter listed, enter the typical value and indicate the basis for the data you provide by entering a "1" for analysis based on testing or a "2" for an estimate.*				
a. Total solids content	35 %	2	60 %	2
b. Total suspended solids	04 %	2	NA %	
c. Ash content	DK %		DK %	
d. Water content	65 %	2	40 %	2
e. Total organic carbon—TOC	NA %		NA %	
f. Oil and grease	00 %	2	DK %	
g. Specific gravity (The specific gravity of water is 1.0)	01.11	1	. DK	

NOTE: This is from page 16 of Questionnaire GB.

Hazardous Waste No. 3 D006	Basis for Data	Hazardous Waste No. 4 F001	Basis for Data	Hazardous Waste No. 5	Basis for Data
SEE NOTE %		15 %	2	%	
00 %	2	12 %	2	%	
DK %		DK %		%	
SEE NOTE %		02 %	2	%	
NA %		83 %	2	%	
00 %	2	10 %	2	%	
01.00	2	01.30	2	.	

NOTE: This is from page 17 of Questionnaire GB.

CONSTITUENT CONCENTRATION RANGE CODES:

01 — ≥ 90%	06 — ≥ 1% < 10%	11 — ≥ 1 ppm < 10 ppm
02 — ≥ 75% < 90%	07 — ≥ 0.1% < 1%	12 — ≥ 0.1 ppm < 1 ppm
03 — ≥ 50% < 75%	08 — ≥ 500 ppm < 0.1%	13 — ≥ 1 ppb < 0.1 ppm
04 — ≥ 25% < 50%	09 — ≥ 100 ppm < 500 ppm	14 — < 1 ppb
05 — ≥ 10% < 25%	10 — ≥ 10 ppm < 100 ppm	

Question	Hazardous Waste No. 1 F007	Basis for Data	Hazardous Waste No. 2 F006	Basis for Data
25. What is the concentration range of the metal constituents listed below in this hazardous waste? *Indicate the concentration range of each constituent by entering the numerical code corresponding to the appropriate range provided in the above box. Indicate the basis for the data you provide by entering a "1" for analysis based on testing or a "2" for an estimate.*				
a. Antimony	N P		N P	
b. Arsenic	N P		N P	
c. Barium	N P		N P	
d. Beryllium	N P		N P	
e. Cadmium	06	2	05	2
f. Chromium (total)	N P		N P	
g. Chromium (hexavalent)	N P		N P	
h. Copper	N P		N P	
i. Lead	N P		N P	
j. Mercury	N P		N P	
k. Nickel	N P		N P	
l. Selenium	N P		N P	
m. Silver	N P		N P	
n. Thallium	N P		N P	
o. Vanadium	N P		N P	
p. Zinc	N P		N P	

NOTE: This is from page 22 of Questionnaire GB.

Hazardous Waste No. 3 D006		Hazardous Waste No. 4 F001		Hazardous Waste No. 5	
SEE NOTE	Basis for Data		Basis for Data		Basis for Data
N P					
N P					
N P					
N P					
1 1	2				
N P					
N P					
N P					
N P					
N P					
N P					
N P					
N P					
N P					
N P					
N P					

NOTE: This is from page 23 of Questionnaire GB.

FACILITY NOTES

Question Number(s)	Notes, comments, etc.
20, 21e, 25e WASTE NO. 3	THE D006 WASTE STREAM HAS A VARIABLE CONCENTRATION THAT IS DEPENDENT UPON THE FLOW RATE OF THE RINSE, THE NUMBER OF PARTS PLATED IN ONE LOAD, AND THE NUMBER OF LOADS PLATED DURING THE DAY. THE VALUES GIVEN FOR QUESTIONS 21e AND 25e ARE TYPICAL CONCENTRATIONS. THE CONCENTRATION OF CADMIUM AND CYANIDE IN THE HAZARDOUS D006 RINSE WATER RANGES FROM 1 PPM TO 8 PPM FOR EACH. THE CONCENTRATION OF THESE CONSTITUENTS MAKE UP THE TOTAL SOLIDS CONTENT OF THE WASTE STREAM. THE BALANCE OF THE RINSE WATER CONCENTRATION IS WATER.

NOTE: This is from page 43 of Questionnaire GB.

13. Does this facility have a National Pollutant Discharge Elimination System (NPDES) permit? *(Circle one)*

01 Yes *(Go to next question)*
(02) No *(Skip to Question 16)*

14. What is the NPDES permit number(s) for this facility? *(Enter your 9-digit NPDES permit number)*

a. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
b. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
c. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]
d. [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]

15. What quantity of wastewater, RESULTING FROM ONLY THOSE PROCESSES THAT GENERATED OR MANAGED HAZARDOUS WASTE, was discharged under this permit during 1986?

Quantity of Wastewater Discharged Under NPDES Permit	*Enter the quantity and circle a unit of measure. Sum the quantities if this facility has more than one NPDES permit.*	
	Unit of measure *(Circle one)*	
Quantity	**Tons**	**Gallons**
[ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ] [ ]	..... 01	02 .....

16. Does this facility discharge wastewater to a publicly owned treatment works (POTW)? *(Circle one)*

(01) Yes *(Go to next question)*
02 No *(Skip to Question 19)*

17. What is the name and location (city and state) of this POTW?

a. Name: ANY TOWN MUNICIPAL SEWAGE PLANT

b. Location: ANY TOWN (City) NC (State)

NOTE: This is from page 5 of Questionnaire GA.

Complete Questions 4 through 25 for EACH wastewater treatment process that is currently operating, that is temporarily not operating, or that is no longer operational (but was during 1986) to treat hazardous wastewater onsite. (These are the processes for which you circled 01 in your response to the table in Question 2.) To minimize errors in recording your answers in the multiple answer columns, answer the questions for only one process at a time. For example, if you have two hazardous wastewater treatment processes onsite, you should answer ALL of the questions for one before you answer ANY of the questions for the other. Call the Survey Helpline (1-800-635-8850) if you need additional answer spaces or if you have any questions.

Question	Wastewater Treatment Process No. 1	Wastewater Treatment Process No. 2
4. What type of wastewater treatment process is this? *(Enter the one code and process name from the table in Question 2 that most closely describes this process.)*		
a. Code	01WT	02WT
b. Process name	EQUALIZATION	ALKALINE CHLORINATION
5. Do you plan to make this process commercial (accept waste from the general public) before January 1992? *(Circle one)*		
Yes	01	01
No	(02)	(02)
6. What is the operating status of this wastewater treatment process? *(Circle one)*		
Currently operating *(Circle 01 and skip to Question 8 for this wastewater treatment process)*	(01) *(Skip to Q.8)*	(01) *(Skip to Q.8)*
Temporarily not operating *(Go to next question)*	02	02
No longer operational *(Circle 03 and skip to Question 9 for this wastewater treatment process)*	03 *(Skip to Q.9)*	03 *(Skip to Q.9)*
7. When does this facility expect to resume use of this wastewater treatment process? *(Circle one)*		
1987	01	01
1988	02	02
Don't know	03	03
8. When does this facility expect to close this wastewater treatment process? *(Circle one)*		
1987	01	01
1988	02	02
1989-1990	03	03
After 1990	04	04
No closure date currently set	(05)	(05)

NOTE: This is from page 8 of Questionnaire GE.

Wastewater Treatment Process No. 3	Wastewater Treatment Process No. 4	Wastewater Treatment Process No. 5
10WT LIME PRECIPITATION	63WT FLOCCULATION	64WT CLARIFICATION
01 02	01 02	01 02
01 (Skip to Q.8) 02 03 (Skip to Q.9)	01 (Skip to Q.8) 02 03 (Skip to Q.9)	01 (Skip to Q.8) 02 03 (Skip to Q.9)
01 02 03	01 02 03	01 02 03
01 02 03 04 05	01 02 03 04 05	01 02 03 04 05

NOTE: This is from page 9 of Questionnaire GE.

Complete Questions 4 through 25 for EACH wastewater treatment process that is currently operating, that is temporarily not operating, or that is no longer operational (but was during 1986) to treat hazardous wastewater onsite. (These are the processes for which you circled 01 in your response to the table in Question 2.) To minimize errors in recording your answers in the multiple answer columns, answer the questions for only one process at a time. For example, if you have two hazardous wastewater treatment processes onsite, you should answer ALL of the questions for one before you answer ANY of the questions for the other. Call the Survey Helpline (1-800-635-8850) if you need additional answer spaces or if you have any questions.

Question	Wastewater Treatment Process No. 16	Wastewater Treatment Process No. 17
4. What type of wastewater treatment process is this? *(Enter the one code and process name from the table in Question 2 that most closely describes this process.)*		
a. Code	36WT	40WT
b. Process name	MULTIMEDIA FILTER	PLATE AND FRAME FILTER PRESS
5. Do you plan to make this process commercial (accept waste from the general public) before January 1992? *(Circle one)*		
Yes	01	01
No	(02)	(02)
6. What is the operating status of this wastewater treatment process? *(Circle one)*		
Currently operating *(Circle 01 and skip to Question 8 for this wastewater treatment process)*	(01) *(Skip to Q.8)*	(01) *(Skip to Q.8)*
Temporarily not operating *(Go to next question)*	02	02
No longer operational *(Circle 03 and skip to Question 9 for this wastewater treatment process)*	03 *(Skip to Q.9)*	03 *(Skip to Q.9)*
7. When does this facility expect to resume use of this wastewater treatment process? *(Circle one)*		
1987	01	01
1988	02	02
Don't know	03	03
8. When does this facility expect to close this wastewater treatment process? *(Circle one)*		
1987	01	01
1988	02	02
1989-1990	03	03
After 1990	04	04
No closure date currently set	(05)	(05)

NOTE: This is from page 8 of Questionnaire GE.

Question	Wastewater Treatment Process No. 1	Wastewater Treatment Process No. 2
9. Is this a batch or continuous process? *(Circle one)* Batch *(Go to next question)* ..... Continuous *(Circle 02 and skip to Question 13 for this wastewater treatment process)*	..... 01 .... (02) *(Skip to Q.13)*	..... 01 .... (02) *(Skip to Q.13)* .....
10. How long does it typically take to process a batch? *(Include in your answer the actual treatment time, required setup time, and cleanup time)*	..... [ ][ ][ ] hr	..... [ ][ ][ ] hr .....
11. What is the typical hazardous waste input batch size? *(Enter the quantity and circle a unit of measure)* a. Quantity ..... b. Unit of measure *(Circle one)* Pounds per batch ..... Gallons per batch	[ ][ ][ ][ ][ ][ ][ ] ..... 01 .... 02	[ ][ ][ ][ ][ ][ ][ ] ..... 01 .... 02 .....
12. What is the typical number of batches per day? *(Enter the number of batches and skip to Question 14 for this wastewater treatment process)*	..... [ ][ ][ ] ..... *(Skip to Q.14)*	..... [ ][ ][ ] ..... *(Skip to Q.14)*
13. What is the maximum influent flow rate for this continuous process? *(Enter the rate in gallons per day)*	[ ][ ][ ][5][7][6][0][0]	[ ][ ][ ][5][7][6][0][0]
14. Which onsite tanks are used with this wastewater treatment process? *(Identify the tanks used with this process by listing the identification numbers that you entered on the schematic of your wastewater treatment process(es) that you drew for Questionnaire GA, "General Facility Information.")* **Tank number**	i. [0][0][1] iv. [ ][ ][ ] ii. [ ][ ][ ] v. [ ][ ][ ] iii. [ ][ ][ ] vi. [ ][ ][ ]	i. [0][0][2] iv. [ ][ ][ ] ii. [ ][ ][ ] v. [ ][ ][ ] iii. [ ][ ][ ] vi. [ ][ ][ ]

NOTE: This is from page 10 of Questionnaire GE.

Wastewater Treatment Process No. 3	Wastewater Treatment Process No. 4	Wastewater Treatment Process No. 5
01	01	01
02 (Skip to Q.13)	02 (Skip to Q.13)	02 (Skip to Q.13)
hr	hr	hr
01 02	01 02	01 02
(Skip to Q.14)	(Skip to Q.14)	(Skip to Q.14)
57600	57600	57600
i. 003 iv. ii. v. iii. vi.	i. 003 iv. ii. v. iii. vi.	i. 004 iv. ii. v. iii. vi.

NOTE: This is from page 11 of Questionnaire GE.

Question	Wastewater Treatment Process No. 16	Wastewater Treatment Process No. 27
9. Is this a batch or continuous process? *(Circle one)* Batch *(Go to next question)* Continuous *(Circle 02 and skip to Question 13 for this wastewater treatment process)*	01 (02) *(Skip to Q.13)*	(01) 02 *(Skip to Q.13)*
10. How long does it typically take to process a batch? *(Include in your answer the actual treatment time, required setup time, and cleanup time)*	[ ][ ][ ] hr	[ ][ ][2] hr
11. What is the typical hazardous waste input batch size? *(Enter the quantity and circle a unit of measure)* a. Quantity b. Unit of measure *(Circle one)* Pounds per batch Gallons per batch	[ ][ ][ ][ ][ ][ ][ ] 01 02	[ ][ ][ ][ ][8][0][0] 01 (02)
12. What is the typical number of batches per day? *(Enter the number of batches and skip to Question 14 for this wastewater treatment process)*	[ ][ ][ ] *(Skip to Q.14)*	SEE NOTE [ ][ ][ ] *(Skip to Q.14)*
13. What is the maximum influent flow rate for this continuous process? *(Enter the rate in gallons per day)*	[ ][ ][ ][5][7][6][0][0]	[ ][ ][ ][ ][ ][ ][ ][ ]
14. Which onsite tanks are used with this wastewater treatment process? *(Identify the tanks used with this process by listing the identification numbers that you entered on the schematic of your wastewater treatment process(es) that you drew for Questionnaire GA, "General Facility Information.")* **Tank number**	i. [0][0][5] iv. [ ] ii. [ ] v. [ ] iii. [ ] vi. [ ]	i. [0][0][6] iv. [ ] ii. [ ] v. [ ] iii. [ ] vi. [ ]

NOTE: This is from page 10 of Questionnaire GE.

FACILITY NOTES

Question Number(s)	Notes, comments, etc.
12	THE CLARIFIER (PROCESS NO. 5) DISCHARGES
PROCESS	THE UNDERFLOW SLUDGE TO THE FILTER
NO. 7	PRESS (PROCESS NO. 7) ONCE EVERY FOUR DAYS.
	CONSEQUENTLY, THE FILTER PRESS IS
	OPERATED ONLY ONCE EVERY FOUR DAYS WHEN
	THE UNDERFLOW SLUDGE FROM THE
	CLARIFIER IS DISCHARGED.

NOTE: This is from page 33 of Questionnaire GE.

ACCUMULATION IN TANKS REGULATED UNDER THE 90-DAY RULE

Hazardous waste accumulated in tanks (stored under the 90-day rule) must:

- Have been **generated onsite.**
- Be held for periods of **90 days or less.**

3. **Does this facility accumulate hazardous waste onsite in tanks exempt from RCRA permitting requirements and regulated under the 90-day rule?** *(Circle one)*

   01 Yes *(Go to next question)*
   02 No *(Skip to the note on page 4 prior to Question 6)*

4. **How many tanks exempt from RCRA permitting requirements and regulated under the 90-day rule are used onsite to accumulate hazardous waste?** ..... [ ][ ][ ]

5. **Complete the following table for accumulation of hazardous waste in tanks onsite that are exempt from RCRA permitting requirements and regulated under the 90-day rule.**

Accumulation of Hazardous Waste in Tanks Onsite Exempt from RCRA Permitting Requirements and Regulated Under the 90-Day Rule	*Enter the quantities and where appropriate circle a unit of measure. If none, enter zero. Sum information if you have more than one tank.*	
Question	**Quantity**	**Unit of measure** *(Circle one)* **Ton** **Gal**
a. Total quantity of hazardous waste entering accumulation tanks onsite during 1986	[ ][ ][ ][ ][ ][ ][ ][ ][ ]	.. 01 .... 02 ..
b. Typical quantity of hazardous waste in accumulation tanks onsite at any given time	[ ][ ][ ][ ][ ][ ][ ][ ][ ]	.. 01 .... 02 ..
c. Typical residence time	..... [ ][ ] days	
d. Percentage of hazardous waste in "a" that was later held in RCRA permitted or interim status tanks onsite	..... [ ][ ][ ] %	

NOTE: This is from page 3 of Questionnaire GI.

TANK DESCRIPTION FORM ■

TANK NUMBER 006
This number should correspond to a number in the schematic(s) from Questionnaire A.

a1. What hazardous waste management operations were conducted in this tank during 1986? *(Enter either the process name or code from Appendix A of the Instructions booklet to describe each hazardous waste management operation conducted in this tank.)*

a. 40WT PLATE AND FRAME FILTER PRESS
b.
c.
d.

a2. What is the permit status of this tank? *(Circle all that apply)*
(01) Exempt wastewater treatment/elementary neutralization
02 Exempt recycling
03 90-Day accumulation rule
04 Other _____ *(specify)*

a3. What is the operating status of this tank? *(Circle one)*
(01) Currently in service *(Skip to Question a5)*
02 Temporarily not in service *(Go to next question)*
03 No longer in service *(Skip to Question a6)*

a4. When does this facility expect to resume use of this tank? *(Circle one)*
01 1987
02 1988
03 Don't know

a5. Do you plan to stop using this tank for the management of hazardous waste in 1987? *(Circle one)*
01 Yes
(02) No

a6. What is the size of this tank? *(Enter the size in gallons)*
100 gallons

a7. What was the total quantity of hazardous and nonhazardous waste accumulated, treated, recovered for reuse, or stored in this tank during 1986? *(Enter the quantities in gallons per year; if none, enter zero.)*
a. Hazardous waste 450000 gal/yr
b. Nonhazardous waste 0 gal/yr

a8. What is the typical and maximum residence time for hazardous waste stored/accumulated in this tank? *(Enter "NA" if hazardous waste is not stored/accumulated in this tank.)*
a. Typical residence time NA days
b. Maximum residence time NA days

a9. How long has this tank been in use at this facility?
02 years

a10. What is the age of this tank?
02 years

a11. What tank inspection methods (other than visual exterior inspection) are used? *(Circle all that apply)*
01 Volumetric tightness testing (e.g., petro-tite, leak lokator)
02 Nonvolumetric tightness testing (e.g., helium)
03 Radiography
04 Ultrasonic
05 Vacuum test
06 Pressure test
07 Visual interior inspection
(08) None
09 Other _____ *(specify)*

a12. Is this tank open topped? *(Circle one)*
(01) Yes
02 No

a13. How is this tank situated in relation to ground level? *(Circle one)*
(01) Totally above ground (in cradle or elevated on legs)
02 On the ground or concrete foundation
03 In ground
04 Completely underground
05 Other _____ *(specify)*

a14. What material is this tank constructed of? *(Circle one)*
(01) Carbon steel
02 Stainless steel
03 Concrete
04 Fiberglass
05 Aluminum
06 Other _____ *(specify)*

a15. What types of secondary containment are used for this tank? *(Circle all that apply)*
01 Double-wall tank
02 Vault (e.g., concrete)
(03) Berm or dike around the tank
04 Liner under the tank (exclusive of the support foundation)
05 None
06 Other _____ *(specify)*

a16. Which of the following external corrosion protection measures are used other than the corrosion resistence of the tank itself? *(Circle all that apply)*
01 Cathodic protection using impressed current or sacrificial anodes
02 Asphaltic coating
03 Fiberglass/epoxy coating
(04) Paint
05 None
06 Other _____ *(specify)*

a17. Are internal corrosion protection measures used other than the corrosion resistence of the tank itself? *(Circle one)*
01 Yes
(02) No

NOTE: This is from page 11 of Questionnaire GI.

a18. What leak detection methods other than visual inspection are used? *(Circle all that apply)*

01 Groundwater monitoring
02 Unsaturated zone monitoring
03 Inventory monitoring
04 Automatic level indicator
05 Leak detection monitor as part of the secondary containment system
06 None
07 Other _____ *(specify)*

a19. Does this tank have overfill control devices? *(Circle one)*

01 Yes
02 No

a20. What type of enclosure is this tank in (other than a vault built for secondary containment)? *(Circle one)*

01 This tank is not enclosed
02 Roof only
03 Roof and walls

a21. What percentage of the influent waste stream to this tank is water?

90 %

a22. What method is used to fill this tank? *(Circle all that apply)*

01 Pump
02 Vacuum
03 Gravity feed
04 Other _____ *(specify)*

a23. What method is used to empty waste from this tank? *(Circle all that apply)*

01 Pumped from tank
02 Forced from tank by pressurizing
03 Gravity discharged
04 Other _____ *(specify)*

a24. Is this tank used to manage any of the following? *(Circle 01 or 02 for each)*

	Yes	No
a. Liquids? (based on EPA paint filter test)	01	02
b. Solids?	01	02
c. Gases?	01	02

a25. Is this tank a sump? *(Circle one)*

01 Yes
02 No

a26. What air pollution control methods are used for this tank? *(Circle all that apply)*

01 Submerged loading
02 Internal floating roof
03 External floating roof
04 Non-vented tank
05 Refrigeration/condensation emission device
06 Carbon adsorption device
07 Flare
08 Vapor/fume incinerator
09 None
10 Other _____ *(specify)*

a27. List a RCRA waste code for each type of hazardous waste that was accumulated, treated, recovered for reuse, or stored in this tank during 1986. *(See Appendix C of the Instructions booklet for a list of RCRA and other waste codes.)*

RCRA Waste Code
(See list of codes in Appendix C of the Instructions booklet)

a.	F006	n.	
b.		o.	
c.		p.	
d.		q.	
e.		r.	
f.		s.	
g.		t.	
h.		u.	
i.		v.	
j.		w.	
k.		x.	
l.		y.	
m.		z.	

You have now completed a Tank Description Form for this tank. If you have completed a Tank Description Form for each tank that is currently in service, that is temporarily not in service, or that is no longer in service (but was during 1986) to manage hazardous waste onsite, GO TO PAGE 31. If you have not completed a Tank Description Form for each tank, go to the next Tank Description Form.

NOTE: This is from page 12 of Questionnaire GI.

EPA United States Environmental Protection Agency

FORM R

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

WHERE TO SEND COMPLETED FORMS: 1. TRI Data Processing Center P.O.Box 1513 Lantham, MD 20703-1513 2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision

For EPA use only

Important: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR 2002

SECTION 2. TRADE SECRET INFORMATION

2.1	Are you claiming the toxic chemical identified on page 2 trade secret? ☐ Yes (Answer question 2.2; Attach substantiation forms) ☒ NO (Do not answer 2.2; Go to Section 3)	2.2	Is this copy ☐ Sanitized ☐ Unsanitized (Answer only if "YES" in 2.1)

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data availble to the preparers of this report.

Name and official title of owner/operator or senior management official:	Signature:	Date Signed:
CHARLES HAUGH VICE PRESIDENT		06/30/2003

SECTION 4. FACILITY IDENTIFICATION

4.1		TRI Facility ID Number	11801PRKNL220MI
Facility or Establishment Name	SULZER METCO (US), INC.	Facility or Establishment Name or Mailing Address (if different from street address)	SULZER METCO (US), INC.
Street	220 MILLER PLACE	Mailing Addres	1101 PROSPECT AVENUE
City/County/State/Zip Code	HICKSVILLE NASSAU NY 11801	City/State/Zip Code	WESTBURY NY 11590
		Country (Non-US	

4.2	This report contains information for: (Important: check a or b; check c or d if applicable)	a. ☒ An entire facility	b. ☐ Part of a facility	c. ☐ A Federal facility	d. ☐ GOCO
4.3	Technical Contact Name	PETER DIPIETRANTONIO		Telephone Number (include area code)	(516) 338-2337
	Email Address	peterdipietrantonio@sulzer.com			
4.4	Public Contact Name	CHARLES HAUGH		Telephone Number (include area code)	(516) 338-2249

4.5	SIC Code (s) (4 digits)	Primary a. 3499	b.	c.	d.	e.	f.

4.6		Degrees	Minutes	Seconds		Degrees	Minutes	Seconds
	Latitude	40	47	10	Longitude	073	31	00

4.7 Dun & Bradstreet Number(s) (9 digits)	4.8 EPA Identification Number (RCRA I.D. No.) (12 characters)	4.9 Facility NPDES Permit Number(s) (9 characters)	4.10 Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)
a. 152084398	a. NYD981558570	a. NA	a. NA
b.	b.	b.	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	NA ☐	SULZER US INDUSTRIES HOLDING INC.
5.2	Parent Company's Dun & Bradstreet Number	NA ☐	001826957

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION

TRI Facility ID Number
11801PRKNL220MI
Toxic Chemical, Category or Generic Name
Nickel

SECTION 1. TOXIC CHEMICAL IDENTITY (Important: DO NOT complete this section if you completed Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.) 7440-02-0
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.) Nickel
1.3	Generic Chemical Name (Important: Complete only if Part 1, Section 2.1 is checked "Yes". Generic Name must be structurally descriptive.) NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category.
(If there are any numbers in boxes 1-17, then every field must be filled in with either 0 or some number between 0.01 and 100. Distribution should be reported in percentages and the total should equal 100%. If you do not have speciation data available, indicate NA.)

NA	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17

SECTION 2. MIXTURE COMPONENT IDENTITY (Important: DO NOT complete this section if you completed Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.) NA

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY
(Important: Check all that apply.)

3.1 Manufacture the toxic chemical:	3.2 Process the toxic chemical:	3.3 Otherwise use the toxic chemical:
a. [ ] Produce b. [ ] Import		
If produce or import:	a. [ ] As a reactant	a. [ ] As a chemical processing aid
c. [ ] For on-site use/processing	b. [X] As a formulation component	b. [ ] As a manufacturing aid
d. [ ] For sale/distribution	c. [ ] As an article component	c. [ ] Ancillary or other use
e. [ ] As a byproduct	d. [X] Repackaging	
f. [ ] As an impurity	e. [ ] As an impurity	

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ONSITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE

			A. Total Release (pounds/year*) (Enter range code or estimate**)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	NA	0	O	
5.2	Stack or point air emissions	NA	47	E	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
	Stream or Water Body Name				
5.3.1	NA				
5.3.2					
5.3.3					

If additional pages of Part II, Section 5.3 are attached, indicate the total number of pages in this box and indicate the Part II, Section 5.3 page number in this box. [ ] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

EPA Form 9350-1 (Rev. 03/2003) - Previous editions are obsolete.

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

COPY - DO NOT SUBMIT

EPA FORM R

PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 5. QUANTITY OF THE TOXIC CHEMICAL ENTERING EACH ENVIRONMENTAL MEDIUM ONSITE (Continued)

		NA	A. Total Release (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)
5.4.1	Underground Injection onsite to Class I Wells	X		
5.4.2	Underground Injection onsite to Class II-V Wells	X		
5.5	Disposal to land onsite			
5.5.1.A	RCRA Subtitle C landfills	X		
5.5.1.B	Other landfills	X		
5.5.2	Land treatment/application farming	X		
5.5.3	Surface Impoundment	X		
5.5.4	Other disposal	X		

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTWs)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1. Total Transfers (pounds/year*) (enter range code** or estimate)	6.1.A.2 Basis of Estimate (enter code)
NA	

6.1.B. 1	POTW Name	NA					
POTW Address							
City		State		County		Zip	
6.1.B.	POTW Name						
POTW Address							
City		State		County		Zip	

If additional pages of Part II, Section 6.1 are attached, indicate the total number of pages in this box [ ] and indicate the Part II, Section 6.1 page number in this box [ ] (example: 1,2,3, etc.)

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. 1	Off-Site EPA Identification Number (RCRA ID No.)				PAD987395803				
Off-Site Location Name	MODERN LANDFILL								
Off-site Address	4499 MOUNT PISGAH ROAD								
City	YORK	State	PA	County	YORK	Zip	17402	Country (Non-US)	
Is location under control of reporting facility or parent company?						Yes	X	No	

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 18184	1. C	1. M41
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 2 Off-Site EPA Identification Number (RCRA ID No.) MID000724831

Off-Site location Name: MICHIGAN DISPOSAL

Off-site Address: 49350 NORTH I-94 SERVICE DRIVE

City	BELLEVILLE	State	MI	County	WAYNE	Zip	48111	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 106	1. C	1. M41
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]						c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data ?
7A.1a	7A.1b	1		2			7A.1c	7A.1d	7A.1e
	3	4		5				%	Yes No
	6	7		8					
7A.2a	7A.2b	1		2			7A.2c	7A.2d	7A.2e
	3	4		5				%	Yes No
	6	7		8					
7A.3a	7A.3b	1		2			7A.3c	7A.3d	7A.3e
	3	4		5				%	Yes No
	6	7		8					
7A.4a	7A.4b	1		2			7A.4c	7A.4d	7A.4e
	3	4		5				%	Yes No
	6	7		8					
7A.5a	7A.5b	1		2			7A.5c	7A.5d	7A.5e
	3	4		5				%	Yes No
	6	7		8					

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [2]
and indicate the Part II, Section 6.2/7A page number in this box: [1] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL - SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS (Continued)

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1.
2.	2.	2.
3.	3.	3.
4.	4.	4.

6.2. 3 Off-Site EPA Identification Number (RCRA ID No.) NA

Off-Site location Name: ARROW SCRAP METAL

Off-site Address: 24 GAYMOR LANE

City	COMMACK	State	NY	County	SUFFOLK	Zip	11725	Country (Non-US)	

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year*) (enter range code** or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 13000	1. C	1. M24
2. NA	2.	2.
3.	3.	3.
4.	4.	4.

SECTION 7A. ONSITE WASTE TREATMENT METHODS AND EFFICIENCY

[ ] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data ?
7A.6a	7A.6b 1 2 3 4 5 6 7 8	7A.6c	7A.6d %	7A.6e Yes No
7A.7a	7A.7b 1 2 3 4 5 6 7 8	7A.7c	7A.7d %	7A.7e Yes No
7A.8a	7A.8b 1 2 3 4 5 6 7 8	7A.8c	7A.8d %	7A.8e Yes No
7A.9a	7A.9b 1 2 3 4 5 6 7 8	7A.9c	7A.9d %	7A.9e Yes No
7A.10a	7A.10b 1 2 3 4 5 6 7 8	7A.10c	7A.10d %	7A.10e Yes No

If additional pages of Part II, Section 6.2/7A are attached, indicate the total number of pages in this box [2]
and indicate the Part II, Section 6.2/7A page number in this box: [2] **(example: 1,2,3, etc.)**

* For Dioxin or Dioxin-like compounds, report in grams/year

** Range Codes: A= 1- 10 pounds; B= 11- 499 pounds; C= 500 - 999 pounds.

EPA FORM R
PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI Facility ID Number
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Nickel

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

X	Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1		2		3		4	

SECTION 7C. ON-SITE RECYCLING PROCESSES

X	Not Applicable (NA) - Check here if no on-site recyling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1		2		3		4		5	
6		7		8		9		10	

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

		Column A Prior Year (pounds/year*)	Column B Current Reporting Year (pounds/year*)	Column C Following Year (pounds/year*)	Column D Second Following Year (pounds/year*)
8.1	Quantity released ***	18200	18337	20000	NA
8.2	Quantity used for energy recovery onsite	NA	NA	NA	NA
8.3	Quantity used for energy recovery offsite	NA	NA	NA	NA
8.4	Quantity recycled onsite	NA	NA	NA	NA
8.5	Quantity recycled offsite	11125	13000	15000	NA
8.6	Quantity treated onsite	NA	NA	NA	NA
8.7	Quantity treated offsite	NA	NA	NA	NA
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)			NA	
8.9	Production ratio or activity index			1.02	

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	NA	a.	b.	c.
8.10.2		a.	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.
8.11	Is additional information on source reduction, recycling, or pollution control activities included with this report ? (Check one Box)			Yes [ ] No [X]

EPA Form 9350-1 (Rev. 03/2003) - Previous editions are obsolete.

*For Dioxin or Dioxin-like compounds, report in grams/year

***Report releases pursuant to EPCRA Section 329 (8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated onsite.

ANSI®
Z89.1-1986
Revision of
ANSI Z89.1-1981

American National Standard for Personnel Protection –

Protective Headwear for Industrial Workers – Requirements

Secretariat

Department of Biomedical Engineering
Duke University

Approved July 31, 1986

American National Standards Institute, Inc

American National Standard

Approval of an American National Standard requires verification by ANSI that the requirements for due process, consensus, and other criteria for approval have been met by the standards developer.

Consensus is established when, in the judgment of the ANSI Board of Standards Review, substantial agreement has been reached by directly and materially affected interests. Substantial agreement means much more than a simple majority, but not necessarily unanimity. Consensus requires that all views and objections be considered, and that a concerted effort be made toward their resolution.

The use of American National Standards is completely voluntary; their existence does not in any respect preclude anyone, whether he has approved the standards or not, from manufacturing, marketing, purchasing, or using products, processes, or procedures not conforming to the standards.

The American National Standards Institute does not develop standards and will in no circumstances give an interpretation of any American National Standard. Moreover, no person shall have the right or authority to issue an interpretation of an American National Standard in the name of the American National Standards Institute. Requests for interpretations should be addressed to the secretariat or sponsor whose name appears on the title page of this standard.

CAUTION NOTICE: This American National Standard may be revised or withdrawn at any time. The procedures of the American National Standards Institute require that action be taken to reaffirm, revise, or withdraw this standard no later than five years from the date of approval. Purchasers of American National Standards may receive current information on all standards by calling or writing the American National Standards Institute.

Published by

American National Standards Institute
1430 Broadway, New York, New York 10018

Copyright © 1986 by American National Standards Institute, Inc
All rights reserved.

No part of this publication may be reproduced in any form, in an electronic retrieval system or otherwise, without the prior written permission of the publisher.

Printed in the United States of America

(A5C889/7)

Foreword

(This Foreword is not part of American National Standard Z89.1-1986.)

This standard is a revision of American National Standard Requirements for Protective Headwear for Industrial Workers, ANSI Z89.1-1981. After a careful review, Accredited Standards Committee on Industrial Helmets, Z89, decided that the interests of the industrial safety community would be best served by revising ANSI Z89.1-1981 to allow innovation, particularly in retention systems.

It is intended that this standard be applied in industrial environments where the primary hazard is from small falling objects striking the top of the head. Protective caps and hats provide protection for the top of the head against small falling objects striking the top of the shell, and against light bumps. They are effective against small tools, small pieces of wood, bolts and nuts, rivets, sparks from overhead work, and similar hazards. Protective caps and hats only reduce the amount of force from an impact blow and do not provide complete head protection from severe impact blows. Protection from side or real impact is less than top impact. Good safety practices must be used when working in areas that present these hazards.

The Z89 Committee decided to continue the 850-pound average force transmission limitation as the measure of energy management for a head protection device. While this limitation is based partly on biomechanical factors, it, along with the energy levels of 40 foot-pounds in the impact resistance test, represents the committee's best judgment as to acceptable minimum performance, considering the state of the art combined with the weight, size, comfort, user acceptance, and cost of such devices.

Suggestions for improvement of this standard will be welcome. They should be sent to the Z89.1 Secretariat, Biomedical Engineering Department, Room 136 School of Engineering, Duke University, Durham, NC 27706.

This standard was processed and approved for submittal to ANSI by Accredited Standards Committee on Industrial Helmets, Z89. Committee approval of the standard does not necessarily imply that all committee members voted for its approval. At the time it approved this standard, the Z89 Committee had the following members:

James H. McElhaney, Chair

Organization Represented	*Name of Representative*
Aerospace Industries Association	J. A. Martin C. D. Ruyle (Alt)
Alliance of American Insurers	Thomas F. Bresnahan Frederick H. Deeg (Alt)
American Federation of Labor – Congress of Industrial Organizations	John D. Conners Walter J. Feltz (Alt)
American Gas Association	Frank J. Vihlein Dennis Strokes (Alt)
American Insurance Association	Victor J. Roman
American Iron and Steel Institute	Gerald L. Owens George Lodge (Alt)
American Occupational Medical Association	Howard N. Schulz
American Society for Testing Materials	Bruce Blake
Associated General Contractors of America	Henry V. Carvill
Association of American Railroads	W. C. Laraway
Canadian Standards Association	J. A. Johnson
Duke University	James H. McElhaney
Edison Electric Institute	John P. Markey
Exchange Carriers Standards Association	J. M. Degen O. J. Gusella, Jr (Alt)
General Services Administration	James Price
Industrial Safety Equipment Association	John H. Kuhlman Michael Theodore
Institute for Product Safety	Verne L. Roberts
Lukens Steel Company	Robert T. Conrad

Organization Represented	*Name of Representative*
National Bureau of Standards	Nickolas Calvano
National Institute of Occupational Safety and Health	W. I. Cook
National Safety Council	Robert Currie
	C. S. Wolff (Alt)
Safety Helmet Council of America	Ivan J. Wagar
Siebe Norton, Inc	John H. King
Snell Memorial Foundation	C. O. Chichester
Society of the Plastics Industry	Alan E. Sherr
The Telephone Group	R. L. Beach
3M Company	Larry Sweet
United Mine Workers of America	Joseph Main
U.S. Department of the Army	Edward R. Gloyd
U.S. Department of Labor, Occupational Safety and Health Administration	Rolland E. Stroup
U.S. Department of the Navy	M. Glonfriddo
	Gian R. Ruff
United States Steel Corporation	T. Forrest Fisher

Individual Members

Richard Pippen
Paul Pribble

Contents

SECTION PAGE

1. Scope and Purpose . . . 7
   1.1 Scope . . . 7
   1.2 Purpose . . . 7

2. Compliance . . . 7

3. Definitions . . . 7

4. Types and Classes . . . 7
   4.1 Helmet Types . . . 7
   4.2 Helmet Classes . . . 8

5. Materials . . . 8

6. Physical Requirements . . . 8
   6.1 Construction . . . 8
   6.2 Shell . . . 8
   6.3 Headband, Sweatband, Crown Straps, Protective Padding . . . 8
   6.4 Mass . . . 8
   6.5 Accessories . . . 8
   6.6 Instructions . . . 9
   6.7 Marking . . . 9

7. Performance Requirements . . . 9
   7.1 Electrical Insulation . . . 9
   7.2 Impact Resistance . . . 9
   7.3 Penetration Resistance . . . 9
   7.4 Flammability . . . 9
   7.5 Water Absorption . . . 9

8. Methods of Test . . . 9
   8.1 Preparation of Samples for Electrical Insulation and Water Absorption Tests . . . 9
   8.2 Electrical Insulation Test . . . 9
   8.3 Impact Resistance Tests . . . 10
   8.4 Penetration Resistance Test . . . 15
   8.5 Flammability . . . 15
   8.6 Water Absorption . . . 15

Table 1 Hat and Helmet Size Guide . . . 8

Figures
   Figure 1 Contour Drawings of ISEA Headforms . . . 11
   Figure 2 Typical Impact Test System . . . 13
   Figure 3 Guided Missile Assembly . . . 14

Appendixes
   Appendix A Electrical Insulation Test Procedure . . . 16
   Appendix B Recommendations and Precautions Concerning Helmet Use, Maintenance, and Testing . . . 17
   Appendix C Impact System Calibration Procedures . . . 18

American National Standard for Personnel Protection –

Protective Headwear for Industrial Workers – Requirements

1. Scope and Purpose

1.1 Scope. This standard describes types and classes; materials; physical and performance requirements; and tests for helmets for the protection of industrial workers. These include recommended safety requirements for authorities considering the establishment of regulations or codes concerning the use of protective helmets.

1.2 Purpose. This standard establishes specifications for helmets to protect the heads of industrial workers from impact and penetration by falling objects and from high-voltage electric shock and burn.

2. Compliance

Any statement(s) of compliance with this standard shall mean that the product meets all its requirements in their entirety. It is specifically intended that partial utilization of this standard is prohibited.

Variations from the requirements of this standard may be granted by the authority having jurisdiction only when it is demonstrated to the satisfaction of the administrative agency that equivalent protection is afforded.

3. Definitions

brim. An integral part of the shell extending outward over the entire circumference.

chin strap. An adjustable strap that fits under the chin to secure the helmet to the head.

crown straps. The part of the suspension that passes over the head.

harness. The complete assembly by means of which the helmet is maintained in position on the wearer's head.

headband. The part of the harness that encircles the head.

helmet. A device that is worn to provide protection for the head, or portions thereof, against impact, flying particles, electric shock, or any combination thereof; and that includes a suitable harness.

nape strap. A strap that fits behind the head to secure the helmet to the head; it may be an integral part of the headband.

peak. An integral part of the shell extending forward over the eyes only.

protective padding. A material used to absorb the kinetic energy of impact.

shell. A helmet less its harness, accessories, and fittings.

suspension. The portion of the harness that is designed to act as an energy-absorbing mechanism. It may consist of crown straps, protective padding, or a similar mechanism.

sweatband. The part of the headband, whether integral or replaceable, that comes in contact with at least the wearer's forehead.

winter liner. A snug-fitting cover worn under the helmet to protect the head, ears, and neck from cold.

4. Types and Classes

Protective helmets shall be of the types and classes listed in 4.1 and 4.2.

4.1 Helmet Types

4.1.1 Type 1. Type 1 helmets shall have a full brim.

4.1.2 Type 2. Type 2 helmets have no brim but may include a peak.

4.2 Helmet Classes

4.2.1 **Class A.** Class A helmets are intended to reduce the force of impact of falling objects and to reduce the danger of contact with exposed low-voltage conductors. Representative sample shells are proof-tested at 2200 volts (phase to ground).

NOTE: This voltage is not intended to be an indication of the voltage at which the headgear protects the wearer.

4.2.2 **Class B.** Class B helmets are intended to reduce the force of impact of falling objects and to reduce the danger of contact with exposed high-voltage conductors. Representative sample shells are proof-tested at 20 000 volts (phase to ground).

NOTE: This voltage is not intended to be an indication of the voltage at which the headgear protects the wearer.

4.2.3 **Class C.** Class C helmets are intended to reduce the force of impact of falling objects. This class offers no electrical protection.

5. Materials

All materials used shall conform to the requirements of this standard. All materials that come in contact with the wearer's head shall be those generally known to be nonirritating to normal skin.

6. Physical Requirements

6.1 **Construction.** Each helmet shall consist of a shell and a means of absorbing energy within the shell. The harness shall be securely attached to the shell. Provision shall be made for ventilation between the headband and the shell.

6.2 **Shell.** The shell shall be generally dome shaped. There shall be no holes in the shells of Class A and B helmets that would cause the helmet to fail the electrical insulation test (see 8.2). Identification markers used on shells for Class B helmets shall be affixed without making holes through the shell and without the use of any metal parts or metallic labels. The area under the peak or the front of the brim may be covered with a nonconducting antiglare material.

6.3 **Headband, Sweatband, Crown Straps, Protective Padding.** The headband, sweatband, crown straps, and protective padding shall be made of any suitable materials that are comfortable.

Table 1
Hat and Helmet Size Guide

Headband Size	Circumferential Measurement (Centimeters)	Circumferential Measurement (Inches)
6-1/2	52.07	20-1/2
6-5/8	53.02	20-7/8
6-3/4	53.98	21-1/4
6-7/8	54.93	21-5/8
7	55.88	22
7-1/8	56.83	22-3/8
7-1/4	57.79	22-3/4
7-3/8	58.74	23-1/8
7-1/2	59.69	23-1/2
7-5/8	60.64	23-7/8
7-3/4	61.59	24-1/4
7-7/8	62.55	24-5/8
8	63.50	25

NOTE: Nothing in this standard shall be construed as prohibiting larger or smaller headband sizes than specified. This table is a size guide for round bands, not applicable to integral nape straps because of the contour involved.

6.3.1 **Headband.** Headbands shall be adjustable in at least 1/8 hat size increments. The approximate size range that can be accommodated shall be marked on the helmet in a permanently legible manner (see Table 1). When the headband is adjusted to the maximum designated size, there shall be sufficient clearance between the shell and the headband to provide ventilation. Headbands shall be removable and replaceable.

6.3.2 **Sweatband.** Sweatbands may be of the removable-replaceable type or may be integral with the headband. The sweatband shall cover at least the forehead portion of the headband.

6.3.3 **Crown Straps.** Crown straps, when assembled, shall form a cradle for supporting the helmet on the wearer's head so that the distance between the top of the head and the underside of the shell cannot be adjusted to less than the manufacturer's requirements for that particular helmet.

6.3.4 **Protective Padding.** Protective padding may be used in conjunction with or in place of crown straps.

6.4 **Mass.** The mass of each helmet, complete with harness but exclusive of accessories, should not exceed 0.44 kg (15.5 ounces) for Class A, B, and C helmets.

6.5 Accessories

6.5.1 **Chin Strap and Nape Strap.** The chin strap and nape strap shall be made of suitable material not less than 12.7 mm (1/2 inch) in width.

6.5.2 **Winter Liners.** Winter liners shall be made of suitable materials. Colored materials shall be colorfast. The outer surface may be water resistant. There shall

be no metal parts in winter liners intended for use with Class B helmets.

6.5.3 **Lamp Brackets.** The lamp brackets, if supplied, shall be of a material suitable to hold the lamp properly.

6.5.4 **Mounting of Accessories**

6.5.4.1 **Class A Helmets.** Where practical, accessories for Class A helmets shall be mounted without making holes through the shell. When holes are required, any holes above the plane formed by the suspension attachment holes must be adequately filled or gasketed so that the helmet will pass the electrical insulation test (see 8.2) when the water level is within 12.7 mm (1/2 inch) of the holes for mounting the suspension. For example, a Class A helmet having a shell with holes for mounting a lamp bracket must pass the test in 8.2 for Class A helmets with the bracket attached. Helmets which cannot meet this requirement shall be classified as Class C.

6.5.4.2 **Class B Helmets.** Gasketing or other means of filling holes to pass the electrical insulation test in 8.2 for Class B helmets is not permitted. Helmets which cannot meet the electrical insulation test in 8.2 for Class B helmets shall be labeled Class A or Class C.

6.6 **Instructions.** Each helmet shall be accompanied by instructions explaining the proper method of adjusting the harness.

6.7 **Marking.** Each helmet conforming to the requirements of this standard shall bear identification on the inside of the shell stating the name of the manufacturer, the American National Standard designation, and the class of the helmet. For example:

Manufacturer
ANSI Z89.1-1986
Class B

7. Performance Requirements

7.1 **Electrical Insulation**

7.1.1 Class A helmets shall be tested in accordance with 8.2 and shall withstand 2200 volts (root mean square), AC, 60 Hertz, for 1 minute; the leakage shall not exceed 3 milliamperes.

7.1.2 Class B helmets shall be tested in accordance with 8.2 and shall withstand 20 000 volts (root mean square), AC, 60 Hertz, for 3 minutes; the leakage shall not exceed 9 milliamperes; at 30 000 volts, the helmet shall not burn through. Each Class B helmet tested for electrical insulation shall first pass the impact resistance test (see 7.2).

7.1.3 Class C helmets need not be tested for electrical insulation.

7.2 **Impact Resistance.** Helmets shall be tested in accordance with 8.3 and shall transmit an average force of not more than 3781 N (850 pounds). No individual specimen shall transmit a force of more than 4450 N (1000 pounds). For certification or compliance testing, the average force shall be calculated separately from a minimum sample of 12 helmets tested at each temperature. A sample of this size may not be necessary for normal manufacturing quality control procedures. Disengagement of, deformation of, or damage to the shell or component parts shall be allowed.

7.3 **Penetration Resistance.** Helmets shall be tested in accordance with 8.4; shells for Class A and B helmets shall be pierced not more than 9.5 mm (3/8 inch) and those for Class C helmets not more than 11.1 mm (7/16 inch), including the thickness of the shell.

7.4 **Flammability.** Class A, B, and C helmets shall be tested in accordance with 8.5 and shall have an average burn rate not greater than 76.2 mm (3 inches) per minute.

7.5 **Water Absorption.** Class A, B, and C helmets shall be tested in accordance with 8.6. Shells for Class A and C helmets shall not absorb more than 5.0 percent of water, by weight. Shells for Class B helmets shall not absorb more than 0.5 percent of water, by weight.

8. Methods of Test

8.1 **Preparation of Samples for Electrical Insulation and Water Absorption Tests.** Where it is evident that the sample helmets have a protective coating over the basic material, the exterior surface of the shell shall be abraded with a No. 60 grit garnet paper until the basic material is exposed. Tests shall be made at room temperature (23°C ± 2°C [73.4°F ± 3.6°F]). If there is a disagreement in the test results of different laboratories, the helmets shall be retested at a controlled relative humidity of 50 percent ± 5 percent. The temperatures specified in the various test procedures shall be interpreted as the temperature of the specimen. For water absorption tests the label shall be removed.

8.2 **Electrical Insulation Test (see 8.1 and Appendix A).**

8.2.1 **Apparatus.** The test apparatus shall consist of the following:

(1) A vessel containing fresh tap water, of sufficient size to submerge an inverted helmet shell to within 12.7 mm (1/2 inch) of the juncture of the brim with the crown

(2) A frame for suspending the test specimen in the water

(3) A source of 60-Hertz alternating current variable from 0 to 30 000 volts (root mean square voltage) with at least a 20-milliampere capability at 20 000 volts

(4) Wiring and terminals for application of voltage across the crown of the test specimen

(5) A voltmeter of sufficient capacity to measure the specified voltages

(6) A suitable milliammeter of sufficient capacity and accuracy to measure the specified currents

8.2.2 **Class A Helmets.** Accessories meant to be detachable shall be removed (goggles, welding helmets, lamps, etc). Accessories meant to be permanent shall be retained (earlugs, shield holders, lamp bracket, etc). The inside of the helmet (without harness) shall be filled with fresh tap water to within 12.7 mm (1/2 inch) of the juncture of the peak or brim with the crown. If a shell for a Class A helmet contains holes in the crown near the peak or brim for mounting the harness, it shall be filled to within 12.7 mm (1/2 inch) of the holes. No special provisions shall be made for any accessory mounting holes above the plane of the suspension mounting holes.

The shell shall then be submerged in the same type of water and to the same level as the water on the inside of the shell. The voltmeter and the milliammeter shall be attached to the circuit.

Care shall be taken to keep the unsubmerged portion of the shell dry so that flashover will not occur when voltage is applied.

The voltage shall be applied, increased to 2200 volts, and held there for 1 minute. The current leakage shall be noted.

8.2.3 **Class B Helmets.** The inside of the helmet shell (with harness and permanent accessories installed) shall be filled with fresh tap water to within 12.7 mm (1/2 inch) of the juncture of the peak or brim with the crown, or to whatever level is required to prevent flashover at the test voltage.

The shell shall then be submerged in the same type of water and to the same level as the water on the inside of the shell. The voltmeter and milliammeter shall be attached to the circuit. If there is a disagreement in the test results of different laboratories, the shell shall be retested after being submerged in fresh tap water for 24 hours prior to the test.

Care shall be taken to keep the unsubmerged portion of the shell dry so that flashover will not occur when voltage is applied. The voltage shall be applied, increased to 20 000 volts, and held there for 3 minutes. The current leakage shall be noted.

The shell shall then be tested for burn-through by further increasing the voltage to 30 000 volts at the rate of 1000 volts per second and then immediately reducing the voltage to zero.

8.2.4 **Recording.** For each specimen the leakage current or any evidence of burn-through shall be recorded.

8.3 Impact Resistance Tests

8.3.1 **Headform.** The headform used for this test shall be either the model head known as the "ISEA Standard Head Form" (see Figure 1), size 7 (approximate dimensions are contained in Figure 1 for reference only), or the "AML Head Size Standard," medium. The headform shall be of low-resonance magnesium K-1A, wood, or aluminum. For protection against damage, wood headforms may be provided with a steel insert in the crown. Damaged or deformed headforms shall not be used. The mass of the headform shall be 3.64 kg ± 0.45 kg (8 pounds ± 1 pound).

8.3.2 **Apparatus.** The test apparatus shall contain a load-measuring device to indicate transmitted force.

8.3.2.1 **Electronic Test Apparatus.** The electronic impact system shall be set up using Figure 2 as a guide. The electronics shall meet the following requirements:

Diameter of Load Cell[1]	75 mm (2.96 in) min
Meter Range	0–4450 N (0–1000 lb)
Resolution	44.5-N (10-lb) increments max
System Accuracy, Including Linearity	±2.5% full scale max
Rigidity	$\geqslant 4.5 \times 10^9$ N/m (2.6×10^7 lb/in)
Frequency Response in Compliance with:	Instrumentation for Impact Tests, SAE Recommended Practice J211b, Channel Class 1000
Resonant Frequency of Headform Load Cell Assembly[2]	5 kHz min

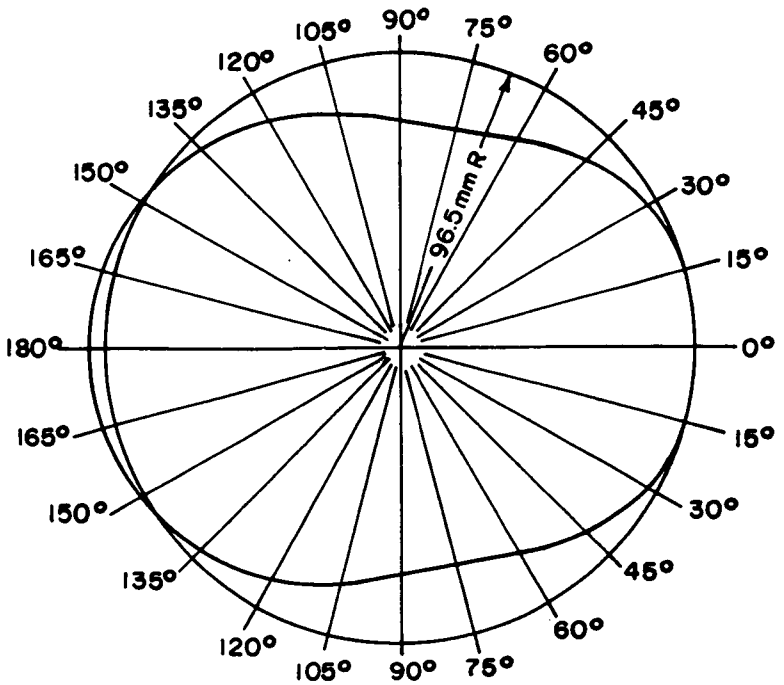
A system known to work is detailed in Appendix C.

[1] Although it is not recommended, a smaller load cell may be used provided that an appropriate mounting means is used to ensure that no bending moment develops, that is, that the force transmitted is always approximately normal to the surface of the load cell. Such a mounting may also adversely affect the resonant frequency.

[2] As calculated by the formula $f_r = \frac{1}{2\pi}\sqrt{\frac{k}{m}}$

where

f_r = resonant frequency (Hz)
k = spring constant (stiffness) of load cell (N/m) (lb/in)
m = mass added to the top of the load cell (kg) (pounds mass – that is, weight/32.17 ft/sec^2)



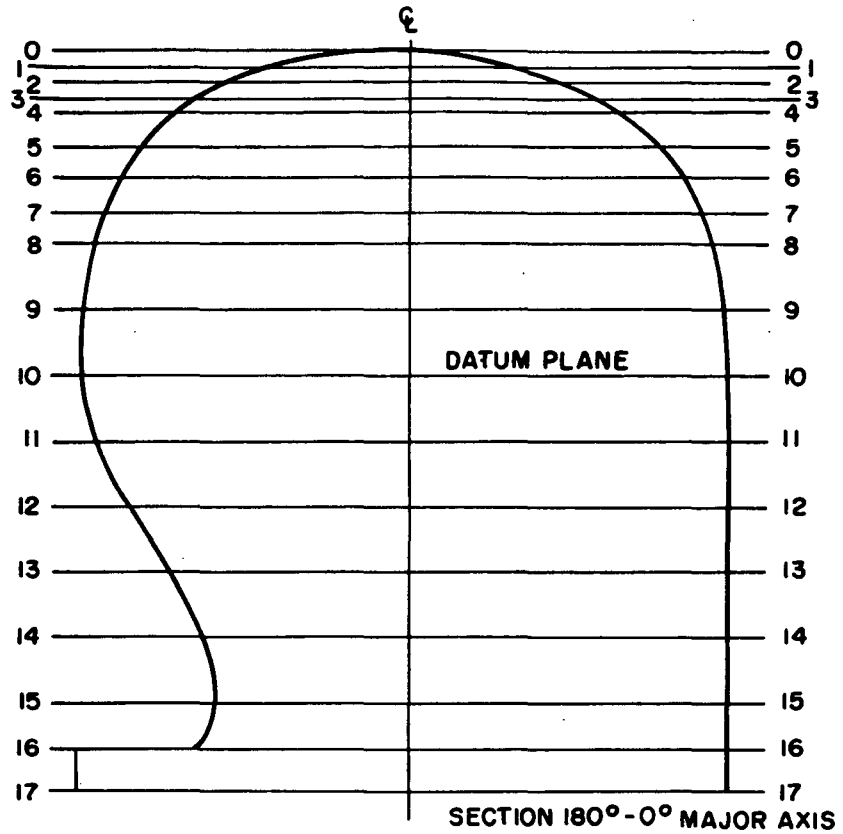
DATUM PLANE 10-10
CIRCUMFERENCE 55.88 cm (22 in)

Data for contour drawings of ISEA headform
(all dimensions in mm)

	Horizontal Plane	Distance from Datum Plane	Vertical Sections 0°	15°	30°	45°	60°	75°	90°	105°	120°	135°	150°	165°	180°
	0–0	99.0	0	0	0	0	0	0	0	0	0	0	0	0	0
	1–1	95.0	22.5	22.5	23.0	25.5	26.5	28.0	28.5	31.0	33.0	36.0	39.0	38.7	40.0
	2–2	90.0	39.5	40.0	40.0	40.5	40.5	40.5	41.5	43.5	47.5	50.0	53.0	53.0	54.5
	3–3	85.0	53.5	54.0	55.7	51.5	50.5	50.0	51.5	53.5	57.0	60.5	64.0	64.5	65.5
	4–4	80.0	62.5	63.0	60.9	59.0	57.0	57.0	57.5	60.5	63.5	67.3	70.7	70.7	72.2
	5–5	70.0	72.5	74.0	71.5	68.2	65.5	64.5	65.3	68.0	72.0	75.7	79.1	80.0	82.0
	6–6	60.0	82.0	82.0	79.5	75.0	71.0	69.4	70.1	73.0	77.5	81.7	85.1	87.5	87.9
	7–7	50.0	87.3	87.0	84.5	79.0	74.0	71.5	72.0	75.7	80.9	85.8	89.4	91.0	92.3
	8–8	40.0	90.2	90.5	87.5	81.5	75.5	73.0	73.5	76.9	82.7	88.3	91.3	93.5	95.0
	9–9	20.0	94.0	94.0	90.5	83.5	77.1	73.7	74.2	77.8	84.3	91.0	95.5	97.6	98.5
Datum Plane	10–10	0.0	96.5	96.5	93.0	84.6	77.5	73.5	74.2	79.0	85.0	92.5	96.5	98.8	99.9
	11–11	20.0	96.5	96.5	93.0	84.6	77.5	73.5	72.0	70.0	78.5	84.0	90.0	91.0	95.0
	12–12	40.0	96.5	96.5	93.0	84.6	77.5	73.5	70.0	63.5	70.0	75.0	81.0	82.0	84.0
	13–13	60.0	96.5	96.5	93.0	84.6	77.5	73.5	68.0	58.0	57.5	63.0	69.0	69.0	72.0
	14–14	80.0	96.5	96.5	93.0	84.6	77.5	73.5	66.0	54.0	48.0	53.0	59.0	60.0	63.0
	15–15	100.0	96.5	96.5	93.0	84.6	77.5	73.5	64.0	52.0	48.0	49.0	54.0	56.0	59.0
	16–16	115.9	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5
	17–17	128.6	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5	96.5

NOTE: All dimensions ± 5 mm.

Figure 1
Contour Drawings of ISEA Headforms



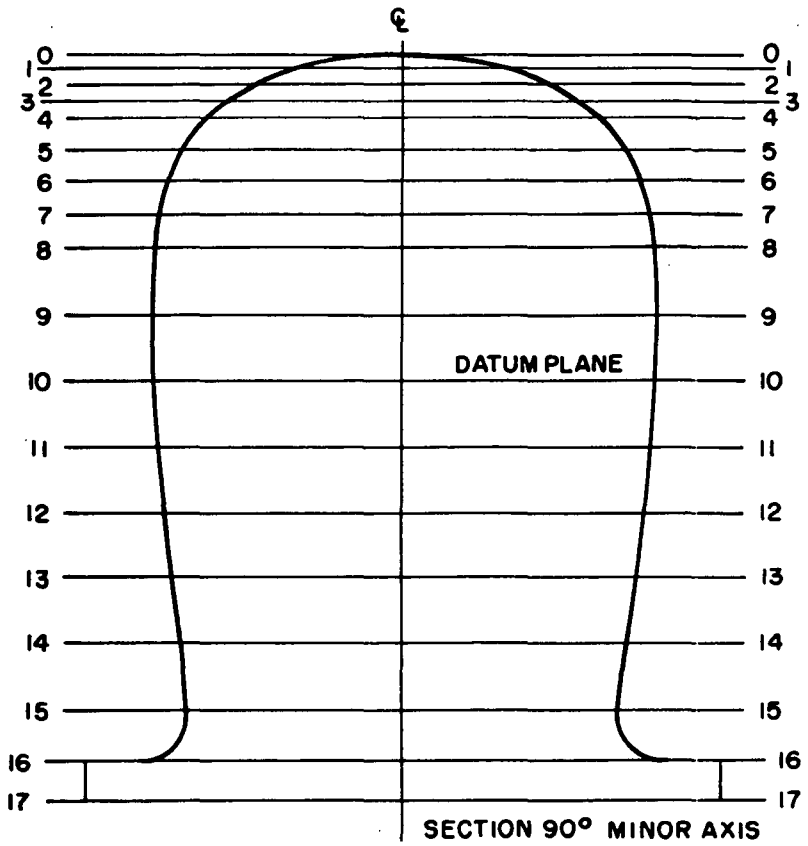
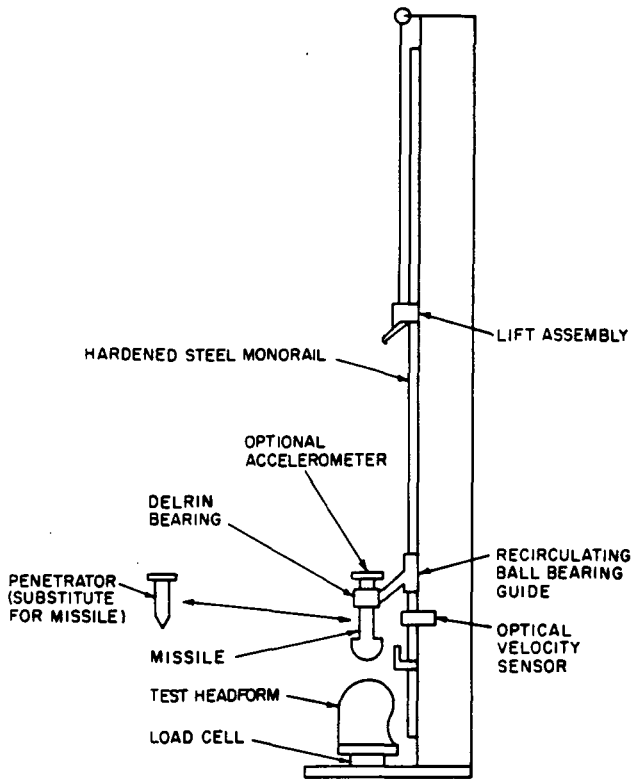


Figure 1 (*continued*)



NOTE: The Universal Helmet Test System (available from US Testing Company, 1415 Park Avenue, Hoboken, N.J. 07030) or an equivalent system is suitable for the impact test.

Figure 2
Typical Impact Test System

8.3.2.1.1 **Missile.** The missile should be guided. Alternatively, the impactor may be an unguided steel ball approximately 95 mm (3-3/4 inches) in diameter and with a mass of 3.54 to 3.64 kg (7.8 to 8.0 pounds). The free-fall system, however, is not recommended and cannot be used for initial calibration as described in C1 (see Appendix C).

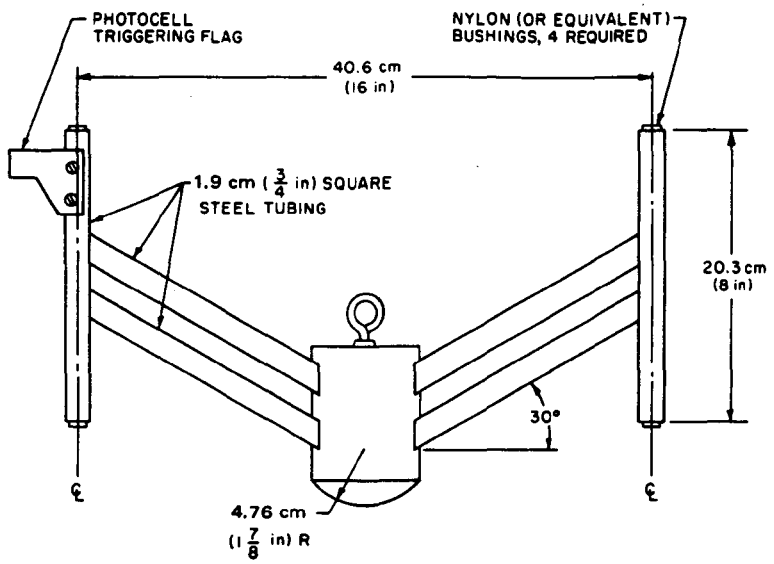
The guided impactor shall consist of a 3.54- to 3.64-kg (7.8- to 8.0-pound) missile whose striking face is a spherical segment with a radius of 4.8 cm ± 0.8 cm (1.9 inch ± 0.3 inch) and a chord length of 7.6 cm (3 inches). It shall be constrained to fall along a known and repeatable path vertical (and, in the case of a double-guide system, parallel) to within 6 mm per 3 meters (1/4 inch per 10 feet).

The missile shall be constructed in such a manner that it will remain rigid upon impact (single degree-of-freedom system). A missile known to be acceptable for a double-guide wire system is shown in Figure 3. It must be demonstrable that missiles deviating from this design are indeed single degree-of-freedom devices and do not themselves absorb energy upon impact.

A means shall be used to ensure that the momentum (product of mass and velocity) of the missile immediately prior to impact is identical to that of a freely falling mass. This can be accomplished with any appropriate means, such as a photocell-type velocity indicator.

8.3.2.1.2 **Calibration.** No simple means exists to calibrate the impact system required by this standard. Nevertheless, calibration is necessary. A suggested method and an alternate method are included in Appendix C. For systems with a guided impactor instrumented with an accelerometer, the preferred procedures, C1, C3, and C4, can be used. For systems without the accelerometer, C2 may be substituted for C1.

Laboratories with systems calibrated by other means shall assure themselves that the Law of Conservation of Momentum, the Law of Conservation of Energy, and Newton's Second Law (Force equals the product of Mass and Acceleration) are met.



NOTE: Total weight is 3.54 to 3.64 kg (7.8 to 8.0 lb)

Figure 3
Guided Missile Assembly

8.3.3 **Mounting of Specimens.** For the impact and penetration resistance tests, the specimen, with adjustment laces (if any) removed and the headband adjusted to size 7-1/4 or larger to prevent binding, shall be mounted on the medium size (size 7) headform. The center of the crown of the shell and the center of the suspension of the specimen shall be as nearly centered as possible on the headform.

8.3.4 **Test Procedures**

8.3.4.1 **Electronic Test Procedure.** The correctly mounted load cell assembly shall be mounted between the headform and a steel plate 25.4 mm (1 inch) thick and at least 30 cm square (12 X 12 inches). The plate shall be bolted down to, and in intimate contact with, a concrete (or material of similar density) block which measures approximately 1 X 1 X 0.3 meter (3 X 3 X 1 feet). The surface finish of mating metal parts connected with the load cell assembly shall be at least 0.8 μm (32 microinches). The plate shall be leveled with a precision level in the area of the load cell mounting to ± 1° and shall have an overall bilateral accuracy of ± 0.13 mm (0.005 inch) (flat to ± 0.13 mm [0.005 inch] total indicator reading) maximum. The center of the impactor, the center of the headform, and the center of the load cell shall be co-linear as measured by a plumb bob. The alignment tolerance shall be ± 3 mm (1/8 inch). The instrumentation shall be allowed to warm up until it stabilizes. Equipment shall be statically verified daily and calibrated periodically by procedure C1 or C2 and procedure C3 (see Appendix C), or by equivalent procedures. Equipment found to be out of calibration shall not be used for testing. Specimens shall be tested at −18°C ± 2°C (0°F ± 3.6°F) and 49°C ± 2°C (120°F ± 3.6°F). All specimens shall be subjected to the test temperature for at least 2 hours prior to impact tests. The impact resistance test shall be conducted within 15 seconds after the removal of the specimen from the temperature-conditioning apparatus. The meter should be zeroed after the helmet is placed on the headform but before the impact. The impactor shall be dropped from a height which yields the same impact momentum as a mass of 3.54 to 3.64 kg (7.8 to 8.0 pounds) falling freely from a height of 1.524 m (5 ft) (19.36 to 19.86 kg-m/sec [4.35 to 4.46 slug-ft/sec]). The impactor shall not be allowed to strike the specimen more than once. Alternatively, the unguided steel ball may be dropped from a height of 1.524 meters (5 feet). However, blows where the ball bounces back at an angle greater than 15° off the vertical shall be discounted.

8.3.4.2 **Recording.** For impact resistance tests, the average force and the greatest individual force for the required number of specimens (see 7.2) tested under each temperature shall be recorded.

8.4 Penetration Resistance Test

8.4.1 Apparatus. The apparatus shall consist of the following:

(1) A standard headform as specified in 8.3.1.

(2) A 0.45-kg (1-pound) plumb bob with a steel point having an included angle of 35° ± 1° and a maximum point radius of 0.25 mm (0.010 inch).

8.4.2 Mounting of Specimens. Three specimens shall be mounted as specified in 8.3.3.

8.4.3 Test Procedures. The headform shall be placed on a substantially level concrete floor beneath the plumb bob. The plumb bob shall be dropped 3.048 meters (10 feet) to strike the shell within a circle whose diameter is 76 mm (3 inches) and whose center shall be the geometric center of the shell. The plumb bob shall not fall on any portion of the ridges or make any contact with the headform. The depth of penetration shall be determined by measuring the perpendicular distance the penetrator went into the shell. This includes the thickness of the shell. The tip of the plumb bob may be marked at 9.5 mm (3/8 inch) and 11.1 mm (7/16 inch), but this shall be measured from the tip along the plumb bob centerline. Tests shall be conducted at −18°C ± 2°C (0°F ± 3.6°F) and at 49°C ± 2°C (120°F ± 3.6°F). Specimens shall be conditioned for at least 2 hours before the test. The test must be performed within 15 seconds after their removal from the conditioning chamber.

8.4.4 Recording. The depth of penetration for three specimens shall be averaged and recorded.

8.5 Flammability

8.5.1 Test Method. The test method described in ASTM D635-77,[3] Method of Test for Flammability of Self-Supporting Plastics, shall be employed to determine conformance to this standard. Three strips shall be used in lieu of the ten specimens required in ANSI/ASTM D635-77. The specimen shall be cut from the brim or from the side of the crown, whichever is thinner, and shall be as flat a section as is practical.

8.5.2 Recording. The burning rate, in inches per minute, for three specimens shall be averaged and recorded.

8.6 Water Absorption

8.6.1 Apparatus. The test apparatus shall consist of the following:

(1) An oven of sufficient size where a consistent temperature of 49°C (120°F) can be maintained for at least 4 hours.

(2) A vessel containing fresh tap water, of sufficient size to completely submerge a helmet shell.

8.6.2 Conditioning. The shell shall be placed in the oven for at least 4 hours at 49°C (120°F).

8.6.3 Test Procedures. After conditioning, the shell shall be weighed and then submerged in fresh tap water for 24 hours. After it is removed from the water, the shell shall be wiped lightly with an absorbent cloth or paper towel in order to remove surface moisture and then reweighed.

8.6.4 Recording. The difference in weight before and after immersion multiplied by 100 and divided by the initial weight equals the percent water absorption. The percent water absorption shall be averaged for three specimens and recorded.

---

[3] Copies are available from ASTM, 1916 Race Street, Philadelphia, PA 19103.

Appendixes (These Appendixes are not part of American National Standard Z89.1-1986, but are included for information only.)

Appendix A

Electrical Insulation Test Procedure

A1. High-Voltage Test Equipment

Commercially available high-voltage test equipment can provide self-contained voltage- and current-sensing circuits with adjustable current limiting from 3 to 30 milliamperes. With these units, all that is required is a test stand for the helmet and appropriate safety interlocks. The transformer should have a rating of at least 400 volt-amperes and have one side of the high-voltage supply grounded.

If a multistation test stand is to be used to test more than one helmet at a time, an additional current meter should be added for each helmet being tested. The volt-ampere rating of the transformer should be increased about 350 volt-amperes for each additional station.

A multistation test stand can also be built so that the external tank is charged and the inside of each helmet can be alternately grounded through a suitable current meter. With this arrangement, only one meter is required. It does not have to be protected from high voltage, and no increase in the transformer rating is necessary.

CAUTION: This and all test systems should comply with all applicable requirements of OSHA (Occupational Safety and Health Administration) and the American National Standard National Electrical Code, ANSI/NFPA 70-1987, concerning wiring, interlocks, grounding, safety signs, ozone, etc.

A2. Safety Precautions

High-voltage test equipment is dangerous because of the relatively high volt-ampere rating of the transformer and its stored energy capacity that can produce a current in excess of the current limit that has been set for a fraction of a second. People familiar with the relatively harmless automotive ignition and other small (although high-voltage) coils may have developed a false sense of security. The following checklist is submitted to supplement those of the equipment manufacturers and the testers.

(1) Prepare and review the test procedure during an operator's training. Post the procedure on the test stand. Only well-trained and competent personnel should operate this equipment.

(2) Post "High Voltage" signs in the area and equip the system with vivid pilot lights to indicate that it is operating.

(3) Ground the system.

(4) Contain the helmet under test in an insulated chamber of Plexiglas or a similar material, with safety interlocks on the door. The interlocks should be fail-safe and operated with low voltage, such as 24 volts. *All joints and openings in the chamber should have grounded screen or wires over or adjacent to them on the inside of the chamber.* Maintenance of this ground and the ground mentioned in item (3) should be part of the safety interlock system.

(5) Provide dual hand contacts to occupy both hands of the operator.

(6) Do not allow other people in the area during testing.

(7) Do not allow moisture or water to accumulate during or after testing. Ozone is generated during the testing. The amount is disagreeable and may be dangerous. Ozone may be radiomimetic and may induce or worsen respiratory tract diseases of viral or microbial origin. A small cage-type fan can be used to extract ozone from the test chamber, with an airflow from vents at the end of the chamber furthest from the point of extraction. The ozone should be vented to the outside or absorbed in a bromide or iodide solution.

Appendix B

Recommendations and Precautions Concerning Helmet Use, Maintenance, and Testing

B1. Laces

Laces, if any, should always be tied securely with a square knot.

B2. Cleaning

Shells should be scrubbed with a mild detergent and rinsed in clear water approximately 60°C (140°F). After rinsing, the shell should be carefully inspected for any signs of damage.

Removal of tars, paints, oils, and other materials may require the use of a solvent. Since many solvents may attack and damage the shell, the manufacturer should be consulted with regard to an acceptable solvent.

B3. Painting

Caution should be exercised if shells are to be painted, since some paints and thinners may attack and damage the shell and reduce protection. The manufacturer should be consulted with regard to paints or cleaning materials.

B4. Periodic Inspection

All components, shells, suspensions, headbands, sweatbands, and accessories, if any, should be visually inspected daily for signs of dents, cracks, penetration, and any damage due to impact, rough treatment, or wear that might reduce the degree of safety originally provided. Any industrial helmet that requires replacement or the replacement of any worn, damaged, or defective part should be removed from service until the condition of wear or damage has been corrected.

B5. Limitation of Protection

Industrial protective helmets meeting the requirements of ANSI Z89.1-1986 are designed to provide optimum protection under average conditions. Users are cautioned that if unusual conditions prevail (for example, higher or lower extremes of temperature than those described), or if there are signs of abuse or mutilation of the helmet or of any component, the margin of safety may be reduced.

NOTE: All items constructed of polymeric materials are susceptible to damage from ultraviolet light and chemical degradation, and safety helmets are no exception. Periodic examinations should be made of all safety helmets and in particular those worn or stored in areas exposed to sunlight for long periods. Ultraviolet degradation will first manifest itself in a loss of surface gloss, called chalking. Upon further degradation the surface will craze or flake away, or both. At the first appearance of either or both of the latter two phenomena the shell should be replaced immediately for maximum safety.

B6. Sizes

Provisions should be made by the manufacturers of industrial protective helmets for testing large and small sizes as appropriate.

B7. Precautions

Because helmets can be damaged, they should not be abused. They should be kept free from abrasions, scrapes, and nicks and should not be dropped, thrown, or used as supports. This applies especially to helmets that are intended to afford protection against electrical hazards.

Industrial protective helmets should not be stored or carried on the rear-window shelf of an automobile, since sunlight and extreme heat may cause degradation that will adversely affect the degree of protection they provide. Also, in the case of an emergency stop or accident, the helmet might become a hazardous missile.

The addition of accessories to the helmet may adversely affect the original degree of protection. When precautions or limitations are indicated by the manu-

facturer, they should be transmitted to the wearer and care taken to see that such precautions and limitations are strictly observed.

B8. Safe Condition

Neither the impact resistance requirements (see 7.2) nor the electrical insulation requirement (see 7.1) should be construed to indicate the safe impact level or safe voltage to which the industrial worker may be subjected. The maximum voltage against which insulating safety headgear will protect the wearer depends on a number of variable factors, such as the characteristics of the electrical circuit and the equipment involved, the care exercised in maintenance of equipment, and weather conditions. Therefore, the safe and proper local use of insulating safety headgear is beyond the scope of ANSI Z89.1-1986.

Appendix C

Impact System Calibration Procedures

C1. Medium Calibration

This calibration step should be carried out with a guided-fall system and an accelerometer mounted on the 3.64-kg (8-pound) falling mass. The accelerometer should have the following characteristics:

Minimum Range	0–125 g's
Maximum Resolution	1 g
Minimum Frequency Response (± 0.5 dB)	0.1–2000 Hz
Minimum Resonant Frequency	20 kHz
Linearity	1% full scale
Repeatability and Stability	0.5% full scale

The accelerometer should be mounted, according to the manufacturer's instructions, on the falling mass within 5° of true vertical. A suitable amplifier and peak meter (or equivalent devices) are required; a storage oscilloscope is recommended but not required.

Mount a calibrating medium[4] over the load cell. Drop the mass from at least 3 feet to strike the medium. The centers of the load cell, medium, mass, and accelerometer must be co-linear. A means to verify the velocity at impact should be used.

The values shown on two peak meters should read such that the acceleration value a, in g's, times the weight of the falling mass m equals the force value F within 2.5% ($F = ma$). This accuracy must be repeatable through at least five impacts.

C2. System Calibration Only

A calibrating medium that has been tested in accordance with C1 may be used without the accelerometer or guided mass. The force value obtained when the medium was tested according to C1 should be recorded and this information provided with the calibrating medium. The calibrating medium is mounted over the load cell with the centers of both aligned. The mass is then dropped directly on the center of the medium. The force value obtained should be within 2.5% of that achieved during testing according to C1. The calibrating medium should be retested according to C1 at least three times a year and more often if a significant change in force becomes apparent.

C3. Electronic Calibration

Electronic calibration of the normally used amplifier and peak meter scales should be performed at least weekly. This can be accomplished with a precision voltage source coupled to the input circuit via a precision capacitor, with a precision voltmeter attached

[4] A suitable calibrating medium is a 1-inch Open Blue Modular Elastomer Programmer, available from MTS Systems Corporation, P.O. Box 24012, Minneapolis MN 55424, or the equivalent. With such a programmer, the drop height should be 3 feet.

to the output circuit. A compact unit, such as a hand calibrator that meets the following requirements, may be used instead:

Resolution	0.02% full scale min
Linearity	±0.25% full scale
Output Voltage (Suitable for Amplifier)	Typically 0–10 V, 100 Hz ± 10 Hz
External Load	100 kΩ min 0.1 μF max

C4. Static Calibration

A rough determination of the calibration of the system may be obtained as follows:

(1) Apply a known weight of at least 45 kg (100 lb) to it

(2) Zero the peak meter and amplifier

(3) If the amplifier has an adjustable time constant, move it to the longest setting available

(4) Slowly add the weight, being careful not to impart acceleration to it

The peak meter should indicate the weight. This method should be used before each series of tests. An error in weight can indicate the need for a more sophisticated calibration check.

C5. A Proven System

The following electronic components have been shown to be effective in determining peak load on a guided-fall impact-attenuation test system:

(1) Load Cell	
Diameter	2.96 in
Range, Full-Scale Compression	90 000 lb
Sensitivity	10 pC/lb
Resolution	0.1 lb
Rigidity	0.5×10^{-8} in/lb
Minimum Resonant Frequency	50 kHz
Linearity	1%
(2) Amplifier and Peak Meter	
Range (at least one)	0–1000 lbs
Transducer Sensitivity	Compatible with load cell
Permissible System Error, including Linearity	±2.5% full scale max
Rise Time of Circuit	<10 μsec
Frequency Response	0.016 Hz–100 kHz
Minimum Storage Time Constant of Display	>10
Maximum Zero Drift	1.0% full scale
(3) Filter	
Frequency Cutoff 3 dB Down	5 kHz ± 10%
Minimum Rolloff	12 dB/octave

C6. Sources of Headforms

Aluminum headforms are available from Industrial Safety Equipment Association, Inc, 1901 North Moore Street, Arlington, VA 22209.

Wood headforms are available from Rieder Brothers, Inc, 120 Wooster Street, New York, NY 10012.

State Diskette

Submission Checklist

Please Note! After validating and submitting your data, please remember to access and review your Facility Data Profile (FDP) at http://www.triefdp.org/. When your FDP is posted for review, the Technical Contact that is listed in the Form R or Form A Certification Statement will be notified by an email message. Therefore, please make sure the Technical Contact email address is correct.

The FDP serves two purposes:

First, EPA wants to give the reporting facility the opportunity to confirm that the TRI Data Processing Center has entered its data correctly into EPA's TRIS database.

Second, if the TRI Data Processing Center identifies potential errors in the forms a facility has submitted, the FDP indicates what these errors are and requests that the facility provide EPA with corrections.

PLEASE CHECK AND COMPLETE EACH STEP BELOW: **Complete?**

1. The submission diskette is a new diskette. Older diskettes (for example, "recycled" diskettes) have caused upload problems in the past.
2. The diskette is a 3.5" high-density (1.44 MB) Windows-compatible diskette.
3. The diskette contains only files created by TRI-ME. Any other files on the diskette may cause the entire diskette to be rejected during the upload process into the Toxics Release Inventory System (TRIS).
4. The diskette has been virus-checked and it is virus free.
5. Attach a label to each diskette. The label should be in the following format:

   TRIS Report
   (Your Company Name)

Date:	07-01-2005
Density:	HD
Report Year:	2005
Number:	1 of 1
Contact:	(Technical Contact Name)
	(Technical Contact Phone)

6. **The certification letter is signed by a senior management official per EPCRA section 313(g)(1)(B).**
7. Use the correct address:

   Susanne Wither
   NY State Department of Environmental Conservation
   Division of Environmental Remediation
   625 Broadway, 11th Floor
   Albany, NY 12233-8010
   (518) 402-9553; Fax: (518) 402-9020

8. **The envelope contains only the submission diskette and the signed certification letter. (Do not send paper forms with a diskette submission.)**

Signature Certification for State Diskette Submission

DISK

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11590PRKNL1101P

June 30, 2006

Susanne Wither
NY State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-8010
(518) 402-9553; Fax: (518) 402-9020

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 6 chemical report(s) for our facility.
These 6 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2005	7429-90-5	Form R
Chromium	2005	7440-47-3	Form R
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2005	N090	Form R
Cobalt	2005	7440-48-4	Form R
Copper	2005	7440-50-8	Form R
Nickel	2005	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETER.DIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Sincerely,

W. GREGORY WUEST
DIRECTOR, QUALITY, ENVIRONMENT, HEALTH SAFETY

Enclosure: Diskette

Submission Receipt
Internet via CDX

This EPCRA section 313 (TRI) submission has been PREPARED, CERTIFIED, and SENT TO U.S. EPA.

Please be aware that if this facility resides in a state that is participating in EPA's TRI State Data Exchange through the Environmental Information Exchange Network, this certified submission will be electronically forwarded to your state satisfying your obligation to report to both EPA and your state. For more information, visit: http://www.exchangenetwork.net/exchanges/cross/tri.htm

Status	Date	Time
[X] Prepared	6/30/2006	1:59:27 PM
[X] Certified	6/30/2006	1:59:27 PM
[X] Sent to EPA	6/30/2006	1:59:27 PM
[ ] Cancelled		

Reference Number: **TRI00012006063013592 7GREGWUEST**
Certifying Official: W. GREGORY WUEST
Title: Director, Quality, Environment, Health Safety

TRI Facility ID: **11590PRKNL1101P**
Facility: SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590

TRI Chemical or Category	RY	CAS	Form	Revision
Copper	2005	7440-50-8	Form R	No
Aluminum (fume or dust)	2005	7429-90-5	Form R	No
Chromium	2005	7440-47-3	Form R	No
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2005	N090	Form R	No
Cobalt	2005	7440-48-4	Form R	No
Nickel	2005	7440-02-0	Form R	No

United States Environmental Protection Agency
Central Data Exchange
A New Paradigm for Environmental Reporting

You may wish to print a copy of this receipt and keep it for your records.

9. **The signed certification letter and diskette must be postmarked and mailed on or before July 1, 2006.**

Validation Results Report

Please Note! After validating and submitting your data, please remember to access and review your Facility Data Profile (FDP) at http://www.triefdp.org/. When your FDP is posted for review, the Technical Contact that is listed in the Form R or Form A Certification Statement will be notified by an email message. Therefore, please make sure the Technical Contact email address is correct.

The FDP serves two purposes:

First, EPA wants to give the reporting facility the opportunity to confirm that the TRI Data Processing Center has entered its data correctly into EPA's TRIS database.

Second, if the TRI Data Processing Center identifies potential errors in the forms a facility has submitted, the FDP indicates what these errors are and requests that the facility provide EPA with corrections.

There are two types of errors that TRI-ME checks for and reports: CRITICAL ERRORS are problems that the user must correct before TRI-ME will allow the user to submit a particular Form R/A. Critical errors usually involve missing data or inconsistent data. POSSIBLE ERRORS are potential problems that EPA recommends the user review and remedy as appropriate before submitting the Form R/A to EPA. The presence of possible errors does not prevent the user from submitting a particular Form R/A. If you have already determined that a possible error is not applicable, you may ignore it and proceed; in some cases it may not possible for you to remove a "possible error" from this report.

Facility Name: **SULZER METCO (US), INC.**

Passed?	Reported Chemical:	Critical Errors	Possible Errors
Yes	Copper	0	3
Yes	Aluminum (fume or dust)	0	1
Yes	Chromium	0	2
Yes	Chromium Compounds (except for chromite ore	0	1
Yes	Cobalt	0	1
Yes	Nickel	0	2

Form R Materials
2005

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (lb	% Cu	Cu (lb)
METCO 16C POWDE	6,355.00	0.5%	32	69.0%	4,385	0.0%	0	16.0%	1,017	0.0%	0	0.0%	0	2.0%	127
METCO 16C POWDE	1,890.00	0.5%	9	69.0%	1,304	0.0%	0	16.0%	302	0.0%	0	0.0%	0	2.0%	38
METCO 16C POWDE	150.00	0.5%	1	69.0%	104	0.0%	0	16.0%	24	0.0%	0	0.0%	0	2.0%	3
METCO 41C POWDE	3,445.00	0.0%	0	12.0%	413	0.0%	0	17.0%	586	0.0%	0	0.0%	0	0.0%	0
METCO 42C POWDE	9,260.00	0.0%	0	2.0%	185	0.0%	0	16.0%	1,482	0.0%	0	0.0%	0	0.0%	0
METCO 32C POWDE	5,950.00	10.0%	595	14.0%	833	0.0%	0	3.5%	208	0.0%	0	0.0%	0	0.0%	0
METCO 18C POWDE	1,060.00	40.0%	424	27.0%	286	0.0%	0	18.0%	191	0.0%	0	0.0%	0	0.0%	0
METCO 43C-NS POV	7,505.00	0.0%	0	78.0%	5,854	0.0%	0	19.0%	1,426	0.0%	0	0.0%	0	0.0%	0
METCO 201NS POW	3,550.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 55 POWDEF	995.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 34FP POWD	1,345.00	6.0%	81	36.0%	484	0.0%	0	8.5%	114	0.0%	0	0.0%	0	0.0%	0
METCO 63NS POWD	5,725.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS PO	920.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POW	9,985.00	0.0%	0	80.0%	7,988	20.0%	1,997	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS POW	1,050.00	12.5%	131	27.0%	284	2.0%	21	48.0%	504	0.0%	0	0.0%	0	0.0%	0
METCO 101NS POW	26,115.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POW	11,610.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS PO	37.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 81NS POWD	10,425.00	0.0%	0	20.0%	2,085	0.0%	0	4.0%	417	76.0%	7,923	0.0%	0	0.0%	0
METCO 44 POWDEF	775.00	0.0%	0	74.0%	574	0.0%	0	16.0%	124	0.0%	0	0.0%	0	0.0%	0
METCO 56F-NS POV	9,830.00	0.0%	0	99.5%	9,781	0.0%	0	16.0%	1,573	0.0%	0	0.0%	0	0.0%	0
METCO 43F-NS POV	10,260.00	0.0%	0	78.0%	8,003	0.0%	0	19.0%	1,949	0.0%	0	0.0%	0	0.0%	0
METCO 430NS POW	3,385.00	12.5%	423	27.0%	914	2.0%	68	0.0%	0	55.0%	1,862	0.0%	0	0.0%	0
AMDRY 100 POWDE	570.00	0.0%	0	70.0%	399	0.1%	1	19.0%	108	0.0%	0	0.0%	0	0.0%	0
AMDRY 100C POWD	4,405.00	0.0%	0	70.0%	3,084	0.1%	2	19.0%	837	0.0%	0	0.0%	0	0.0%	0
METCO 71NS POWD	8,025.00	11.5%	923	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Amdry 103 powder 5#	1,530.00	0.0%	0	70.0%	1,071	0.1%	1	19.0%	291	0.0%	0	0.0%	0	0.0%	0
METCO 210 POWDE	3,395.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 451 POWDE	715.00	0.0%	0	81.0%	579	1.0%	7	9.0%	64	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDE	6,780.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 111 POWDE	535.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	45.0%	241	0.0%	0
METCO 45C-NS POV	12,940.00	55.0%	7,117	10.0%	1,294	0.0%	0	24.0%	3,106	0.0%	0	0.0%	0	0.0%	0
METCO 45VF-NS PC	5,755.00	55.0%	3,165	10.0%	576	0.0%	0	24.0%	1,381	0.0%	0	0.0%	0	0.0%	0
METCO 71VF-NS PC	12,945.00	11.5%	1,489	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

METCO 81VF-NS PC	62,865.00	0.0%	0	20.0%	12,573	0.0%	0	0.0%	0	76.0%	47,777	0.0%	0	0.0%	0
METCO 34F POWDE	7,950.00	6.0%	477	36.0%	2,862	0.0%	0	8.5%	676	0.0%	0	0.0%	0	0.0%	0
METCO 101B-NS PO	34,665.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 72F-NS POV	9,880.00	12.0%	1,186	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POW	156,430.00	0.0%	0	94.0%	147,044	5.0%	7,822	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDE	8,579.75	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDE	5,012.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS-2 PO	3,420.00	12.5%	428	27.0%	923	2.0%	68	48.0%	1,642	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POV	28,975.00	0.0%	0	0.0%	0	10.0%	2,898	0.0%	0	0.0%	0	0.0%	0	89.0%	25,788
METCO 450NS POW	1,175.00	0.0%	0	94.0%	1,105	5.0%	59	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 57NS POWD	3,245.00	0.0%	0	38.0%	1,233	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	2,012
METCO 58NS POWD	27,660.00	0.0%	0	38.0%	10,511	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	17,149
METCO 301NS POW	12,305.00	0.0%	0	65.0%	7,998	3.5%	431	14.0%	1,723	0.0%	0	0.0%	0	0.0%	0
METCO 52C-NS POV	23,120.00	0.0%	0	0.0%	0	88.0%	20,346	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 131VF POW	1,960.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POV	300.00	0.0%	0	0.0%	0	10.0%	30	0.0%	0	0.0%	0	0.0%	0	89.0%	267
METCO 601NS POW	142,265.00	0.0%	0	0.0%	0	53.0%	75,400	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS POW	19,340.00	0.5%	97	74.5%	14,408	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POW	46,735.00	0.0%	0	73.0%	34,117	5.0%	2,337	18.0%	8,412	0.0%	0	0.0%	0	0.0%	0
METCO 308NS POW	8,075.00	5.0%	404	84.5%	6,823	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 410NS POW	6,925.00	0.0%	0	6.0%	416	24.0%	1,662	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-1 PC	23,045.00	17.0%	3,918	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 36C POWDE	12,495.00	0.0%	0	45.0%	5,623	0.0%	0	12.0%	1,499	0.0%	0	0.0%	0	0.0%	0
METCO 106 POWDE	4,665.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	4,525	0.0%	0
METCO 106F POWD	3,240.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	3,143	0.0%	0
METCO 73SF-NS PC	2,460.00	17.0%	418	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 301C-NS PC	3,325.00	0.0%	0	65.0%	2,161	3.5%	116	14.0%	466	0.0%	0	0.0%	0	0.0%	0
METCO 444 POWDE	16,130.00	0.0%	0	72.0%	11,614	7.0%	1,129	9.0%	1,452	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDE	30,862.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 101SF POW	5,315.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51NS POWD	7,935.00	0.0%	0	0.0%	0	10.0%	794	0.0%	0	0.0%	0	0.0%	0	89.0%	7,062
METCO 605NS POW	1,425.00	0.0%	0	0.0%	0	9.0%	128	0.0%	0	0.0%	0	0.0%	0	80.0%	1,140
METCO 64 POWDEF	480.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 310NS POW	3,700.00	0.0%	0	0.0%	0	61.0%	2,257	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 202NS POW	23,710.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 19E POWDE	945.00	0.0%	0	64.0%	605	0.0%	0	16.0%	151	0.0%	0	0.0%	0	2.4%	23
METCO 307NS-3 PO	10,640.00	0.5%	53	74.5%	7,927	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-3 PO	7,310.00	0.5%	37	84.5%	6,177	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

METCO 56C-NS POV	785.00	0.0%	0	99.5%	781	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130SF POW	1,265.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWD	8,760.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	7,972	0.0%	0
METCO 307NS-2 PO	9,840.00	0.5%	49	74.5%	7,331	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 447NS POW	25,580.00	0.0%	0	86.0%	21,999	6.0%	1,535	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWD	1,825.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	1,661	0.0%	0
METCO 54NS POWD	3,325.00	0.0%	0	0.0%	0	99.0%	3,292	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 71VF-NS-1 F	3,735.00	11.5%	430	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 54NS-1 POV	17,145.00	0.0%	0	0.0%	0	99.0%	16,974	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 445 POWDE	3,584.00	0.0%	0	0.0%	0	10.0%	358	0.0%	0	0.0%	0	0.0%	0	89.0%	3,190
METCO 43VF-NS PC	2,215.00	0.0%	0	78.0%	1,728	0.0%	0	19.0%	421	0.0%	0	0.0%	0	0.0%	0
METCO 450P POWD	620.00	0.0%	0	94.0%	583	4.0%	25	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105SFP POV	14,420.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 66F-NS POV	3,325.00	59.5%	1,978	1.0%	33	0.0%	0	8.5%	283	0.0%	0	0.0%	0	0.0%	0
METCO 31C-NS POV	34,365.00	4.0%	1,375	55.0%	18,901	0.0%	0	4.5%	1,546	0.0%	0	0.0%	0	0.0%	0
METCO 309NS-3 PO	1,985.00	0.5%	10	79.5%	1,578	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 442 POWDE	5,260.00	0.0%	0	68.0%	3,577	7.0%	368	8.5%	447	0.0%	0	0.0%	0	0.0%	0
METCO 312NS POW	7,537.50	0.0%	0	71.0%	5,352	4.0%	302	4.0%	302	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-1 PO	2,630.00	0.5%	13	84.5%	2,222	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-2 PC	10,290.00	17.0%	1,749	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 68F-NS-1 PC	4,970.00	49.0%	2,435	1.0%	50	0.0%	0	17.5%	870	0.0%	0	0.0%	0	0.0%	0
METCO 313NS POW	20,890.00	0.0%	0	0.0%	0	40.0%	8,356	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 600NS POW	1,010.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 1123 POWD	290.00	9.0%	26	18.0%	52	0.0%	0	4.0%	12	0.0%	0	0.0%	0	0.0%	0
METCO 82VF-NS PC	1,980.00	0.0%	0	12.0%	238	0.0%	0	0.0%	0	88.0%	1,742	0.0%	0	0.0%	0
METCO 311NS POW	4,070.00	0.0%	0	0.0%	0	55.0%	2,239	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1 PO	12,010.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 480NS POW	30,320.00	0.0%	0	95.5%	28,956	4.5%	1,364	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POW	70,895.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1 PO	5,862.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 143 POWDE	35.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 303NS-1 PO	1,615.00	0.0%	0	27.0%	436	0.0%	0	7.0%	113	0.0%	0	0.0%	0	0.0%	0
METCO 452 POWDE	16,885.00	0.0%	0	38.0%	6,416	7.0%	1,182	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 355 POWDE	5,000.00	0.0%	0	0.0%	0	55.0%	2,750	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 610NS POW	4,275.00	0.0%	0	0.0%	0	7.5%	321	0.0%	0	0.0%	0	0.0%	0	72.0%	3,078
METCO 202NS POW	8,150.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 70C-NS POV	3,675.00	0.0%	0	0.0%	0	0.0%	0	100.0%	3,675	0.0%	0	0.0%	0	0.0%	0
METCO 350NS POW	26,675.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

METCO 204B-NS PO	58,955.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POW	49,362.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 314NS POW	33,875.00	0.0%	0	71.0%	24,051	4.0%	1,355	4.0%	1,355	0.0%	0	0.0%	0	0.0%	0
METCO 700 POWDE	810.00	0.0%	0	55.0%	446	0.0%	0	20.0%	162	0.0%	0	0.0%	0	4.0%	32
METCO 453 POWDE	10,920.00	0.0%	0	31.0%	3,385	6.0%	655	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POW	2,400.00	0.0%	0	73.0%	1,752	5.0%	120	18.0%	432	0.0%	0	0.0%	0	0.0%	0
METCO 449P POWD	445.00	0.0%	0	0.0%	0	3.0%	13	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 205NS POW	775.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1G P	1,337.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 461NS POW	2,575.00	2.5%	64	67.0%	1,725	5.5%	142	17.5%	451	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POW	1,987.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 441NS-1 PO	570.00	0.0%	0	26.0%	148	2.0%	11	6.0%	34	0.0%	0	0.0%	0	0.0%	0
AMDRY 400 POWDE	1,500.00	51.0%	765	17.0%	255	0.0%	0	19.0%	285	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1003 PC	6,465.00	0.0%	0	12.0%	776	0.0%	0	17.0%	1,099	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1004 PC	1,670.00	0.0%	0	0.0%	0	10.0%	167	0.0%	0	0.0%	0	0.0%	0	89.0%	1,486
DIAMALLOY 1005 PC	3,130.00	0.5%	16	63.0%	1,972	0.0%	0	21.5%	673	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1006 PC	970.00	1.0%	10	53.0%	514	0.0%	0	19.0%	184	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1007 PC	4,890.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	4,890
DIAMALLOY 2001 PC	14,655.00	1.0%	147	70.0%	10,259	0.0%	0	17.0%	2,491	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2002 PC	2,110.00	6.0%	127	36.0%	760	0.0%	0	8.5%	179	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2003 PC	1,455.00	11.5%	167	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2004 PC	10,490.00	12.0%	1,259	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2006 PC	245.00	17.0%	42	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3001 PC	2,125.00	49.0%	1,041	1.0%	21	0.0%	0	17.5%	372	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3004 PC	7,130.00	0.0%	0	20.0%	1,426	0.0%	0	0.0%	0	80.0%	5,704	0.0%	0	0.0%	0
DIAMALLOY 3005 PC	305.00	0.0%	0	10.0%	31	0.0%	0	0.0%	0	90.0%	275	0.0%	0	0.0%	0
DIAMALLOY 3007 PC	12,010.00	0.0%	0	10.0%	1,201	0.0%	0	0.0%	0	90.0%	10,809	0.0%	0	0.0%	0
DIAMALLOY 3006 PC	70.00	0.0%	0	40.0%	28	0.0%	0	52.0%	36	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4006 PC	4,900.00	0.0%	0	55.0%	2,695	0.0%	0	20.5%	1,005	0.0%	0	0.0%	0	4.0%	196
METCO 203NS POW	62.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 76F-NS POV	1,095.00	21.0%	230	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-G PC	287,062.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4008NS	2,655.00	0.0%	0	95.5%	2,536	4.5%	119	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1008 PC	2,035.00	0.0%	0	4.0%	81	0.0%	0	18.0%	366	0.0%	0	0.0%	0	2.0%	41
DIAMALLOY 4010 PC	985.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3002NS	230.00	59.5%	137	1.0%	2	0.0%	0	8.5%	20	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2005NS	30,820.00	17.0%	5,239	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 1371 POWD	12,140.00	25.0%	3,035	19.0%	2,307	0.0%	0	3.5%	425	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY 301 POWDE	750.00	11.0%	83	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 302 POWDE	45.00	11.5%	5	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 313X POWD	5,450.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 333 POWDE	1,030.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 353 POWDE	910.00	46.0%	419	50.0%	455	53.5%	487	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 365-2 POWD	15,570.00	24.0%	3,737	45.0%	7,007	12.0%	1,868	17.0%	2,647	0.0%	0	0.0%	0	0.0%	0
AMDRY 386 POWDE	3,710.00	22.0%	816	48.0%	1,781	13.0%	482	17.0%	631	0.0%	0	0.0%	0	0.0%	0
AMDRY 387 POWDE	1,095.00	0.0%	0	86.0%	942	6.0%	66	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 500C POWD	7,685.00	0.0%	0	36.0%	2,767	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	4,534
AMDRY 500F POWD	4,585.00	0.0%	0	36.0%	1,651	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	2,705
AMDRY 625 POWDE	1,275.00	50.0%	638	63.0%	803	0.0%	0	21.5%	274	0.0%	0	0.0%	0	0.0%	0
AMDRY 718 POWDE	1,465.00	1.0%	15	53.0%	776	0.0%	0	19.0%	278	0.0%	0	0.0%	0	0.0%	0
AMDRY 718 CLASS I	7,035.00	1.0%	70	53.0%	3,729	0.0%	0	19.0%	1,337	0.0%	0	0.0%	0	0.0%	0
AMDRY 956 POWDE	31,185.00	0.0%	0	93.5%	29,158	5.0%	1,559	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 959 POWDE	3,190.00	0.0%	0	38.0%	1,212	7.0%	223	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 960 POWDE	14,710.00	0.0%	0	73.0%	10,738	5.0%	736	18.0%	2,648	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 POWDE	66,005.00	0.0%	0	67.0%	44,223	10.0%	6,601	22.0%	14,521	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 POWDE	3,865.00	0.0%	0	67.0%	2,590	10.0%	387	22.0%	850	0.0%	0	0.0%	0	0.0%	0
AMDRY 963 POWDE	2,185.00	0.0%	0	68.0%	1,486	6.0%	131	26.0%	568	0.0%	0	0.0%	0	0.0%	0
AMDRY 964 POWDE	8,590.00	0.0%	0	57.0%	4,896	11.0%	945	31.0%	2,663	0.0%	0	0.0%	0	0.0%	0
AMDRY 9830 POWD	1,200.00	17.0%	204	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9831 POWD	7,650.00	17.0%	1,301	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 993 POWDE	17,100.00	0.0%	0	1.0%	171	35.0%	5,985	1.0%	171	0.0%	0	0.0%	0	0.0%	0
AMDRY 9951 POWD	7,540.00	35.0%	2,639	30.0%	2,262	8.0%	603	25.0%	1,885	0.0%	0	0.0%	0	0.0%	0
AMDRY 9954 POWD	14,340.00	35.0%	5,019	30.0%	4,302	8.0%	1,147	25.0%	3,585	0.0%	0	0.0%	0	0.0%	0
AMDRY 995C POWD	20,745.00	35.0%	7,261	30.0%	6,224	8.0%	1,660	26.0%	5,394	0.0%	0	0.0%	0	0.0%	0
AMDRY 997 POWDE	3,235.00	23.0%	744	44.0%	1,423	8.0%	259	20.0%	647	0.0%	0	0.0%	0	0.0%	0
AMDRY 1718 POWD	4,090.00	1.0%	41	53.0%	2,168	0.0%	0	19.0%	777	0.0%	0	0.0%	0	0.0%	0
AMDRY 2000 POWD	1,295.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 2010 POWD	31,695.00	0.0%	0	0.0%	0	53.0%	16,798	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5260 POWD	6,040.00	20.0%	1,208	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5670 POWD	2,455.00	20.0%	491	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5843 POWD	15,960.00	10.0%	1,596	0.0%	0	0.0%	0	4.0%	638	0.0%	0	0.0%	0	0.0%	0
AMDRY 6420 POWD	9,070.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY CHROME P(	5,050.00	0.0%	0	0.0%	0	0.0%	0	100.0%	5,050	0.0%	0	0.0%	0	0.0%	0
AMDRY 365-1	165.00	24.0%	40	45.0%	74	12.0%	20	17.0%	28	0.0%	0	0.0%	0	0.0%	0
AMDRY 187 POWDE	3,700.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 718B POWD	445.00	1.0%	4	53.0%	236	0.0%	0	19.0%	85	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY 770 POWDE	2,830.00	0.1%	3	80.0%	2,264	0.0%	0	20.0%	566	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	5,910.00	0.1%	6	80.0%	4,728	0.0%	0	20.0%	1,182	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	200.00	0.1%	0	80.0%	160	0.0%	0	20.0%	40	0.0%	0	0.0%	0	0.0%	0
AMDRY 775 POWDE	1,590.00	0.1%	2	80.0%	1,272	0.0%	0	20.0%	318	0.0%	0	0.0%	0	0.0%	0
AMDRY 780 POWDE	1,185.00	0.1%	1	92.0%	1,090	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 780 POWDE	1,335.00	0.1%	1	92.0%	1,228	0.0%	0	15.0%	200	0.0%	0	0.0%	0	0.0%	0
Amdry 790.0 powder	875.00	0.1%	1	92.0%	805	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 790.1 POWD	830.00	0.1%	1	92.0%	764	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 204NS-1 PO	61,712.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 58(	3,560.00	8.0%	285	11.5%	409	0.0%	0	11.0%	392	0.0%	0	0.0%	0	1.0%	36
METCO 320NS POW	23,470.00	0.0%	0	0.0%	0	62.0%	14,551	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 581	1,230.00	12.0%	148	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 586	70.00	8.0%	6	6.0%	4	0.0%	0	0.0%	0	29.0%	20	0.0%	0	0.0%	0
METCO 70F-NS POV	60.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	60	0.0%	0	0.0%	0
METCO 204C-NS PC	47,225.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 204	2,600.00	26.0%	676	25.0%	650	6.0%	156	16.5%	429	0.0%	0	0.0%	0	0.0%	0
METCO 73F POWDE	585.00	17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 581	505.00	12.0%	61	0.0%	0	0.0%	0		0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 584	16,320.00	10.0%	1,632	0.0%	0	0.0%	0	4.0%	653	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 524	14,090.00	0.0%	0	31.0%	4,368	0.0%	0	60.0%	8,454	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 66(	1,300.00	0.0%		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4700 PC	19,370.00	38.0%	7,361	32.0%	6,198	8.0%	1,550	21.0%	4,068	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 204	4,790.00	26.0%	1,245	26.0%	1,245	6.0%	287	16.5%	790	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB POWDI	520.00	9.5%	49	68.5%	356	6.0%	31	13.5%	70	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB POWDI	300.00	9.5%	29	68.5%	206	6.0%	18	13.5%	41	0.0%	0	0.0%	0	0.0%	0
AMDRY D-15 POWD	865.00	10.0%	87	65.0%	562	3.5%	30	15.0%	130	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-3 POWD	1,260.00	20.0%	252	54.0%	680	2.0%	25	20.0%	252	0.0%	0	0.0%	0	0.0%	0
AMDRY MM509 POW	105.00	54.0%	57	10.0%	11	0.0%	0	23.0%	24	0.0%	0	0.0%	0	0.0%	0
SP 86/70NS POWDE	800.00	0.1%	0	84.0%	672	16.0%	128	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 2-2590 POWDE	375.00	0.0%	0	85.0%	319	15.0%	56	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 4-2231 POWDE	8,040.00	2.5%	201	67.0%	5,387	5.5%	442	17.5%	1,407	0.0%	0	0.0%	0	0.0%	0
SPM 6-2255 POWDE	400.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 6-2309 AE7443	425.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY ALUM SIL /	11,200.00	21.0%	2,352	38.0%	4,256	11.5%	1,288	23.0%	2,576	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 246	2,910.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY X-40 POWDI	670.00	54.0%	362	10.0%	67	0.0%	0	23.0%	154	0.0%	0	0.0%	0	0.0%	0
AMDRY 8670 / PWA	0.00	10.0%	0	14.0%	0	5.5%	0	8.0%	0	0.0%	0	0.0%	0	0.1%	0
1824 RZR BRAZE PC	30.00	18.0%	5	60.0%	18	3.0%	1	11.0%	3	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

SULZER METCO 55	1,900.00	0.0%	0	17.0%	323	2.5%	48	70.5%	1,340	0.0%	0	0.0%	0	0.0%	0
METCO 443NS SPEC	10,220.00	0.0%	0	70.0%	7,154	5.0%	511	18.5%	1,891	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-6A POWI	210.00	0.0%	0	74.0%	155	2.0%	4	18.0%	38	0.0%	0	0.0%	0	0.0%	0
SXH-70 / 10 LBS	7,460.00	10.0%	746	0.0%	0	0.0%	0	4.0%	298	0.0%	0	0.0%	0	0.0%	0
METCO 136CP / 5 LE	2,740.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	2,493	0.0%	0
AMDRY DF-3 POWD	160.00	20.0%	32	54.0%	86	2.0%	3	20.0%	32	0.0%	0	0.0%	0	0.0%	0
AMDRY RENE 80 / 5	1,305.00	9.5%	124	54.0%	705	3.0%	39	14.0%	183	0.0%	0	0.0%	0	0.0%	0
SP8847 Metco 604NS	1,000.00	0.0%	0	0.0%	0	9.0%	90	0.0%	0	0.0%	0	0.0%	0	85.0%	850
XPT 459	50.00	0.0%	0	94.0%	47	4.0%	2	0.0%	0	0.0%	0	0.0%	0	0.0%	0
XPT 470 / SPM 7-262	8,030.00	1.0%	80	75.0%	6,023	0.0%	0	15.0%	1,205	0.0%	0	0.0%	0	0.0%	0
SPM 4-2443 POWDE	600.00	0.0%	0	0.0%	0	10.0%	60	0.0%	0	0.0%	0	0.0%	0	89.0%	534
DIAMALLOY 4454	8,740.00	35.0%	3,059	30.0%	2,622	8.0%	699	25.0%	2,185	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 44	**4,010.00**		0		0		0		0		0		0		0
DIAMALLOY 5872 NS	0.00	12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9150	570.00	1.0%	6	75.5%	430	0.0%	0	13.0%	74	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 41	17,455.00	36.0%	6,284	32.0%	5,586	10.0%	1,746	22.0%	3,840	0.0%	0	0.0%	0	0.0%	0
METCO 12C POWDE	620.00	0.5%	3	83.0%	515	0.0%	0	10.0%	62	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POW	75.00	0.5%	0	83.0%	62	0.0%	0	10.0%	8	0.0%	0	0.0%	0	0.0%	0
AMDRY 482 POWDE	565.00	8.0%	45	73.0%	412	2.0%	11	9.0%	51	0.0%	0	0.0%	0	0.0%	0
SPECIAL SIZE METC	620.00	0.5%	3	74.5%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM2000 POWDER	14,250.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9621 POWD	5,850.00	0.0%	0	77.0%	4,505	6.0%	351	17.0%	995	0.0%	0	0.0%	0	0.0%	0
AMDRY 920	920.00	64.0%	589	0.5%	5	6.0%	55	29.0%	267	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5849 PC	4,755.00	10.0%	476	0.0%	0	0.0%	0	4.0%	190	0.0%	0	0.0%	0	0.0%	0
XPT 448 AMDRY DF-	40.00	10.0%	4	67.0%	27	3.5%	1	14.0%	6	0.0%	0	0.0%	0	0.0%	0
AMDRY 915 POWDE	1,375.00	1.0%	14	75.0%	1,031	0.0%	0	13.0%	179	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 449/SPI	3,110.00	24.0%	746	48.0%	1,493	12.0%	373		0	0.0%	0	0.0%	0	0.0%	0
METCO 15E (US) PC	3,445.00	1.0%	34	70.5%	2,429	0.0%	0	17.0%	586	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 395 PO	855.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 345	5.00	65.0%	3	0.0%	0	10.0%	1	25.0%	1	0.0%	0	0.0%	0	0.0%	0
AMDRY AlCo	10,900.00	30.0%	3,270	50.0%	5,450	69.0%	7,521	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY B-93	2,925.00	12.0%	351	55.0%	1,609	3.0%	88	14.0%	410	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-5	70.00	0.0%	0	74.0%	52	2.0%	1	18.0%	13	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-4B	260.00	10.0%	26	67.0%	174	3.5%	9	14.0%	36	0.0%	0	0.0%	0	0.0%	0
AMDRY S-57B	80.00	54.0%	43	10.0%	8	0.0%	0	23.5%	19	0.0%	0	0.0%	0	0.0%	0
GT-50 GE Proprietar	2,480.00	26.0%	645	25.0%	620	6.0%	149	16.5%	409	0.0%	0	0.0%	0	0.0%	0
SULZER METCO SPI	23,175.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR	9,900.00	0.0%	0	2.0%	198	0.0%	0	16.0%	1,584	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

34FP/15F BLEND	1,630.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 41C PWDR !	8,050.00	0.0%	0	12.0%	966	0.0%	0	17.0%	1,369	0.0%	0	0.0%	0	0.0%	0
SPM5-2219 (AE7609	2,113.10	0.0%	0	0.0%	0	0.0%	0	85.5%	1,807	0.0%	0	0.0%	0	0.0%	0
SPEC METCO 52C (I	700.00	0.0%	0	0.0%	0	87.0%	609	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY TD-55	25.00	2.0%	1	41.0%	10	0.0%	0	21.5%	5	0.0%	0	0.0%	0	0.0%	0
AMDRY SV 20 POWI	280.00	0.0%	0	65.0%	182	5.5%	15	25.0%	70	0.0%	0	0.0%	0	0.0%	0
FVA-5-B/XPT 271/SP	720.00	25.0%	180	18.3%	131	0.0%	0	3.5%	25	0.0%	0	0.0%	0	0.0%	0
RAW MATERIAL FOI	0.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 434 BLE	10.00	8.0%	1	68.0%	7	4.3%	0	15.0%	2	0.0%	0	0.0%	0	0.0%	0
XPT 595	210.00	50.0%	105	83.0%	174	0.0%	0	10.0%	21	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB / XPT 6	895.00	9.0%	81	70.0%	627	3.5%	31	14.0%	125	0.0%	0	0.0%	0	0.0%	0
AMDRY 951 (Ni-50 G	0.00	0.5%	0	60.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
BORON NITRIDE POWDER/0157		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 15E POWDE	925.00	1.0%	9	70.5%	652	0.0%	0	17.0%	157	0.0%	0	0.0%	0	0.0%	0
METCO 15F PWDR 5	990.00	1.0%	10	70.5%	698	0.0%	0	17.0%	168	0.0%	0	0.0%	0	0.0%	0
METCO 54NS PWDR	2,610.00	0.0%	0	0.0%	0	99.0%	2,584	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 57NS POWD	300.00	0.0%	0	38.0%	114	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	186
METCO 58NS POWD	200.00	0.0%	0	36.0%	72	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	118
METCO 308NS1 PWI	0.00	0.5%	0	84.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 303	375.00	0.0%	0	0.0%	0	99.0%	371	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 71VFNS-5 P	1,305.00	11.5%	150	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR 2	4,200.00	0.0%	0	2.0%	84	0.0%	0	16.0%	672	0.0%	0	0.0%	0	0.0%	0
AMDRY 485 PWA 1185-1		33.0%	0	40.0%	0	0.0%	0	24.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 600NS-1 PW	6,400.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 367 POWDE	565.00	0.0%	0	10.5%	59	0.0%	0	78.5%	444	0.0%	0	0.0%	0	0.0%	0
AMDRY 949 POWDE	3,005.00	0.0%	0	0.0%	0	55.0%	1,653	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 961	2,000.00	0.0%	0	77.0%	1,540	6.0%	120	17.0%	340	0.0%	0	0.0%	0	0.0%	0
AMDRY 6417 POWD	60.00	0.0%	0	0.0%	0	0.2%	0	0.1%	0	0.0%	0	99.0%	59	0.0%	0
AMDRY 356 ALUM O	410.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 713C	355.00	1.0%	4	70.0%	249	6.0%	21	16.0%	57	0.0%	0	0.0%	0	0.0%	0
AMDRY 738	190.00	8.5%	16	62.0%	118	3.5%	7	16.0%	30	0.0%	0	0.0%	0	0.0%	0
AMDRY 788	650.00	39.0%	254	21.0%	137	0.0%	0	22.0%	143	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 - 1	500.00	0.0%	0	16.0%	80	0.0%	0	73.0%	365	0.0%	0	0.0%	0	0.0%	0
METCO 312NS PWD	800.00	0.0%	0	71.0%	568	4.0%	32	4.0%	32	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5815 PV	3,365.00	12.0%	404	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5826 PV	1,370.00	17.0%	233	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5848 PV	4,685.00	10.0%	469	0.0%	0	0.0%	0	4.0%	187	0.0%	0	0.0%	0	0.0%	0
AMDRY 914 / NICOS	25.00	20.0%	5	72.5%	18	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY 917F	155.00	0.0%	0	100.0%	155	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9300B	3,135.00	0.0%	0	65.5%	2,053	0.0%	0	0.1%	0	0.0%	0	0.0%	0	4.5%	141
AMDRY 930	2,580.00	0.0%	0	65.5%	1,690	0.0%	0	0.1%	0	0.0%	0	0.0%	0	4.5%	116
AMDRY 936	605.00	0.0%	0	68.0%	411	0.0%	0	0.0%	0	0.0%	0	0.0%	0	5.0%	30
AMDRY 942-3 POWI	100.00	0.0%	0	38.0%	38	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	62
AMDRY 9500	200.00	0.0%	0	0.0%	0	53.0%	106	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 (9624)	55.00	0.0%	0	67.0%	37	10.0%	6	22.0%	12	0.0%	0	0.0%	0	0.0%	0
GT54	220.00	0.0%	0	80.0%	176	4.0%	9	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 412NS	15.00	0.0%	0	28.0%	4	17.0%	3	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 5-2599	100.00	11.5%	12	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	800.00	0.0%	0	83.0%	664	0.0%	0	7.0%	56	0.0%	0	0.0%	0	0.0%	0
METCO 421NS-2	30.00	0.0%	0	33.0%	10	2.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY CHROME P(	930.00	0.0%	0	0.0%	0	0.0%	0	99.5%	925	0.0%	0	0.0%	0	0.0%	0
SPM2-2638 / GT56 (	3,325.00	0.0%	0	63.0%	2,095	3.5%	116	13.5%	449	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-AP P	40,312.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 2-2644 (312NS-	2,200.00	0.0%	0	71.0%	1,562	4.0%	88	4.0%	88	0.0%	0	0.0%	0	0.0%	0
AMDRY 964 (9640)	2,800.00	0.0%	0	57.0%	1,596	11.0%	308	31.0%	868	0.0%	0	0.0%	0	0.0%	0
METCO 204BNS PO	9,746.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 131PAB	710.00	0.0%	0	20.0%	142	0.0%	0	67.0%	476	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY W914 -	20,245.00	0.0%	0	20.0%	4,049	0.0%	0	67.0%	13,564	0.0%	0	0.0%	0	0.0%	0
SPM4-2506 Ti 6Al 4V	600.00	0.0%	0	0.0%	0	6.0%	36	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 4-2507	1,850.00	0.0%	0	0.0%	0	6.0%	111	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 737	3,615.00	4.0%	145	50.0%	1,808	0.0%	0	8.0%	289	0.0%	0	0.0%	0	0.0%	0
SPM5-2657 POWDEI	0.00	12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5847-1 !	735.00	10.0%	74	0.0%	0	0.0%	0	4.0%	29	0.0%	0	0.0%	0	0.0%	0
METCO 204F 12.5#	4,625.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
UCP Riken -SPM-5-2	20.00	0.0%	0	40.0%	8	0.0%	0	53.0%	11	0.0%	0	0.0%	0	0.0%	0
WOKA 3102	5,250.00	12.0%	630	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA 3105	880.00	12.0%	106	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA - RTP 2	6,930.00	0.0%	0	5.0%	347	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA - RTP 2	14,784.00	0.0%	0	5.0%	739	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042849 MATRIX	2,310.00	0.0%	0	5.0%	116	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042885 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1049625 PXP 70	1,639.00		0		0		0		0		0		0		0
AMDRY 6415	1,637.50	0.0%	0	0.0%	0	0.0%	0	10.0%	164	0.0%	0	98.8%	1,617	0.0%	0
SUME 9013	2,760.00	10.0%	276	0.0%	0	0.0%	0	4.0%	110	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 58(	100.00	9.0%	9	13.0%	13	0.0%	0	5.0%	5	0.0%	0	0.0%	0	0.0%	0
SPM 6-2710	300.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

1058249 MATRIX	576.00	0.0%	0	5.0%	29	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058251 MATRIX	1,731.00	0.0%	0	5.0%	87	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058252 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058266 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058271 MATRIX	5,775.00	0.0%	0	5.0%	289	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058272 MATRIX	9,240.00	0.0%	0	5.0%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058273 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

	Co	Ni	Al	Cr	CrC	Cr2O	Cu
Westbury Usage 2005, Materials:	**102,653**	**717,698**	**235,730**	**154,351**	**76,172**	**21,711**	**75,834**
Westbury Usage 2005, Equipment:	0	546	0	1,080	0	0	329,765
Total Westbury Usage 2005:	102,653	718,244	235,730	155,431	76,172	21,711	405,599
Total Westbury Usage 2004:	27,220	462,637	103,807	62,330	40,147	15,675	281,616
2005/2004 Ratio:	3.77	1.55	2.27	2.49	1.90	1.39	1.44

Form R Materials
2005

1058249 MATRIX	576.00	0.0%	0	5.0%	29	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058251 MATRIX	1,731.00	0.0%	0	5.0%	87	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058252 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058266 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058271 MATRIX	5,775.00	0.0%	0	5.0%	289	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058272 MATRIX	9,240.00	0.0%	0	5.0%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058273 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

	Co	Ni	Al	Cr	CrC	Cr2O	Cu
Westbury Usage 2005, Materials:	102,653	717,698	235,730	154,351	76,172	21,711	75,834
Westbury Usage 2005, Equipment:	0	546	0	1,080	0	0	329,765
Total Westbury Usage 2005:	**102,653**	**718,244**	**235,730**	**155,431**	**76,172**	**21,711**	**405,599**
Total Westbury Usage 2004:	27,220	462,637	103,807	62,330	40,147	15,675	281,616
2005/2004 Ratio:	3.77 ✓	1.55	2.27 ✓	2.49 ✓	1.90	1.39	1.44 ✓

Cr cpds:
2005 = 97,883 lb
2004 = 55,822 lb
R = 1.75 ✓

Form R 2005
Equipment

Short text	Material	Brass	Aluminum	Stainless Steel Copper	Bronze/ Copper	Leaded Bronze/ Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu
B0141-160 1/4 STL SAE 1020/1018 C/F	1021578										
B0141-240 3/8 STL SAE 1020/1018 C/F	1021580										
B0141-480 3/4 STL 1020/1018 C/F	1021583										
B0141-640 1 STL SAE 1020/1018	1021584										
B0144-128 3/16X1 1/4 STL SAE 1020/1018	1021588										
B0144-130 3/16X1-1/2 STL SAE 1020/1018	1021589										
B0144-138 3/16X4-1/2 STL 1020/1018 C/F	1021591										
B0144-326 1/2X1 STL SAE 1020/1018 C/F	1021600										
B0171-160 1/4 DRILL ROD DBL-2-	1021608										
B0181-160 1/4 STL SAE 1113/1213/1215 C/F	1021610										
B0181-320 1/2 STL SAE 1113/1213/1215 C/F	1021612										
B0181-640 1 STL SAE 1113/1213/1215 C/F	1021615										
B0183-640 1 STL SAE 1113/1213/1215 C/F	1021621										
B0191-360 9/16 LEDLOY "A" S	1021625										
B0191-700 1-3/4 LEDLOY "A"	1021633										
B0192-560 7/8 LEDLOY "A" ST	1021635										
B0311-080 1/8 ST.STL TYPE 416	1021640										
B0311-240 3/8 ST.STL TYPE 416	1021646			4							
B0311-320 1/2 ST.STL TYPE 416	1021649			37							
B0311-400 5/8 ST.STL TYPE 416	1021651			34							
B0311-480 3/4 ST.STL TYPE 416	1021653			21							
B0311-560 7/8 ST.STL TYPE 416	1021654			57							
B0311-660 1-1/4 ST.STL TYPE 41	1021659			120							
B0312-280 7/16 ST.STL TYPE 416	1021670			11							
B0312-320 1/2 ST.STL TYPE 416	1021671			25							
B0312-360 9/16 ST.STL TYPE 416	1021672										
B0312-400 5/8 ST.STL TYPE 416	1021673			6							
B0313-722 2X2 ST.STL TYPE 416	1021681			14							
B0314-082 1/8X1/4 ST.STL TYPE	1021682										
B0314-650 1X2.5 ST.STL TYPE 41	1021686										
B0325-083 1/8X.035 ST.STL TYPE 304	1021690										
B0325-165 1/4X.049 ST.STL TYPE	1021697										
B0325-167 1/4X.065 ST.STL TYPE	1021698										
B0325-205 5/16X.049 ST.STL TYPE 304	1021699										
B0341-160 1/4 GRAPH-MO CENTLS GRD TL	1021701										
B0341-240 3/8 GRAPH-MO CENTLS GRD TL	1021702										
B0341-320 1/2 GRAPH-MO CENTLS GRD TL	1021704			2							
B0351-240 3/8 GRAPH-MO CENTLS GRD TL	1021707										
B0381-320 1/2 ST.STL TYPE 440C	1021712			11.5							
B0381-360 9/16 ST.STL TYPE 440	1021713										
B0381-440 11/16 ST.STL TYPE 44	1021715			1.5							
B0501-160 1/4 BRS FR CUT 1/2 H	1021724	2									
B0501-240 3/8 BRS FR CUT 1/2 H	1021728	20									
B0501-320 1/2 BRS FR CUT 1/2 H	1021731	53									
B0501-400 5/8 BRS FR CUT 1/2 H	1021733										

B0501-480 3/4 BRS FR CUT 1/2 H	1021735	32
B0501-560 7/8 BRS FR CUT 1/2 H	1021738	12
B0501-640 1 BRS FR CUT 1/2 HAR	1021740	22
B0501-650 1-1/8 BRS FR CUT 1/2 HARD	1021742	107
B0501-655 1-3/16 BRS FR CUT 1/2 HARD	1021743	20,000
B0501-660 1-1/4 BRS FR CUT 1/2 HARD	1021744	17,000
B0501-670 1-3/8 BRS FR CUT 1/2 HARD	1021746	5,700
B0501-680 1-1/2 BRS FR CUT 1/2 HARD	1021748	696
B0501-690 1-5/8 BRS FR CUT 1/2 HARD	1021750	1,973
B0501-700 1-3/4 BRS FR CUT 1/2 HARD	1021751	3,700
B0501-710 1-7/8 BRS FR CUT 1/2 HARD	1021752	3,600
B0501-720 2 BRS FR CUT 1/2 HAR	1021753	3,100
B0501-730 2-1/8 BRS FR CUT 1/2 HARD	1021754	3,000
B0501-760 2-1/2 BRS FR CUT 1/2 HARD	1021756	3,500
B0501-800 3 " BRS FR CUT 1/2	1021758	1,650
B0501-840 3-1/2 BRS FR CUT 1/2 HARD	1021761	350
B0502-120 3/16 BRASS FR CUT 1/2 HARD	1021764	
B0502-240 3/8 BRS FR CUT 1/2 HARD	1021765	1.5
B0502-280 7/16 BRS FR CUT 1/2 HARD	1021766	3
B0502-320 1/2 BRS FR CUT 1/2 HARD	1021767	5
B0502-360 9/16 BRS FR CUT 1/2 HARD	1021768	15
B0502-400 5/8 BRS FR CUT 1/2 HARD	1021769	5
B0502-440 11/16 BRS FR CUT 1/2 HARD	1021770	7.5
B0502-480 3/4 BRS FR CUT 1/2 HARD	1021771	1.5
B0502-520 13/16 BRS FR CUT 1/2 HARD	1021772	2
B0502-560 7/8 BRS FR CUT 1/2 HARD	1021773	31
B0502-640 1 BRS FR CUT 1/2 HA	1021774	59
B0502-645 1-1/16 BRS FR CUT 1/2 HARD	1021775	10
B0502-650 1-1/8 BRS FR CUT 1/2 HARD	1021776	16
B0502-655 1-3/16 BRS FR CUT 1/2 HARD	1021777	
B0502-670 1-3/8BRS FR CUT 1/2 HARD	1021778	1
B0502-680 1-1/2 BRS FR CUT 1/2 HARD	1021779	17
B0502-700 1-3/4 BRS FR CUT 1/2 HARD	1021781	2
B0502-710 1-7/8 BRS FR CUT 1/2 HARD	1021782	8
B0503-480 3/4 BRS FR CUT 1/2 H	1021786	1
B0503-650 1-1/8 BRS FR CUT 1/2 HARD	1021788	1
B0503-680 1-1/2 BRS FR CUT 1/2 HARD	1021790	
B0503-690 1-5/8 BRASS FR CUT 1/2 HARD	1021791	16
B0503-720 2 BRS FR CUT 1/2 HAR	1021793	22
B0503-760 2-1/2 BRS FR CUT 1/2 HARD	1021794	21
B0504-254 3/8X1-1/2 BRASS FR CUT 1/2HD	1021799	
B0504-404 5/8X1 BRASS FR CUT 1/2 HARD	1021801	3
B0504-485 3/4X1-3/4 BRASS FR CUT 1/2HD	1021803	1
B0504-489 3/4X1-1/2 BRASS FR CUT 1/2HD	1021804	1
B0504-644 1X1-1/2 BRASS FR CUT 1/2 HARD	1021806	18
B0504-666 1-1/4X2 BRASS FR CUT 1/2 HARD	1021807	4
B0504-686 1-1/2X2 BRASS FR CUT 1/2 HARD	1021808	1
B0504-694 1-1/2X3-1/2 BRASS FR CUT 1/2HD	1021811	36

B0519-657 1X2X1/8 BRS HRD DRAW	1021813			
B0525-123 3/16X.032 BRS HRD DRAWN	1021815			
B0525-126 3/16X.049 BRS HRD DRAWN	1021816			
B0525-163 1/4 X .032 BRASS HRD DRAWN	1021817			
B0525-164 1/4X.035 BRS HRD DRAWN	1021818	2		
B0525-245 3/8X.042 BRS HRD DRAWN	1021821			
B0525-288 7/16X.062 BRS HRD DRAWN	1021822	7		
B0525-405 5/8X.042 BRS HRD DRAWN	1021823			
B0525-676 1-3/8X.064 BRS HRD DRAWN	1021824			
B0525-682 1-1/2X.125 BRS HARD DRAWN	1021825	1		
B0525-691 1-5/8X.025 BRS HRD DRAWN	1021826			
B0555-270 3/16X.032 BRS/COP 33	1021830			
B0555-281 7/16X.020 BRS/COP 33	1021831			
B0611-320 1/2 LEAD BRONZE/ COP 314	1021839		241	
B0611-400 5/8 LEAD BRONZE/ COP 314	1021840			
B0611-560 7/8 LEAD BRONZE/ COP 314	1021841		121	
B0611-640 1 LEAD BRONZE/ COP 314	1021842		362	
B0611-650 1-1/8 LEAD BRONZE/ COP 314	1021843		362	
B0611-660 1-1/4 LEAD BRONZE/ COP 314	1021844		242	
B0611-670 1-3/8" LEAD BRONZE/ COP 314	1021845		181	
B0611-680 1-1/2 LEAD BRONZE/ COP 314	1021846			
B0611-690 1-5/8 LEAD BRONZE/ COP 314	1021847		423	
B0611-700 1-3/4 LEAD BRONZE/ COP 314	1021848		3,442	
B0611-720 2" LEAD BRONZE/ COP 314	1021849		423	
B0611-760 2-1/2 LEAD BRONZE/ COP 314	1021850		2,898	
B0614-646 1X2 LEAD BRONZE/ COP 314	1021852		64	
B0641-320 1/2 DURONZE III COP	1021854			213
B0641-560 7/8 DURONZE III COP	1021859			50,207
B0641-640 1 DURONZE III COP 64	1021860			
B0691-650 1-1/8 POLYPROPYLENE	1021866			
B0751-320 1/2 NATURAL DELRIN 5	1021872			
B0751-660 1-1/4 DELRIN 150 (EXTRUDED)	1021877			
B0751-740 2-1/4 DELRIN 150 (EXTRUDED)	1021882			
B0751-885 4-1/4 NATURAL DELRIN 500	1021883			
B0754-330 1/2X5 DELRIN 150 (EXTRUDED)	1021886			
B0754-480 3/4 x 5 NATURAL DELRIN 500	1021887			
B0771-320 1/2 BLK DELRIN 507	1021890			
B0781-640 1 BLK DELRIN 507	1021895			
B0781-680 1-1/2 BLK DELRIN 507	1021898			
B0781-690 1-5/8 BLK DELRIN 507	1021899			
B0781-710 1-7/8 BLK DELRIN 507	1021900			
B0781-720 2 BLK DELRIN 507	1021901			
B0781-740 2-1/4 BLK DELRIN 507	1021902			
B0783-740 2-1/4 BLK DELRIN 507	1021907			
B0784-330 1/2X4 BLK DELRIN 507	1021912			
B0784-405 5/8X1-5/8 BLK DELRIN	1021913			
B0784-414 5/8X3 BLK DELRIN 507	1021915			
B0784-415 5/8X3-1/2 BLK DELRIN	1021916			

B0784-560 3/4X7/8 BLK DELRIN 5	1021917					
B0784-654 1 X 3 BLK DELRIN 507	1021919					
B0784-775 2 X 4 BLK DELRIN 507	1021921					
B0784-780 2 1/2 X4 BLACK DELRI	1021923					
B0813-480 3/4 COP ALLOY 110	1021932			1		
B0911-660 1-1/4 LEAD/COP ANACON 187	1021940					
B0921-480 3/4 DIA ALUM 2024-T	1021948	1,000				
B0921-640 1 ALUM 2024-T4	1021951	737				
B0921-650 1-1/8 ALUM 2024-T4	1021953	13,097				
B0921-660 1-1/4 ALUM 2024-T4	1021955	1,531				
B0921-670 1-3/8 ALUM 2024-T4	1021957	491				
B0921-680 1-1/2 ALUM 2024-T4	1021959	227				
B0921-730 2-1/8 ALUM 2024-T4	1021963	737				
B0921-780 2-3/4 ALUM 2024-T4	1021965	605				
B0921-820 3-1/4 ALUM 2024-T4	1021968	416				
B0921-830 3-3/8 ALUM 2024-T4	1021969					
B0921-860 3-3/4 ALUM 2024-T4	1021970	888				
B0921-965 6 " DIA ALUM 2024-	1021971	57				
B0922-560 7/8 ALUM 2024-T4	1021975	26				
B0923-640 1 ALUM 2024-T4	1021979	4				
B0923-670 1-3/8 SQ. ALUM 2024	1021981	29				
B0923-700 1-3/4 SQ. ALUM 2024	1021982	6				
B0924-093 1/8X1/4 ALUM 2024-T4	1021986					
B0924-094 1/8X1 ALUM 2024-T4	1021987					
B0924-185 1/4 X 6 ALUM 2024-T4	1021994					
B0924-413 5/8X2 ALUM 2024-T4	1022009	5				
B0924-650 1X2-1/2 ALUM 2024-T4	1022012					
B0924-654 1 X 3 ALUM 2024-T4	1022013	1.5				
B0924-693 1-1/2X3 ALUM 2024-T4	1022019					
B0941-740 2-1/4 ALUM 6061-T6	1022034	1,228				
B0941-850 4-1/2 ALUM 6061-T6	1022038	265				
B0941-967 7-1/2 ALUM 6061-T6	1022039					
B0945-745 2-1/4X.25 ALUM 6061-	1022046	9				
B0945-966 8X1 " ALUM 6061-T6"	1022053	109				
B0951-720 2 " ST.STL TYP 303"	1022060		483			
B0951-730 2-1/8 ST.STL TYP 303	1022061		54			
B0952-560 7/8 ST.STL TYP 303	1022063					
B1015-161 1/4X..035 ALUM 3003-	1022065	5				
B1015-240 3/8X.035 ALUM 3003-H	1022066	1				
B1015-323 1/2X.049 ALUM 3003-H	1022067	8.5				
B1021-640 1 TELLURIUM COPPER	1022068				88,244	
B1021-760 2-1/2in TELLURIUM COPPER	1022069					
B1024-409 5/8X2-1/4 TELLURIUM COPPER	1022070					
B1051-320 1/2 OF HC COPPER	1022073			730		
B1051-480 3/4 OF HC COPPER	1022075			32,163		
B1051-560 7/8 OFHC COPPER	1022077			45,582		
B1051-660 1-1/4 OF HC COPPER	1022080			505,364		
B1051-670 1-3/8 OF HC COPPER	1022081			52,612		

[redacted]

B1051-680 1-1/2 OF HC COPPER	1022082			11,685	
B1051-720 2 " OF HC COPPER"	1022083			16,310	
B1091-400 5/8 GLASS FILLED DELRIN 570	1022097				
B1091-660 1-1/4 GLASS FILLED DELRIN 570	1022100				
B1091-675 1-1/2 GLASS FILLED DELRIN 570	1022101				
B1091-800 3" GLASS FILLED DELRIN 570	1022104				
B1094-646 1X1-1/2 GLASS FIL DELRIN 570	1022106				
B1101-240 3/8 VESPEL SP-1 DUPO	1022108				
B1101-640 1 VESPEL SP-1 DUPONT	1022109				
B1135-243 3/8X.035 COP H/D PHOS 122	1022113				
B1201-720 2 " PEEK MATERIAL"	1022114				
B1511-700 1 3/4 ERTAYTE(P.E.T.)NATURAL	1022116				
B1511-950 5 " DIA. ERTALYTE"	1022117				
B1511-960 5-1/2 ERTALYTE PET-P	1022118				
B1514-350 1/2X6 ERTALYTE PET-P	1022119				
B1520-320 1/2 " ERTALYTE TX"	1022120				
PB35238 TUBING 304 ST STL .148x.118x.015	1030685				
PB40847 TUBING ST STL SEAMLESS .0933	1030704				
PB42243 ESTRALON	1030708				
PB42474 BRASS TUBING LENGTH 36" OD .3	1030711				
PB45038 PEEK 450G 3/8	1030717				
PB47458 ANNEALED BRASS ROD, 1-3/16"	1030732				
PB56377 ROD 3/8 " DIA CHROMIUM COPPEI	1030758				
ROD 5/8 " DIA SST 17-4 PH"	1030760				
PB56388 BAR 1/2 " DIA SST 17-4 PH	1030761				
PB56628 .375 COPPER TUNGSTEN, GRADE	1030762				
B0595-882 COPPER ALLOY 932 4in X 1/2in	1032646				
B1201-640 1 " PEEK MATERIAL"	1032664				
B0924-327 1/2X1-1/4 ALUM 2024-T4	1033276				
B0781-790 3-1/4 BLK DELRIN 507	1035021				
B0895-244 .375X.065 COPPER TUBING	1035426				
B0525-406 5/8X.125 BRASS HARD DRAWN	1035522				
B0141-883 4-3/8 COLD ROLLED STEEL	1035614				
B0504-120 Lead Brass Alloy 353 1/8 x 5	1035666				
B1021-720 2" TELLURIUM COPPER	1035670				
B0594-414 932 BRONZE 5/8in x 2-1/2in	1036004				
B1021-700 TELLURIUM COPPER 1-3/4in	1039266				
B1051-700 1-3/4 OFHC COPPER	1040548			19,231	
B0951-200 5/16 ST.STL TYP 303	1040688		5,690		
B1021-240 3/8in TELLURIUM COPPER	1040735				125,489
B1021-560 7/8in TELLURIUM COPPER	1040736				13,510
B1021-660 1-1/4in TELLURIUM COPPER	1040737				44,244
B0311-760 2-1/2 ST.STL TYPE 41	1041497				
B0311-740 2-1/8 ST.STL TYPE 41	1041498				
B0941-700 1-3/4 ALUM 6061-T6	1041499				
B0944-660 1-1/4 X 2-1/4 ALUMINUM 6061-T6	1041706	3			1,460
B1021-710 1-7/8in TELLURIUM COPPER	1049811				

1049811 B1021-710 1-7/8in TELLURIUM COPPER					
1049795 B0381-400 5/8 ST.STL TYPE 440C		1.5		21	
1043100 B0911-640 1" LEAD/COP ANACON 187					45
1041794 B0311-700 1-3/4 ST.STL TYPE 416		6		253	
1040737 B1021-660 1-1/4in TELLURIUM COPPER				43	
1040736 B1021-560 7/8in TELLURIUM COPPER				73	
1040735 B1021-240 3/8in TELLURIUM COPPER		2			
1040688 B0951-200 5/16 ST.STL TYP 303			245		
1040548 B1051-700 1-3/4 OFHC COPPER					
1039266 B1021-700 1-3/4in TELLURIUM COPPER				23	
1037856 B1021-480 3/4in TELLURIUM COPPER				361	
1035021 B0781-790 3-1/4 BLK DELRIN 507				6	
1032661 B1021-740 2-1/4in TELLURIUM COPPER		2			
1022113 B1135-243 3/8X.035 COP H/D PHOS 122			3		
1022109 B1101-640 1 VESPEL SP-1 DUPONT					
1022083 B1051-720 2 " OF HC COPPER"			271		
1022082 B1051-680 1-1/2 OF HC COPPER			109		
1022081 B1051-670 1-3/8 OF HC COPPER			126		
1022080 B1051-660 1-1/4 OF HC COPPER			3,282		
1022078 B1051-640 1 OF HC COPPER			10		
1022077 B1051-560 7/8 OFHC COPPER			145		
1022075 B1051-480 3/4 OF HC COPPER			75		
1022073 B1051-320 1/2 OF HC COPPER			1		
1022070 B1024-409 5/8X2-1/4 TELLURIUM COPPER				2.5	
1022068 B1021-640 1inch TELLURIUM COPPER				367	
1022067 B1015-323 1/2X.049 ALUM 3003-H	0.5				
1022066 B1015-240 3/8X.035 ALUM 3003-H	1				
1022065 B1015-161 1/4X..035 ALUM 3003-	5				
1022060 B0951-720 2 " ST.STL TYP 303"		8			
1022059 B0951-560 7/8 ST.STL TYP 303		1			
1022058 B0951-480 3/4 ST.STL TYP 303		0.5			
1022053 B0945-966 8X1 " ALUM 6061-T6"	109				
1022050 B0945-869 3-3/4X1/2 ALUM 6061-	3.5				
1022049 B0945-785 2-3/4X.25 ALUM 6061-	9				
1022047 B0945-763 2-1/2X.065 ALUM 6061	9				
1022044 B0945-652 1-1/8X.058 ALUM 6061	6				
1022043 B0944-207 5/16X1 ALUM 6061-T6					
1022041 B0944-083 1/8X1/2 ALUM 6061-T6					
1022038 B0941-850 4-1/2 ALUM 6061-T6	264				
1022034 B0941-740 2-1/4 ALUM 6061-T6	1,228				
1022031 B0941-640 1 ALUM 6061-T6	1,115				
1022023 B0924-789 2X6 FLAT ALUM 2024-T	8				
1022020 B0924-696 1-1/2X4 ALUM 2024-T4	8.5				
1022013 B0924-654 1 X 3 ALUM 2024-T4	5				
1022012 B0924-650 1X2-1/2 ALUM 2024-T4	1				
1022009 B0924-413 5/8X2 ALUM 2024-T4	5				

1022003 B0924-329 1/2X1-1/2 ALUM 2024-	1				
1022000 B0924-321 1/2X3 ALUM 2024-T4					
1021996 B0924-243 3/8X1/2 ALUM 2024-T4	9				
1021993 B0924-179 1/4 X 4 ALUM 2024-T4	40				
1021982 B0923-700 1-3/4 SQ. ALUM 2024	3				
1021981 B0923-670 1-3/8 SQ. ALUM 2024	1				
1021980 B0923-660 1-1/4 SQ. ALUM 2024	8				
1021979 B0923-640 1 ALUM 2024-T4	4				
1021978 B0923-480 3/4 ALUM 2024-T4					
1021977 B0923-320 1/2 ALUM 2024-T4					
1021975 B0922-560 7/8 ALUM 2024-T4	8				
1021974 B0922-480 3/4 ALUM 2024-T4					
1021971 B0921-965 6 " DIA ALUM 2024-	8.5				
1021970 B0921-860 3-3/4 ALUM 2024-T4	52				
1021968 B0921-820 3-1/4 ALUM 2024-T4	18				
1021967 B0921-810 3-1/8 ALUM 2024-T4	4				
1021966 B0921-798 3 " ALUM 2024-T4"	6				
1021965 B0921-780 2-3/4 ALUM 2024-T4	19				
1021964 B0921-760 2-1/2 ALUM 2024-T4	1				
1021962 B0921-720 2 " ALUM 2024-T4"	7				
1021960 B0921-700 1-3/4 ALUM 2024-T4	10				
1021959 B0921-680 1-1/2 ALUM 2024-T4	2				
1021957 B0921-670 1-3/8 ALUM 2024-T4	4				
1021955 B0921-660 1-1/4 ALUM 2024-T4	10				
1021953 B0921-650 1-1/8 ALUM 2024-T4	69				
1021951 B0921-640 1 ALUM 2024-T4	3				
1021950 B0921-560 7/8 ALUM 2024-T4	12				
1021948 B0921-480 3/4 DIA ALUM 2024-T	2.5				
1021946 B0921-400 5/8 ALUM 2024-T4					
1021944 B0921-320 1/2 ALUM 2024-T4					
1021942 B0921-240 3/8 ALUM 2024-T4					
1021938 B0911-480 3/4 LEAD/COP ANACON 187					
1021928 B0801-670 1-3/8 ALUM 2011-T3				4	18
1021861 B0641-660 1-1/4 DURONZE III COP 642					159
1021859 B0641-560 7/8 DURONZE III COP					18
1021854 B0641-320 1/2 DURONZE III COP					159
1021852 B0614-646 1X2 LEAD BRONZE/ COP 314			1,991		
1021850 B0611-760 2-1/2 LEAD BRONZE/ COP 314			75		
1021849 B0611-720 2" LEAD BRONZE/ COP 314			107		
1021848 B0611-700 1-3/4 LEAD BRONZE/ COP 314			127		
1021844 B0611-660 1-1/4 LEAD BRONZE/ COP 314			2		
1021843 B0611-650 1-1/8 LEAD BRONZE/ COP 314			2		
1021842 B0611-640 1 LEAD BRONZE/ COP 314			1.5		
1021841 B0611-560 7/8 LEAD BRONZE/ COP 314			2		
1021830 B0555-270 3/16X.032 BRS/COP 33					
1021822 B0525-288 7/16X.062 BRS HRD DRAWN	8				
1021821 B0525-245 3/8X.042 BRS HRD DRAWN					
1021818 B0525-164 1/4X.035 BRS HRD DRAWN	2				

1021817	B0525-163 1/4 X .032 BRASS HRD DRAWN	
1021815	B0525-123 3/16X.032 BRS HRD DRAWN	
1021813	B0519-657 1X2X1/8 BRS HRD DRAW	
1021811	B0504-694 1-1/2X3-1/2 BRASS FR CUT 1/2HD	495
1021810	B0504-689 1-1/2X3 BRASS FR CUT 1/2 HARD	53
1021808	B0504-686 1-1/2X2 BRASS FR CUT 1/2 HARD	10
1021807	B0504-666 1-1/4X2 BRASS FR CUT 1/2 HARD	76
1021806	B0504-644 1X1-1/2 BRASS FR CUT 1/2 HARD	571
1021804	B0504-489 3/4X1-1/2 BRASS FR CUT 1/2HD	57
1021803	B0504-485 3/4X1-3/4 BRASS FR CUT 1/2HD	57
1021801	B0504-404 5/8X1 BRASS FR CUT 1/2 HARD	266
1021793	B0503-720 2 BRS FR CUT 1/2 HAR	22
1021791	B0503-690 1-5/8 BRASS FR CUT 1/2 HARD	16
1021788	B0503-650 1-1/8 BRS FR CUT 1/2 HARD	1
1021786	B0503-480 3/4 BRS FR CUT 1/2 H	1
1021782	B0502-710 1-7/8 BRS FR CUT 1/2 HARD	8
1021779	B0502-680 1-1/2 BRS FR CUT 1/2 HARD	17
1021776	B0502-650 1-1/8 BRS FR CUT 1/2 HARD	16
1021775	B0502-645 1-1/16 BRS FR CUT 1/2 HARD	10
1021774	B0502-640 1 BRS FR CUT 1/2 HA	67
1021773	B0502-560 7/8 BRS FR CUT 1/2 HARD	32
1021772	B0502-520 13/16 BRS FR CUT 1/2 HARD	2
1021771	B0502-480 3/4 BRS FR CUT 1/2 HARD	1.5
1021770	B0502-440 11/16 BRS FR CUT 1/2 HARD	7
1021769	B0502-400 5/8 BRS FR CUT 1/2 HARD	5
1021768	B0502-360 9/16 BRS FR CUT 1/2 HARD	15
1021767	B0502-320 1/2 BRS FR CUT 1/2 HARD	4
1021766	B0502-280 7/16 BRS FR CUT 1/2 HARD	3
1021765	B0502-240 3/8 BRS FR CUT 1/2 HARD	1.5
1021764	B0502-120 3/16 BRASS FR CUT 1/2 HARD	
1021763	B0501-950 5 " BRS FR CUT 1/2	96
1021761	B0501-840 3-1/2 BRS FR CUT 1/2 HARD	18
1021758	B0501-800 3 " BRS FR CUT 1/2	61
1021756	B0501-760 2-1/2 BRS FR CUT 1/2 HARD	92
1021754	B0501-730 2-1/8 BRS FR CUT 1/2 HARD	58
1021753	B0501-720 2 BRS FR CUT 1/2 HAR	52
1021752	B0501-710 1-7/8 BRS FR CUT 1/2 HARD	52
1021751	B0501-700 1-3/4 BRS FR CUT 1/2 HARD	47
1021750	B0501-690 1-5/8 BRS FR CUT 1/2 HARD	22
1021748	B0501-680 1-1/2 BRS FR CUT 1/2 HARD	6.5
1021746	B0501-670 1-3/8 BRS FR CUT 1/2 HARD	45
1021744	B0501-660 1-1/4 BRS FR CUT 1/2 HARD	108
1021743	B0501-655 1-3/16 BRS FR CUT 1/2 HARD	64
1021742	B0501-650 1-1/8 BRS FR CUT 1/2 HARD	107
1021740	B0501-640 1 BRS FR CUT 1/2 HAR	22
1021738	B0501-560 7/8 BRS FR CUT 1/2 H	12
1021735	B0501-480 3/4 BRS FR CUT 1/2 H	31
1021731	B0501-320 1/2 BRS FR CUT 1/2 H	53

1021728 B0501-240 3/8 BRS FR CUT 1/2 H	20	
1021724 B0501-160 1/4 BRS FR CUT 1/2 HARD	2	
1021718 B0381-655 1-1/4 ST.STL TYPE 44		1
1021716 B0381-640 1 ST.STL TYPE 440C		2
1021715 B0381-440 11/16 ST.STL TYPE 44		1.5
1021712 B0381-320 1/2 ST.STL TYPE 440C		11.5
1021711 B0381-240 3/8 ST.STL TYPE 440C		
1021704 B0341-320 1/2 GRAPH-MO CENTLS GRD TL STL		1.5
1021700 B0325-211 5/16X.095 ST.STL TYPE 304		
1021699 B0325-205 5/16X.049 ST.STL TYPE 304		
1021697 B0325-165 1/4X.049 ST.STL TYPE 304		
1021696 B0325-163 1/4X.035 ST.STL TYPE		1
1021695 B0325-160 1/4X.028 ST.STL TYPE		3
1021694 B0325-129 3/16 X .065 ST.STL TYPE 304		
1021692 B0325-123 3/16X.035 ST.STL TYPE 304		
1021691 B0325-102 5/32X.028 ST.STL TYPE 304		
1021690 B0325-083 1/8X.035 ST.STL TYPE 304		
1021688 B0324-083 1/8 X 1/2 ST.STL TYPE 304		114
1021679 B0313-640 1 " ST.STL TYPE 416		
1021675 B0312-560 7/8 ST.STL TYPE 416		6
1021673 B0312-400 5/8 ST.STL TYPE 416		6
1021672 B0312-360 9/16 ST.STL TYPE 416		
1021671 B0312-320 1/2 ST.STL TYPE 416		25
1021670 B0312-280 7/16 ST.STL TYPE 416		10
1021663 B0311-800 3 ST.STL TYPE 416		102
1021662 B0311-780 2-3/4 ST.STL TYPE 416		20
1021660 B0311-670 1-3/8 ST.STL TYPE 416		96
1021659 B0311-660 1-1/4 ST.STL TYPE 416		120
1021656 B0311-640 1 ST.STL TYPE 416		12
1021654 B0311-560 7/8 ST.STL TYPE 416		57
1021653 B0311-480 3/4 ST.STL TYPE 416		21
1021651 B0311-400 5/8 ST.STL TYPE 416		34
1021649 B0311-320 1/2 ST.STL TYPE 416		37
1021646 B0311-240 3/8 ST.STL TYPE 416		4
1021643 B0311-160 1/4 ST.STL TYPE 416		
1021640 B0311-080 1/8 ST.STL TYPE 416		1
1021635 B0192-560 7/8 LEDLOY "A" ST		
1021634 B0191-720 2 LEDLOY "A" STL/SAE 12L14		
1021623 B0191-240 3/8 LEDLOY "A" ST		
1021612 B0181-320 1/2 STL SAE 1113/1213/1215 C/F		
1021608 B0171-160 1/4 DRILL ROD DBL-2-		
1021588 B0144-128 3/16X1 1/4 STL SAE 1020/1018		
1021587 B0144-124 3/16X3/4 STL SAE 1020/1018C/F		
1021584 B0141-640 1 STL SAE 1020/1018		
1021583 B0141-480 3/4 STL 1020/1018 C/F		
1021578 B0141-160 1/4 STL SAE 1020/1018 C/F		

Brass	Aluminum	Stainless Steel	Copper	Bronze/ Copper	Leaded Bronze/ Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu
2,792.50	24,565.00	7,278.50	687,945.00	0.00	11,066.50	0.00	274,096.50	49	0	50,774.00
3.7% Pb				1.7% PB	1.6% Pb		99% Cu	0.9% Pb		0.05% Pb
103.3225				**0**	**177.064**		271355.535	**0.9 lb. Pb**		**25.387**
63% Cu				89% Cu	89% Cu			99% Cu		90% Cu
1759.275				**0**	**9,849**			**48.1 lb. Cu**		**45696.6**

Form R 2005
Equipment

Brass	Aluminum	Stainless Steel	Copper	Bronze/ Copper	Leaded Bronze/ Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu
2,792.50	24,565.00	7,278.50	687,945.00	0.00	11,066.50	0.00	274,096.50	49	0	50,774.00
3.7% Pb **103.3225**				1.7% PB **0**	1.6% Pb **177.064**		99% Cu 271,355.535	0.9% Pb **0.9 lb. Pb**		0.05% Pb **25.387**
63% Cu **1759.275**				89% Cu **0**	89% Cu **9,849**			99% Cu **48.1 lb. Cu**		90% Cu **45696.6**

al: Cu = 4.3% = 1056 lb
(24,565 lb) Cr = 0.1% = 25 lb
Ni = 2.0% = 491 lb

St. steel: Cr = 14.5% = 1055 lb
(7279 lb) Ni = 0.75% = 55 lb

Cu total = 1056 + 328,709 = 329,765 lb

Cr total = 25 + 1055 = 1080 lb.

Ni total = 491 + 55 = 546 lb.

2004 p3

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (lb)	% Cu	Cu (lb)
METCO 447NS POWDER 5#	29,470.00	0.0%	0	86.0%	25,344	6.0%	1,768	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 POWDER 5#	9,255.00	0.0%	0	10.0%	926	0.0%	0	0.0%	0	90.0%	8,330	0.0%	0	0.0%	0
METCO 130 POWDER 5#	9,690.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDER 12.5#	3,600.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130SF POWDER 5#	3,875.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWDER 5#	6,500.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	5,915	0.0%	0
METCO 136F POWDER 12.5#	1,612.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	1,467	0.0%	0
METCO 136CP / 5 LBS	3,150.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	2,867	0.0%	0
	553,037		783		379,611		37,415		15,539		8,330		10,249		6,304
Westbury Usage 2004, Materials:	1,387,531		27,220		462,460		103,807		61,427		40,147		15,675		18,257
Westbury Usage 2004, Equipment:			0		177		N/a		903		N/a		N/a		263,359
Total Westbury Usage, 2004:			**27,220**		**462,637**		**103,807**		**62,330**		**40,147**		**15,675**		**281,616**
Total Westbury Usage, 2003:															**69,300**
2004/2003											Cr opds = 55,822 lb.				
Westbury Ratio:			NA		NA		NA		NA		NA		NA		4.06

Notes: Cladding production only took place in Westbury. Other production was assumed to be divided evenly between facilities since the Hicksville closure began in July 2004. Use of brass increased significantly and calculations were verified by Bill W.

2004 Tom R

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
AMDRY 942-3 POWDER	775	0.0%	0	38.0%	295	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	481
AMDRY CHROME POWDER 30#	1,680.00	0.0%	0	0.0%	0	0.0%	0	99.5%	1,672	0.0%	0	0.0%	0	0.0%	0
SPM2-2638 / GT56 (B50A978) #5	2,445.00	0.0%	0	63.0%	1,540	3.5%	86	13.5%	330	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-AP POWDER 12.5#	24,037.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204BNS POWDER 12.5#	28,437.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 131PAB / 10#	980	0.0%	0	20.0%	196	0.0%	0	67.0%	657	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY W914 - 10lb	25,250.00	0.0%	0	20.0%	5,050	0.0%	0	67.0%	16,918	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 7371 POWDER #	570		0		0		0		0		0		0	0.0%	0
SPM4-2506 Ti 6Al 4Vanadium Metal	5	0.0%	0	0.0%	0	6.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 7372 POWDER #	6,765.00		0		0		0		0		0		0	0.0%	0
SPM5-2657 POWDER 5#	4,160.00	12.0%	499	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5847-1 5#	1,565.00	10.0%	157	0.0%	0	0.0%	0	4.0%	63	0.0%	0	0.0%	0	0.0%	0
METCO 204F 12.5#	412.5	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
UCP Riken -SPM-5-2702 10#	50	0.0%	0	40.0%	20	0.0%	0	53.0%	27	0.0%	0	0.0%	0	0.0%	0
2004	1,668,989		52,874 /2		165,697/2		132,784 /2		91,774/2		63,636 /2		10,853/2		23,906 /2
2003	1,602,272		28,656		227,443		113,928		94,436				12,474		N/a
2002			51,212		283,370		107,078		128,089				7,056		N/a
2001			49,912		277,273		113,981		136,044				N/a		N/a

take 2004 totals, divide by 2, add to cladding #'s on next page

(see p.3)

2004

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
Cladding Products:															
METCO 320NS POWDER 5#	22,690.00	0.0%	0	0.0%	0	62.0%	14,068	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 310NS POWDER 5#	95	0.0%	0	0.0%	0	61.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 610NS POWDER 12.5#	3,725.00	0.0%	0	0.0%	0	7.5%	279	0.0%	0	0.0%	0	0.0%	0	72.0%	2,682
METCO 308NS POWDER 25#	9,425.00	5.0%	471	84.5%	7,964	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-3 POWDER 5#	9,315.00	0.5%	47	84.5%	7,871	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-1 POWDER 5#	1,805.00	0.5%	9	84.5%	1,525	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 309NS-3 POWDER 5#	1,485.00	0.5%	7	79.5%	1,181	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS POWDER 5#	17,655.00	0.5%	88	74.5%	13,153	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS-3 POWDER 5#	10,310.00	0.5%	52	74.5%	7,681	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS-2 POWDER 5#	14,220.00	0.5%	71	74.5%	10,594	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 312NS POWDER 12.5#	9,312.50	0.0%	0	71.0%	6,612	4.0%	373	4.0%	373	0.0%	0	0.0%	0	0.0%	0
METCO 314NS POWDER 12.5#	27,312.50	0.0%	0	71.0%	19,392	4.0%	1,093	4.0%	1,093	0.0%	0	0.0%	0	0.0%	0
METCO 301NS POWDER 5#	7,830.00	0.0%	0	65.0%	5,090	3.5%	274	14.0%	1,096	0.0%	0	0.0%	0	0.0%	0
METCO 301C-NS POWDER 5#	3,885.00	0.0%	0	65.0%	2,525	3.5%	136	14.0%	544	0.0%	0	0.0%	0	0.0%	0
METCO 445 POWDER 5#	4,070.00	0.0%	0	0.0%	0	10.0%	407	0.0%	0	0.0%	0	0.0%	0	89.0%	3,622
METCO 350NS POWDER 25#	18,499.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 959 POWDER 5#	3,680.00	0.0%	0	38.0%	1,398	7.0%	258	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 453 POWDER 5#	11,115.00	0.0%	0	31.0%	3,446	6.0%	667	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 452 POWDER 5#	13,365.00	0.0%	0	38.0%	5,079	7.0%	936	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POWDER 5#	167,805.00	0.0%	0	94.0%	157,737	5.0%	8,390	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POWDER 25#	3,575.00	0.0%	0	94.0%	3,361	5.0%	179	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 956 POWDER (9560) 5#	34,610.00	0.0%	0	93.5%	32,360	5.0%	1,731	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POWDER 5#	13,185.00	0.0%	0	80.0%	10,548	20.0%	2,637	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 444 POWDER 5#	13,570.00	0.0%	0	72.0%	9,770	7.0%	950	9.0%	1,221	0.0%	0	0.0%	0	0.0%	0
AMDRY 960 POWDER (9600) 5#	12,365.00	0.0%	0	73.0%	9,026	5.0%	618	18.0%	2,226	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POWDER 5#	47,550.00	0.0%	0	73.0%	34,712	5.0%	2,378	18.0%	8,559	0.0%	0	0.0%	0	0.0%	0
METCO 461NS POWDER 5#	1,520.00	2.5%	38	67.0%	1,018	5.5%	84	17.5%	266	0.0%	0	0.0%	0	0.0%	0
METCO 442 POWDER 5#	1,910.00	0.0%	0	68.0%	1,299	7.0%	134	8.5%	162	0.0%	0	0.0%	0	0.0%	0
METCO 447NS POWDER 5#	29,470.00	0.0%	0	86.0%	25,344	6.0%	1,768	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 POWDER 5#	9,255.00	0.0%	0	10.0%	926	0.0%	0	0.0%	0	90.0%	8,330	0.0%	0	0.0%	0
METCO 130 POWDER 5#	9,690.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDER 12.5#	3,600.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130SF POWDER 5#	3,875.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWDER 5#	6,500.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	5,915	0.0%	0
METCO 136F POWDER 12.5#	1,612.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	1,467	0.0%	0
METCO 136CP / 5 LBS	3,150.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	2,867	0.0%	0
	553,037		783		379,611		37,415		15,539		8,330		10,249		6,304

DiPietrantonio, Peter

From: Kinney, Ellen
Sent: Wednesday, 28. June 2006 8:38 AM
To: DiPietrantonio, Peter
Cc: Eldridge, Mark
Subject: RE: Nickel Recovery

Average = $6-/lb of nickel recovered:

In response to your email, note the following:

2005
$447,509.11 = Dominion Nickel
$177,268.33 = PM Recovery
$166,769.52 = ELG Metals
$791,546.96 = Total

DNA = 74,585 lb ni ✓
PM = 29,545 lb ni ✓
ELG = 27,795 lb ni ✓

Regards,

Ellen Kinney
Accounts Payable Supervisor
Sulzer Metco (US) Inc
Phone #516-338-2210
Fax #516-338-2132
Ellen.Kinney@Sulzer.com

-----Original Message-----
From: Eldridge, Mark
Sent: Monday, June 26, 2006 2:59 PM
To: Kinney, Ellen
Cc: DiPietrantonio, Peter
Subject: FW: Nickel Recovery

Ellen

Please give Peter the amounts we received in 2005 from the below companies.

Thanks

Regards,

Mark

Mark Eldridge
Sulzer Metco US
Accounting Manager
Phone: (516) 338-2348
Fax: (516) 338-2132

-----Original Message-----
From: DiPietrantonio, Peter
Sent: Friday, June 23, 2006 11:39 AM
To: Eldridge, Mark
Subject: Nickel Recovery

Hi Mark,

I'm completing a report for US EPA and for one part of it, I need to know how much nickel we sent off-site for recovery during 2005. If you could supply me with the totals paid to us from the recyclers, I'd be able to calculate the nickel quantity.

The companies we used in 2005 were Dominion Nickel, PM Recovery and ELG Metals. Please let me know if you need any other information from me. Thanks for your help.

Regards,
Peter

Peter DiPietrantonio
Environmental, Health and Safety
Sulzer Metco (US), Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 338-2337 Fax: (516) 338-2303
E-mail: peter.dipietrantonio@sulzer.com

Dominion Nickel Alloys
834 Appleby Line
Burlington, Ontario Canada
L7L 2Y7

ELG Metals, Inc.
8200 Port Rd.
Louisville, KY 40258

Jefferson Cty.

PM Recovery
420 S. Cascade St.
New Castle, PA 16101

Russell
Ford

2005 Form R
totals (Materials)

Form R Materials
2005

WOKA - RTP 2	6,930.00	0.0%	0	5.0%	347	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA - RTP 2	14,784.00	0.0%	0	5.0%	739	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042849 MATRIX	2,310.00	0.0%	0	5.0%	116	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042885 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1049625 PXP 70	1,639.00		0		0		0		0		0		0		0
AMDRY 6415	1,637.50	0.0%	0	0.0%	0	0.0%	0	10.0%	164	0.0%	0	98.8%	1,617	0.0%	0
SUME 9013	2,760.00	10.0%	276	0.0%	0	0.0%	0	4.0%	110	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 580	100.00	9.0%	9	13.0%	13	0.0%	0	5.0%	5	0.0%	0	0.0%	0	0.0%	0
SPM 6-2710	300.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058249 MATRIX	576.00	0.0%	0	5.0%	29	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058251 MATRIX	1,731.00	0.0%	0	5.0%	87	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058252 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058266 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058271 MATRIX	5,775.00	0.0%	0	5.0%	289	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058272 MATRIX	9,240.00	0.0%	0	5.0%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058273 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Co	Ni	Al	Cr	CrC	Cr2O	Cu
102,653	**717,698**	**235,730**	**154,351**	**76,172**	**21,711**	**75,834**

Form R Materials
2005

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (lt	% Cu	Cu (lb)
METCO 16C POWDE	6,355.00	0.5%	32	69.0%	4,385	0.0%	0	16.0%	1,017	0.0%	0	0.0%	0	2.0%	127
METCO 16C POWDE	1,890.00	0.5%	9	69.0%	1,304	0.0%	0	16.0%	302	0.0%	0	0.0%	0	2.0%	38
METCO 16C POWDE	150.00	0.5%	1	69.0%	104	0.0%	0	16.0%	24	0.0%	0	0.0%	0	2.0%	3
METCO 41C POWDE	3,445.00	0.0%	0	12.0%	413	0.0%	0	17.0%	586	0.0%	0	0.0%	0	0.0%	0
METCO 42C POWDE	9,260.00	0.0%	0	2.0%	185	0.0%	0	16.0%	1,482	0.0%	0	0.0%	0	0.0%	0
METCO 32C POWDE	5,950.00	10.0%	595	14.0%	833	0.0%	0	3.5%	208	0.0%	0	0.0%	0	0.0%	0
METCO 18C POWDE	1,060.00	40.0%	424	27.0%	286	0.0%	0	18.0%	191	0.0%	0	0.0%	0	0.0%	0
METCO 43C-NS POV	7,505.00	0.0%	0	78.0%	5,854	0.0%	0	19.0%	1,426	0.0%	0	0.0%	0	0.0%	0
METCO 201NS POW	3,550.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 55 POWDER	995.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 34FP POWD	1,345.00	6.0%	81	36.0%	484	0.0%	0	8.5%	114	0.0%	0	0.0%	0	0.0%	0
METCO 63NS POWD	5,725.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS PO	920.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POW	9,985.00	0.0%	0	80.0%	7,988	20.0%	1,997	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS POW	1,050.00	12.5%	131	27.0%	284	2.0%	21	48.0%	504	0.0%	0	0.0%	0	0.0%	0
METCO 101NS POW	26,115.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POW	11,610.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS PO	37.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 81NS POWD	10,425.00	0.0%	0	20.0%	2,085	0.0%	0	4.0%	417	76.0%	7,923	0.0%	0	0.0%	0
METCO 44 POWDER	775.00	0.0%	0	74.0%	574	0.0%	0	16.0%	124	0.0%	0	0.0%	0	0.0%	0
METCO 56F-NS POV	9,830.00	0.0%	0	99.5%	9,781	0.0%	0	16.0%	1,573	0.0%	0	0.0%	0	0.0%	0
METCO 43F-NS POV	10,260.00	0.0%	0	78.0%	8,003	0.0%	0	19.0%	1,949	0.0%	0	0.0%	0	0.0%	0
METCO 430NS POW	3,385.00	12.5%	423	27.0%	914	2.0%	68	0.0%	0	55.0%	1,862	0.0%	0	0.0%	0
AMDRY 100 POWDE	570.00	0.0%	0	70.0%	399	0.1%	1	19.0%	108	0.0%	0	0.0%	0	0.0%	0
AMDRY 100C POWD	4,405.00	0.0%	0	70.0%	3,084	0.1%	2	19.0%	837	0.0%	0	0.0%	0	0.0%	0
METCO 71NS POWD	8,025.00	11.5%	923	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Amdry 103 powder 5#	1,530.00	0.0%	0	70.0%	1,071	0.1%	1	19.0%	291	0.0%	0	0.0%	0	0.0%	0
METCO 210 POWDE	3,395.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 451 POWDE	715.00	0.0%	0	81.0%	579	1.0%	7	9.0%	64	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDE	6,780.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 111 POWDE	535.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	45.0%	241	0.0%	0
METCO 45C-NS POV	12,940.00	55.0%	7,117	10.0%	1,294	0.0%	0	24.0%	3,106	0.0%	0	0.0%	0	0.0%	0
METCO 45VF-NS PO	5,755.00	55.0%	3,165	10.0%	576	0.0%	0	24.0%	1,381	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

METCO 71VF-NS PO	12,945.00	11.5%	1,489	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 81VF-NS PO	62,865.00	0.0%	0	20.0%	12,573	0.0%	0	0.0%	0	76.0%	47,777	0.0%	0	0.0%	0
METCO 34F POWDE	7,950.00	6.0%	477	36.0%	2,862	0.0%	0	8.5%	676	0.0%	0	0.0%	0	0.0%	0
METCO 101B-NS PO	34,665.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 72F-NS POV	9,880.00	12.0%	1,186	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POW	156,430.00	0.0%	0	94.0%	147,044	5.0%	7,822	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDE	8,579.75	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDE	5,012.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS-2 PO	3,420.00	12.5%	428	27.0%	923	2.0%	68	48.0%	1,642	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POV	28,975.00	0.0%	0	0.0%	0	10.0%	2,898	0.0%	0	0.0%	0	0.0%	0	89.0%	25,788
METCO 450NS POW	1,175.00	0.0%	0	94.0%	1,105	5.0%	59	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 57NS POWD	3,245.00	0.0%	0	38.0%	1,233	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	2,012
METCO 58NS POWD	27,660.00	0.0%	0	38.0%	10,511	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	17,149
METCO 301NS POW	12,305.00	0.0%	0	65.0%	7,998	3.5%	431	14.0%	1,723	0.0%	0	0.0%	0	0.0%	0
METCO 52C-NS POV	23,120.00	0.0%	0	0.0%	0	88.0%	20,346	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 131VF POW	1,960.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POV	300.00	0.0%	0	0.0%	0	10.0%	30	0.0%	0	0.0%	0	0.0%	0	89.0%	267
METCO 601NS POW	142,265.00	0.0%	0	0.0%	0	53.0%	75,400	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS POW	19,340.00	0.5%	97	74.5%	14,408	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POW	46,735.00	0.0%	0	73.0%	34,117	5.0%	2,337	18.0%	8,412	0.0%	0	0.0%	0	0.0%	0
METCO 308NS POW	8,075.00	5.0%	404	84.5%	6,823	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 410NS POW	6,925.00	0.0%	0	6.0%	416	24.0%	1,662	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-1 PC	23,045.00	17.0%	3,918	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 36C POWDE	12,495.00	0.0%	0	45.0%	5,623	0.0%	0	12.0%	1,499	0.0%	0	0.0%	0	0.0%	0
METCO 106 POWDE	4,665.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	4,525	0.0%	0
METCO 106F POWD	3,240.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	3,143	0.0%	0
METCO 73SF-NS PO	2,460.00	17.0%	418	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 301C-NS PO	3,325.00	0.0%	0	65.0%	2,161	3.5%	116	14.0%	466	0.0%	0	0.0%	0	0.0%	0
METCO 444 POWDE	16,130.00	0.0%	0	72.0%	11,614	7.0%	1,129	9.0%	1,452	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDE	30,862.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 101SF POW	5,315.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51NS POWD	7,935.00	0.0%	0	0.0%	0	10.0%	794	0.0%	0	0.0%	0	0.0%	0	89.0%	7,062
METCO 605NS POW	1,425.00	0.0%	0	0.0%	0	9.0%	128	0.0%	0	0.0%	0	0.0%	0	80.0%	1,140
METCO 64 POWDER	480.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 310NS POW	3,700.00	0.0%	0	0.0%	0	61.0%	2,257	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 202NS POW	23,710.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 19E POWDE	945.00	0.0%	0	64.0%	605	0.0%	0	16.0%	151	0.0%	0	0.0%	0	2.4%	23

Form R Materials
2005

METCO 307NS-3 PO'	10,640.00	0.5%	53	74.5%	7,927	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-3 PO'	7,310.00	0.5%	37	84.5%	6,177	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 56C-NS POV	785.00	0.0%	0	99.5%	781	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130SF POW	1,265.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWD	8,760.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	7,972	0.0%	0
METCO 307NS-2 PO'	9,840.00	0.5%	49	74.5%	7,331	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 447NS POW	25,580.00	0.0%	0	86.0%	21,999	6.0%	1,535	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWD	1,825.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	1,661	0.0%	0
METCO 54NS POWD	3,325.00	0.0%	0	0.0%	0	99.0%	3,292	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 71VF-NS-1 F	3,735.00	11.5%	430	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 54NS-1 POW	17,145.00	0.0%	0	0.0%	0	99.0%	16,974	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 445 POWDE	3,584.00	0.0%	0	0.0%	0	10.0%	358	0.0%	0	0.0%	0	0.0%	0	89.0%	3,190
METCO 43VF-NS PO	2,215.00	0.0%	0	78.0%	1,728	0.0%	0	19.0%	421	0.0%	0	0.0%	0	0.0%	0
METCO 450P POWD	620.00	0.0%	0	94.0%	583	4.0%	25	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105SFP POV	14,420.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 66F-NS POV	3,325.00	59.5%	1,978	1.0%	33	0.0%	0	8.5%	283	0.0%	0	0.0%	0	0.0%	0
METCO 31C-NS POV	34,365.00	4.0%	1,375	55.0%	18,901	0.0%	0	4.5%	1,546	0.0%	0	0.0%	0	0.0%	0
METCO 309NS-3 PO'	1,985.00	0.5%	10	79.5%	1,578	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 442 POWDE	5,260.00	0.0%	0	68.0%	3,577	7.0%	368	8.5%	447	0.0%	0	0.0%	0	0.0%	0
METCO 312NS POW	7,537.50	0.0%	0	71.0%	5,352	4.0%	302	4.0%	302	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-1 PO'	2,630.00	0.5%	13	84.5%	2,222	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-2 PC	10,290.00	17.0%	1,749	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 68F-NS-1 PC	4,970.00	49.0%	2,435	1.0%	50	0.0%	0	17.5%	870	0.0%	0	0.0%	0	0.0%	0
METCO 313NS POW	20,890.00	0.0%	0	0.0%	0	40.0%	8,356	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 600NS POW	1,010.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 1123 POWD	290.00	9.0%	26	18.0%	52	0.0%	0	4.0%	12	0.0%	0	0.0%	0	0.0%	0
METCO 82VF-NS PO	1,980.00	0.0%	0	12.0%	238	0.0%	0	0.0%	0	88.0%	1,742	0.0%	0	0.0%	0
METCO 311NS POW	4,070.00	0.0%	0	0.0%	0	55.0%	2,239	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1 PO'	12,010.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 480NS POW	30,320.00	0.0%	0	95.5%	28,956	4.5%	1,364	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POW	70,895.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1 PO'	5,862.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 143 POWDE	35.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 303NS-1 PO'	1,615.00	0.0%	0	27.0%	436	0.0%	0	7.0%	113	0.0%	0	0.0%	0	0.0%	0
METCO 452 POWDE	16,885.00	0.0%	0	38.0%	6,416	7.0%	1,182	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 355 POWDE	5,000.00	0.0%	0	0.0%	0	55.0%	2,750	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 610NS POW	4,275.00	0.0%	0	0.0%	0	7.5%	321	0.0%	0	0.0%	0	0.0%	0	72.0%	3,078

Form R Materials
2005

METCO 202NS POW	8,150.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 70C-NS POV	3,675.00	0.0%	0	0.0%	0	0.0%	0	100.0%	3,675	0.0%	0	0.0%	0	0.0%	0
METCO 350NS POW	26,675.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204B-NS PO	58,955.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POW	49,362.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 314NS POW	33,875.00	0.0%	0	71.0%	24,051	4.0%	1,355	4.0%	1,355	0.0%	0	0.0%	0	0.0%	0
METCO 700 POWDE	810.00	0.0%	0	55.0%	446	0.0%	0	20.0%	162	0.0%	0	0.0%	0	4.0%	32
METCO 453 POWDE	10,920.00	0.0%	0	31.0%	3,385	6.0%	655	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POW	2,400.00	0.0%	0	73.0%	1,752	5.0%	120	18.0%	432	0.0%	0	0.0%	0	0.0%	0
METCO 449P POWD	445.00	0.0%	0	0.0%	0	3.0%	13	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 205NS POW	775.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1G P	1,337.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 461NS POW	2,575.00	2.5%	64	67.0%	1,725	5.5%	142	17.5%	451	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POW	1,987.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 441NS-1 PO	570.00	0.0%	0	26.0%	148	2.0%	11	6.0%	34	0.0%	0	0.0%	0	0.0%	0
AMDRY 400 POWDE	1,500.00	51.0%	765	17.0%	255	0.0%	0	19.0%	285	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1003 PC	6,465.00	0.0%	0	12.0%	776	0.0%	0	17.0%	1,099	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1004 PC	1,670.00	0.0%	0	0.0%	0	10.0%	167	0.0%	0	0.0%	0	0.0%	0	89.0%	1,486
DIAMALLOY 1005 PC	3,130.00	0.5%	16	63.0%	1,972	0.0%	0	21.5%	673	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1006 PC	970.00	1.0%	10	53.0%	514	0.0%	0	19.0%	184	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1007 PC	4,890.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	4,890
DIAMALLOY 2001 PC	14,655.00	1.0%	147	70.0%	10,259	0.0%	0	17.0%	2,491	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2002 PC	2,110.00	6.0%	127	36.0%	760	0.0%	0	8.5%	179	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2003 PC	1,455.00	11.5%	167	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2004 PC	10,490.00	12.0%	1,259	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2006 PC	245.00	17.0%	42	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3001 PC	2,125.00	49.0%	1,041	1.0%	21	0.0%	0	17.5%	372	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3004 PC	7,130.00	0.0%	0	20.0%	1,426	0.0%	0	0.0%	0	80.0%	5,704	0.0%	0	0.0%	0
DIAMALLOY 3005 PC	305.00	0.0%	0	10.0%	31	0.0%	0	0.0%	0	90.0%	275	0.0%	0	0.0%	0
DIAMALLOY 3007 PC	12,010.00	0.0%	0	10.0%	1,201	0.0%	0	0.0%	0	90.0%	10,809	0.0%	0	0.0%	0
DIAMALLOY 3006 PC	70.00	0.0%	0	40.0%	28	0.0%	0	52.0%	36	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4006 PC	4,900.00	0.0%	0	55.0%	2,695	0.0%	0	20.5%	1,005	0.0%	0	0.0%	0	4.0%	196
METCO 203NS POW	62.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 76F-NS POV	1,095.00	21.0%	230	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-G PC	287,062.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4008NS	2,655.00	0.0%	0	95.5%	2,536	4.5%	119	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1008 PC	2,035.00	0.0%	0	4.0%	81	0.0%	0	18.0%	366	0.0%	0	0.0%	0	2.0%	41

Form R Materials
2005

DIAMALLOY 4010 PC	985.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3002NS	230.00	59.5%	137	1.0%	2	0.0%	0	8.5%	20	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2005NS	30,820.00	17.0%	5,239	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 1371 POWDI	12,140.00	25.0%	3,035	19.0%	2,307	0.0%	0	3.5%	425	0.0%	0	0.0%	0	0.0%	0
AMDRY 301 POWDE	750.00	11.0%	83	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 302 POWDE	45.00	11.5%	5	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 313X POWD	5,450.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 333 POWDE	1,030.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 353 POWDE	910.00	46.0%	419	50.0%	455	53.5%	487	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 365-2 POWD	15,570.00	24.0%	3,737	45.0%	7,007	12.0%	1,868	17.0%	2,647	0.0%	0	0.0%	0	0.0%	0
AMDRY 386 POWDE	3,710.00	22.0%	816	48.0%	1,781	13.0%	482	17.0%	631	0.0%	0	0.0%	0	0.0%	0
AMDRY 387 POWDE	1,095.00	0.0%	0	86.0%	942	6.0%	66	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 500C POWD	7,685.00	0.0%	0	36.0%	2,767	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	4,534
AMDRY 500F POWD	4,585.00	0.0%	0	36.0%	1,651	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	2,705
AMDRY 625 POWDE	1,275.00	50.0%	638	63.0%	803	0.0%	0	21.5%	274	0.0%	0	0.0%	0	0.0%	0
AMDRY 718 POWDE	1,465.00	1.0%	15	53.0%	776	0.0%	0	19.0%	278	0.0%	0	0.0%	0	0.0%	0
AMDRY 718 CLASS E	7,035.00	1.0%	70	53.0%	3,729	0.0%	0	19.0%	1,337	0.0%	0	0.0%	0	0.0%	0
AMDRY 956 POWDE	31,185.00	0.0%	0	93.5%	29,158	5.0%	1,559	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 959 POWDE	3,190.00	0.0%	0	38.0%	1,212	7.0%	223	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 960 POWDE	14,710.00	0.0%	0	73.0%	10,738	5.0%	736	18.0%	2,648	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 POWDE	66,005.00	0.0%	0	67.0%	44,223	10.0%	6,601	22.0%	14,521	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 POWDE	3,865.00	0.0%	0	67.0%	2,590	10.0%	387	22.0%	850	0.0%	0	0.0%	0	0.0%	0
AMDRY 963 POWDE	2,185.00	0.0%	0	68.0%	1,486	6.0%	131	26.0%	568	0.0%	0	0.0%	0	0.0%	0
AMDRY 964 POWDE	8,590.00	0.0%	0	57.0%	4,896	11.0%	945	31.0%	2,663	0.0%	0	0.0%	0	0.0%	0
AMDRY 9830 POWDI	1,200.00	17.0%	204	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9831 POWDI	7,650.00	17.0%	1,301	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 993 POWDE	17,100.00	0.0%	0	1.0%	171	35.0%	5,985	1.0%	171	0.0%	0	0.0%	0	0.0%	0
AMDRY 9951 POWDI	7,540.00	35.0%	2,639	30.0%	2,262	8.0%	603	25.0%	1,885	0.0%	0	0.0%	0	0.0%	0
AMDRY 9954 POWDI	14,340.00	35.0%	5,019	30.0%	4,302	8.0%	1,147	25.0%	3,585	0.0%	0	0.0%	0	0.0%	0
AMDRY 995C POWD	20,745.00	35.0%	7,261	30.0%	6,224	8.0%	1,660	26.0%	5,394	0.0%	0	0.0%	0	0.0%	0
AMDRY 997 POWDE	3,235.00	23.0%	744	44.0%	1,423	8.0%	259	20.0%	647	0.0%	0	0.0%	0	0.0%	0
AMDRY 1718 POWDI	4,090.00	1.0%	41	53.0%	2,168	0.0%	0	19.0%	777	0.0%	0	0.0%	0	0.0%	0
AMDRY 2000 POWDI	1,295.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 2010 POWDI	31,695.00	0.0%	0	0.0%	0	53.0%	16,798	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5260 POWDI	6,040.00	20.0%	1,208	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5670 POWDI	2,455.00	20.0%	491	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5843 POWDI	15,960.00	10.0%	1,596	0.0%	0	0.0%	0	4.0%	638	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY 6420 POWDI	9,070.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY CHROME PC	5,050.00	0.0%	0	0.0%	0	0.0%	0	100.0%	5,050	0.0%	0	0.0%	0	0.0%	0
AMDRY 365-1	165.00	24.0%	40	45.0%	74	12.0%	20	17.0%	28	0.0%	0	0.0%	0	0.0%	0
AMDRY 187 POWDE	3,700.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 718B POWD	445.00	1.0%	4	53.0%	236	0.0%	0	19.0%	85	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	2,830.00	0.1%	3	80.0%	2,264	0.0%	0	20.0%	566	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	5,910.00	0.1%	6	80.0%	4,728	0.0%	0	20.0%	1,182	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	200.00	0.1%	0	80.0%	160	0.0%	0	20.0%	40	0.0%	0	0.0%	0	0.0%	0
AMDRY 775 POWDE	1,590.00	0.1%	2	80.0%	1,272	0.0%	0	20.0%	318	0.0%	0	0.0%	0	0.0%	0
AMDRY 780 POWDE	1,185.00	0.1%	1	92.0%	1,090	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 780 POWDE	1,335.00	0.1%	1	92.0%	1,228	0.0%	0	15.0%	200	0.0%	0	0.0%	0	0.0%	0
Amdry 790.0 powder !	875.00	0.1%	1	92.0%	805	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 790.1 POWD	830.00	0.1%	1	92.0%	764	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 204NS-1 PO'	61,712.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 58C	3,560.00	8.0%	285	11.5%	409	0.0%	0	11.0%	392	0.0%	0	0.0%	0	1.0%	36
METCO 320NS POW	23,470.00	0.0%	0	0.0%	0	62.0%	14,551	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 581	1,230.00	12.0%	148	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 586	70.00	8.0%	6	6.0%	4	0.0%	0	0.0%	0	29.0%	20	0.0%	0	0.0%	0
METCO 70F-NS POV	60.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	60	0.0%	0	0.0%	0
METCO 204C-NS PO	47,225.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 204	2,600.00	26.0%	676	25.0%	650	6.0%	156	16.5%	429	0.0%	0	0.0%	0	0.0%	0
METCO 73F POWDE	585.00	17.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 581	505.00	12.0%	61	0.0%	0	0.0%	0		0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 584	16,320.00	10.0%	1,632	0.0%	0	0.0%	0	4.0%	653	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 524	14,090.00	0.0%	0	31.0%	4,368	0.0%	0	60.0%	8,454	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 66C	1,300.00	0.0%		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4700 PC	19,370.00	38.0%	7,361	32.0%	6,198	8.0%	1,550	21.0%	4,068	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 204	4,790.00	26.0%	1,245	26.0%	1,245	6.0%	287	16.5%	790	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB POWDE	520.00	9.5%	49	68.5%	356	6.0%	31	13.5%	70	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB POWDE	300.00	9.5%	29	68.5%	206	6.0%	18	13.5%	41	0.0%	0	0.0%	0	0.0%	0
AMDRY D-15 POWDI	865.00	10.0%	87	65.0%	562	3.5%	30	15.0%	130	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-3 POWDI	1,260.00	20.0%	252	54.0%	680	2.0%	25	20.0%	252	0.0%	0	0.0%	0	0.0%	0
AMDRY MM509 POW	105.00	54.0%	57	10.0%	11	0.0%	0	23.0%	24	0.0%	0	0.0%	0	0.0%	0
SP 86/70NS POWDE	800.00	0.1%	0	84.0%	672	16.0%	128	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 2-2590 POWDE	375.00	0.0%	0	85.0%	319	15.0%	56	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 4-2231 POWDE	8,040.00	2.5%	201	67.0%	5,387	5.5%	442	17.5%	1,407	0.0%	0	0.0%	0	0.0%	0
SPM 6-2255 POWDE	400.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

SPM 6-2309 AE7443	425.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY ALUM SIL /	11,200.00	21.0%	2,352	38.0%	4,256	11.5%	1,288	23.0%	2,576	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 246	2,910.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY X-40 POWDI	670.00	54.0%	362	10.0%	67	0.0%	0	23.0%	154	0.0%	0	0.0%	0	0.0%	0
AMDRY 8670 / PWA	0.00	10.0%	0	14.0%	0	5.5%	0	8.0%	0	0.0%	0	0.0%	0	0.1%	0
1824 RZR BRAZE PC	30.00	18.0%	5	60.0%	18	3.0%	1	11.0%	3	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 55	1,900.00	0.0%	0	17.0%	323	2.5%	48	70.5%	1,340	0.0%	0	0.0%	0	0.0%	0
METCO 443NS SPEC	10,220.00	0.0%	0	70.0%	7,154	5.0%	511	18.5%	1,891	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-6A POWI	210.00	0.0%	0	74.0%	155	2.0%	4	18.0%	38	0.0%	0	0.0%	0	0.0%	0
SXH-70 / 10 LBS	7,460.00	10.0%	746	0.0%	0	0.0%	0	4.0%	298	0.0%	0	0.0%	0	0.0%	0
METCO 136CP / 5 LE	2,740.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	2,493	0.0%	0
AMDRY DF-3 POWDI	160.00	20.0%	32	54.0%	86	2.0%	3	20.0%	32	0.0%	0	0.0%	0	0.0%	0
AMDRY RENE 80 / 5	1,305.00	9.5%	124	54.0%	705	3.0%	39	14.0%	183	0.0%	0	0.0%	0	0.0%	0
SP8847 Metco 604NS	1,000.00	0.0%	0	0.0%	0	9.0%	90	0.0%	0	0.0%	0	0.0%	0	85.0%	850
XPT 459	50.00	0.0%	0	94.0%	47	4.0%	2	0.0%	0	0.0%	0	0.0%	0	0.0%	0
XPT 470 / SPM 7-262	8,030.00	1.0%	80	75.0%	6,023	0.0%	0	15.0%	1,205	0.0%	0	0.0%	0	0.0%	0
SPM 4-2443 POWDE	600.00	0.0%	0	0.0%	0	10.0%	60	0.0%	0	0.0%	0	0.0%	0	89.0%	534
DIAMALLOY 4454	8,740.00	35.0%	3,059	30.0%	2,622	8.0%	699	25.0%	2,185	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 44	**4,010.00**		0		0		0		0		0		0		0
DIAMALLOY 5872 NS	0.00	12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9150	570.00	1.0%	6	75.5%	430	0.0%	0	13.0%	74	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 419	17,455.00	36.0%	6,284	32.0%	5,586	10.0%	1,746	22.0%	3,840	0.0%	0	0.0%	0	0.0%	0
METCO 12C POWDE	620.00	0.5%	3	83.0%	515	0.0%	0	10.0%	62	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POW	75.00	0.5%	0	83.0%	62	0.0%	0	10.0%	8	0.0%	0	0.0%	0	0.0%	0
AMDRY 482 POWDE	565.00	8.0%	45	73.0%	412	2.0%	11	9.0%	51	0.0%	0	0.0%	0	0.0%	0
SPECIAL SIZE METC	620.00	0.5%	3	74.5%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM2000 POWDER	14,250.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9621 POWDI	5,850.00	0.0%	0	77.0%	4,505	6.0%	351	17.0%	995	0.0%	0	0.0%	0	0.0%	0
AMDRY 920	920.00	64.0%	589	0.5%	5	6.0%	55	29.0%	267	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5849 PC	4,755.00	10.0%	476	0.0%	0	0.0%	0	4.0%	190	0.0%	0	0.0%	0	0.0%	0
XPT 448 AMDRY DF4	40.00	10.0%	4	67.0%	27	3.5%	1	14.0%	6	0.0%	0	0.0%	0	0.0%	0
AMDRY 915 POWDE	1,375.00	1.0%	14	75.0%	1,031	0.0%	0	13.0%	179	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 449/SPI	3,110.00	24.0%	746	48.0%	1,493	12.0%	373		0	0.0%	0	0.0%	0	0.0%	0
METCO 15E (US) PO	3,445.00	1.0%	34	70.5%	2,429	0.0%	0	17.0%	586	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 395 PO	855.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 345	5.00	65.0%	3	0.0%	0	10.0%	1	25.0%	1	0.0%	0	0.0%	0	0.0%	0
AMDRY AlCo	10,900.00	30.0%	3,270	50.0%	5,450	69.0%	7,521	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY B-93	2,925.00	12.0%	351	55.0%	1,609	3.0%	88	14.0%	410	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-5	70.00	0.0%	0	74.0%	52	2.0%	1	18.0%	13	0.0%	0	0.0%	0	0.0%	0
AMDRY DF-4B	260.00	10.0%	26	67.0%	174	3.5%	9	14.0%	36	0.0%	0	0.0%	0	0.0%	0
AMDRY S-57B	80.00	54.0%	43	10.0%	8	0.0%	0	23.5%	19	0.0%	0	0.0%	0	0.0%	0
GT-50 GE Proprietar	2,480.00	26.0%	645	25.0%	620	6.0%	149	16.5%	409	0.0%	0	0.0%	0	0.0%	0
SULZER METCO SPI	23,175.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR 5	9,900.00	0.0%	0	2.0%	198	0.0%	0	16.0%	1,584	0.0%	0	0.0%	0	0.0%	0
34FP/15F BLEND	1,630.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 41C PWDR 5	8,050.00	0.0%	0	12.0%	966	0.0%	0	17.0%	1,369	0.0%	0	0.0%	0	0.0%	0
SPM5-2219 (AE7609)	2,113.10	0.0%	0	0.0%	0	0.0%	0	85.5%	1,807	0.0%	0	0.0%	0	0.0%	0
SPEC METCO 52C (D	700.00	0.0%	0	0.0%	0	87.0%	609	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY TD-55	25.00	2.0%	1	41.0%	10	0.0%	0	21.5%	5	0.0%	0	0.0%	0	0.0%	0
AMDRY SV 20 POWD	280.00	0.0%	0	65.0%	182	5.5%	15	25.0%	70	0.0%	0	0.0%	0	0.0%	0
FVA-5-B/XPT 271/SP	720.00	25.0%	180	18.3%	131	0.0%	0	3.5%	25	0.0%	0	0.0%	0	0.0%	0
RAW MATERIAL FOR	0.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 434 BLE	10.00	8.0%	1	68.0%	7	4.3%	0	15.0%	2	0.0%	0	0.0%	0	0.0%	0
XPT 595	210.00	50.0%	105	83.0%	174	0.0%	0	10.0%	21	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB / XPT 6	895.00	9.0%	81	70.0%	627	3.5%	31	14.0%	125	0.0%	0	0.0%	0	0.0%	0
AMDRY 951 (Ni-50 G	0.00	0.5%	0	60.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
BORON NITRIDE POWDER/0157		0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 15E POWDE	925.00	1.0%	9	70.5%	652	0.0%	0	17.0%	157	0.0%	0	0.0%	0	0.0%	0
METCO 15F PWDR 5	990.00	1.0%	10	70.5%	698	0.0%	0	17.0%	168	0.0%	0	0.0%	0	0.0%	0
METCO 54NS PWDR	2,610.00	0.0%	0	0.0%	0	99.0%	2,584	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 57NS POWD	300.00	0.0%	0	38.0%	114	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	186
METCO 58NS POWD	200.00	0.0%	0	36.0%	72	0.0%	0	0.0%	0	0.0%	0	0.0%	0	59.0%	118
METCO 308NS1 PWI	0.00	0.5%	0	84.5%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 303	375.00	0.0%	0	0.0%	0	99.0%	371	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 71VFNS-5 P	1,305.00	11.5%	150	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR 2	4,200.00	0.0%	0	2.0%	84	0.0%	0	16.0%	672	0.0%	0	0.0%	0	0.0%	0
AMDRY 485 PWA 1185-1		33.0%	0	40.0%	0	0.0%	0	24.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 600NS-1 PW	6,400.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 367 POWDE	565.00	0.0%	0	10.5%	59	0.0%	0	78.5%	444	0.0%	0	0.0%	0	0.0%	0
AMDRY 949 POWDE	3,005.00	0.0%	0	0.0%	0	55.0%	1,653	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 961	2,000.00	0.0%	0	77.0%	1,540	6.0%	120	17.0%	340	0.0%	0	0.0%	0	0.0%	0
AMDRY 6417 POWD	60.00	0.0%	0	0.0%	0	0.2%	0	0.1%	0	0.0%	0	99.0%	59	0.0%	0
AMDRY 356 ALUM O	410.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 713C	355.00	1.0%	4	70.0%	249	6.0%	21	16.0%	57	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

AMDRY 738	190.00	8.5%	16	62.0%	118	3.5%	7	16.0%	30	0.0%	0	0.0%	0	0.0%	0
AMDRY 788	650.00	39.0%	254	21.0%	137	0.0%	0	22.0%	143	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 - 1	500.00	0.0%	0	16.0%	80	0.0%	0	73.0%	365	0.0%	0	0.0%	0	0.0%	0
METCO 312NS PWD	800.00	0.0%	0	71.0%	568	4.0%	32	4.0%	32	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5815 PV	3,365.00	12.0%	404	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5826 PV	1,370.00	17.0%	233	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5848 PV	4,685.00	10.0%	469	0.0%	0	0.0%	0	4.0%	187	0.0%	0	0.0%	0	0.0%	0
AMDRY 914 / NICOSI	25.00	20.0%	5	72.5%	18	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 917F	155.00	0.0%	0	100.0%	155	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9300B	3,135.00	0.0%	0	65.5%	2,053	0.0%	0	0.1%	0	0.0%	0	0.0%	0	4.5%	141
AMDRY 930	2,580.00	0.0%	0	65.5%	1,690	0.0%	0	0.1%	0	0.0%	0	0.0%	0	4.5%	116
AMDRY 936	605.00	0.0%	0	68.0%	411	0.0%	0	0.0%	0	0.0%	0	0.0%	0	5.0%	30
AMDRY 942-3 POWD	100.00	0.0%	0	38.0%	38	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	62
AMDRY 9500	200.00	0.0%	0	0.0%	0	53.0%	106	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 (9624)	55.00	0.0%	0	67.0%	37	10.0%	6	22.0%	12	0.0%	0	0.0%	0	0.0%	0
GT54	220.00	0.0%	0	80.0%	176	4.0%	9	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 412NS	15.00	0.0%	0	28.0%	4	17.0%	3	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 5-2599	100.00	11.5%	12	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDE	800.00	0.0%	0	83.0%	664	0.0%	0	7.0%	56	0.0%	0	0.0%	0	0.0%	0
METCO 421NS-2	30.00	0.0%	0	33.0%	10	2.0%	1	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY CHROME PC	930.00	0.0%	0	0.0%	0	0.0%	0	99.5%	925	0.0%	0	0.0%	0	0.0%	0
SPM2-2638 / GT56 (I	3,325.00	0.0%	0	63.0%	2,095	3.5%	116	13.5%	449	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-AP P	40,312.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 2-2644 (312NS-	2,200.00	0.0%	0	71.0%	1,562	4.0%	88	4.0%	88	0.0%	0	0.0%	0	0.0%	0
AMDRY 964 (9640)	2,800.00	0.0%	0	57.0%	1,596	11.0%	308	31.0%	868	0.0%	0	0.0%	0	0.0%	0
METCO 204BNS PO	9,746.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 131PAB	710.00	0.0%	0	20.0%	142	0.0%	0	67.0%	476	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY W914 -	20,245.00	0.0%	0	20.0%	4,049	0.0%	0	67.0%	13,564	0.0%	0	0.0%	0	0.0%	0
SPM4-2506 Ti 6Al 4V.	600.00	0.0%	0	0.0%	0	6.0%	36	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 4-2507	1,850.00	0.0%	0	0.0%	0	6.0%	111	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 737	3,615.00	4.0%	145	50.0%	1,808	0.0%	0	8.0%	289	0.0%	0	0.0%	0	0.0%	0
SPM5-2657 POWDEF	0.00	12.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5847-1 5	735.00	10.0%	74	0.0%	0	0.0%	0	4.0%	29	0.0%	0	0.0%	0	0.0%	0
METCO 204F 12.5#	4,625.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
UCP Riken -SPM-5-2	20.00	0.0%	0	40.0%	8	0.0%	0	53.0%	11	0.0%	0	0.0%	0	0.0%	0
WOKA 3102	5,250.00	12.0%	630	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA 3105	880.00	12.0%	106	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Form R Materials
2005

WOKA - RTP 2	6,930.00	0.0%	0	5.0%	347	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
WOKA - RTP 2	14,784.00	0.0%	0	5.0%	739	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042849 MATRIX	2,310.00	0.0%	0	5.0%	116	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1042885 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1049625 PXP 70	1,639.00		0		0		0		0		0		0		0
AMDRY 6415	1,637.50	0.0%	0	0.0%	0	0.0%	0	10.0%	164	0.0%	0	98.8%	1,617	0.0%	0
SUME 9013	2,760.00	10.0%	276	0.0%	0	0.0%	0	4.0%	110	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 58C	100.00	9.0%	9	13.0%	13	0.0%	0	5.0%	5	0.0%	0	0.0%	0	0.0%	0
SPM 6-2710	300.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058249 MATRIX	576.00	0.0%	0	5.0%	29	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058251 MATRIX	1,731.00	0.0%	0	5.0%	87	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058252 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058266 MATRIX	1,155.00	0.0%	0	5.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058271 MATRIX	5,775.00	0.0%	0	5.0%	289	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058272 MATRIX	9,240.00	0.0%	0	5.0%	462	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
1058273 MATRIX	3,465.00	0.0%	0	5.0%	173	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Co	Ni	Al	Cr	CrC	Cr2O	Cu
102,653	**717,698**	**235,730**	**154,351**	**76,172**	**21,711**	**75,834**

DiPietrantonio, Peter

From: Alden, Ken
Sent: Thursday, 22. June 2006 8:09 AM
To: DiPietrantonio, Peter
Subject: RE: Bar Stock

The recycler we used in 2005 was Gershow Recycling Centers, 71 Peconic Avenue, Medford NY 11763.
We switched a couple of months ago to Loni Jo Scrap Metal, 70 Kinkel Street, Westbury.

From: DiPietrantonio, Peter
Sent: Thursday, June 22, 2006 8:06 AM
To: Alden, Ken; Stegemann, Bob
Cc: Feldhusen, Marian
Subject: RE: Bar Stock

Ken,

Thanks for your quick reply. It's much appreciated.

Would you also tell me the name of the scrap dealer and their address? Thanks again.

Regards,
Peter

Cr = 14.5% in st. steel
Cu = 63% in brass
Ni = 0.75% in st. steel

From: Alden, Ken
Sent: Thursday, 22. June 2006 7:41 AM
To: Stegemann, Bob
Cc: DiPietrantonio, Peter; Feldhusen, Marian
Subject: RE: Bar Stock

Scrap for 2005 was as follows:

Copper	58,870 lbs
Aluminum	18,864 lbs.
Brass	15,930 lbs.
Steel	8,575 lbs.
Mixed	14,256 lbs

Mixed would be a combination of any or all of the above metals plus plastics.

Ken

---

assume mixed = 2850 lb of each

From: Stegemann, Bob
Sent: Thursday, June 22, 2006 6:27 AM
To: Alden, Ken
Cc: DiPietrantonio, Peter; Feldhusen, Marian
Subject: RE: Bar Stock

Ken,

In the past we have provided Peter D. a breakdown of the scrap that we have produced based on the documents that we maintain for the scrap sales to the respective dealer. Can you please review your records for calendar year 2005 and provide Peter a breakdown by material of the number of pounds of each material.

This is needed by the end of the week. Please let me know if you have any questions or problems obtaining this data.

Thanks.

Bob-

From: Feldhusen, Marian
Sent: Tuesday, June 20, 2006 9:58 AM
To: Stegemann, Bob
Cc: DiPietrantonio, Peter
Subject: Bar Stock

Hi Bob,

Here are the files we discussed.
Thank you for your help.

Regards,

Marian Feldhusen
Environmental Health & Safety
Sulzer Metco (US) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 338-2331
Fax: (516) 338-2303

Calculations:

copper = 58,870 lb + 2850 lb = 61,720 lb Cu
Al = 18,864 lb + 2850 lb.
brass = 15,930 + 2850 = 18,780 lb ; at 63%, [Cu] = 11,831 lb Cu
steel = 8,575 lb + 2850 lb = 11,425 lb
at 14.5% = 1,657 lb Cr
at 0.75% = 86 lb Ni

totals:
Cr = 1657 lb ✓
Cu = 73,551 lb ✓
Ni = 86 lb ✓

2005 Form R
haz waste

Hazardous Waste Prospect Avenue 2005

Shipment Date	HWM Manifest #	Date HWM TSDF Copy Received	Waste Description	TSDF	TSDF EPA ID#	TSDF Profile	HW Codes	Number	Container Type	Quantity	UOM	Total in Pounds	Total in Tons	Handling Code	End Facility Name
01/07/05	NYG3893211	02/10/05	Ceramic Oxide, Aluminum Oxide	Clean Harbors	MAD039322250	CH189108	D007	1	Drum	250	P	250	0.125	T	
03/18/05	NYG3892518	04/05/05	(Ceramic Oxide Chromium)	Clean Harbors	MAD039322250	CH189108	D007	1	Drum	587	P	587	0.2935	T	
04/28/05	NYG3919221	04/28/05	Ceramic Oxide Aluminum Oxide	Clean Harbors	MAD039322250	CH189108	D007	3	Drum	929	P	929	0.4645	T	
07/12/05	NYF3506094	08/08/05	(Ceramic Oxide, Chromium)	Clean Harbors	MAD039322250	CH189108	D007	1	Drum	107	P	107	0.0535	T	
08/15/05	NYG3892851	08/18/05	Hazardous Waste Solid (Ceramic Oxide, Chromium)	Clean Harbors	MAD039322250	CH189108	D007	4	Drum	1,739	P	1,739	0.8695	L	
10/07/05	NYG2763135	10/24/05	(Ceramic Oxide, Chromium)	Clean Harbors	MAD039322250	CH189108	D007	4	Drum	1,350	P	1,350	0.675	T	
12/30/05	NYG3703446	01/10/06	Ceramic Oxide, Chromium	Clean Harbors	MAD039322250	CH189108	D007	1	Drum	263	P	263	0.1315	T	
												5,225			
06/24/05	NYG1300572	07/14/05	Waste corrosive liquid, acidic inorganic	Clean Harbors	MAD039322250	CH189112	D002	1	DF	497	P	497	0.2485	T	
12/04/05	NYG3704157	12/06/05	liquid, Hydrochloric acid, nitric acid	Clean Harbors	MAD039322250	CH189112	D002	1	DF	473	P	473	0.2365	T	
												970			
05/13/05	NYG2762343	05/20/05	Haz Waste Solid (Filters, Chromium)	Clean Harbors	MAD039322250	CH189135	D007	4	DF	1,219	P	1,219	0.6095	B	
												1,219			
01/07/05	NYG3893211	02/10/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	492	P	492	0.246	T	
02/04/05	NYG3918501	02/14/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	3	DF	1,417	P	1,417	0.7085	T	
03/18/05	NYG3892518	04/05/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	Drum	478	P	478	0.239	T	
04/01/05	NYG3919194	04/21/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	468	P	468	0.234	T	
04/28/05	NYG3919221	05/04/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	484	P	484	0.242	T	
05/13/05	NYG2762343	05/20/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	478	P	478	0.239	T	
06/24/05	NYG1300572	07/14/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	2	DF	1,212	P	1,212	0.606	T	
07/12/05	NYG3506094	08/08/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	459	P	459	0.2295	T	
08/15/05	NYG3892851	08/18/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	491	P	491	0.2455	T	
09/20/05	NYG3704418	09/20/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	471	P	471	0.2355	T	
11/04/05	NYG2323161	11/14/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	442	P	442	0.221	T	
12/04/05	NYG3704157	12/06/05	Waste Chromic Acid Solution	Clean Harbors	MAD039322250	CH189142	D002	1	DF	448	P	448	0.224	T	
												7,340			
03/18/05	NYG3892518	04/05/05	Waste Flammable Liquids (Methanol Graphite	Clean Harbors	MAD039322250	CH62537	F003	1	DF	448	P	448	0.224	B	
03/18/05	NYG3892518	04/05/05	Liquids (Methanol, Graphite	Clean Harbors	MAD039322250	CH62537	F003	1	DF	475	P	475	0.2375	B	

P2SUL003725

2005 Form R Haz Waste

Hazardous Waste Prospect Avenue 2005

W/P #	Qty Shipped	% Ni	Qty Ni	% Cr	Qty Cr	% CrO	Qty CrO	% Cr2O3	Qty Cr2O3	% Al	Qty Al	% Co	Qty Co	% Cu	Qty Cu
Usage			82,849		45,887		31,818		5,427		66,392		26,437		11,953
CH 189106		0%	0	5%	0	0.0%	0	0.0%	0	0%	0	0%	0	1%	0
CH 189107		0%	0	1%	0	1.0%	0	1.0%	0	1%	0	1%	0	0%	0
CH 189108	5,225	20%	1,045	5%	261	0.0%	0	0.0%	0	0%	0	1%	52	0%	0
CH 189109		5%	0	1%	0	1.0%	0	1.0%	0	2%	0	2%	0	0%	0
CH 189112	970	1%	10	4%	39	0.0%	0	0.0%	0	0%	0	1%	10	1%	10
CH 189134	7,340	1%	73	0%	0	1.0%	73	1.0%	73	1%	73	3%	220	0%	0
CH 189142		0%	0	5%	0	0.0%	0	0.0%	0	0%	0	0%	0	1%	0
CH 59278		2%	0	1%	0	1.0%	0	1.0%	0	2%	0	1%	0	0%	0
CH 79100		0%	0	5%	0	0.0%	0	0.0%	0	0%	0	0%	0	1%	0
CH 82414		1%	0	0%	0	1.0%	0	1.0%	0	1%	0	2%	0	0%	0
To Clean Harbors			1,128		300		73		73		73		282		10
									146						

CH - Spring Grove Resource Recovery OHD 000 816 629

4879 Spring Grove Av.

Cincinnati, OH 45232

P2SUL003726

2005 Form R
Materials production

Constituent	Source	% Mfg	Total Qty Used	% To DC	DC Efficiency	Qty To Air	Qty To Waste Drum
Nickel	Westbury	100%	717,698	2%	99.97%	4.31 ✓	14,350
Chromium	Westbury	100%	154,351	2%	99.97%	0.93 ✓	3,086
CrC	Westbury	100%	76,172	2%	99.97%	0.46 ✓	1,523
Cr2O3	Westbury	100%	21,711	2%	99.97%	0.13 ✓	434
Aluminum	Westbury	100%	235,730	2%	99.97%	1.41 ✓	4,713
Cobalt	Westbury	100%	102,653	2%	99.97%	0.62 ✓	2,052
Copper	Westbury	100%	75,834	2%	99.97%	0.46 ✓	1,516

2005 Form R
non haz
waste

	Al	Co	Cr	CrC	Cr2O3	Cu	Ni	
Analysis (TRI Chemicals only)	10%	3%	1%	1%	1%	0%	10%	
General Exhaust (lbs)	16,405	4,921	1,640	1,640	1,640	0	16,405	ONYX
Spent Filters (lbs)	14	4	1	1	1	0	14	ONYX
	16,418 ✓	4,926 ✓	1,642 ✓	1,642	1,642	0 ✓	16,418 ✓	ONYX, Flanders, NJ
				3284				
	Al	Co	Cr	CrC	Cr2O3	Cu	Ni	
Analysis (TRI Chemicals only)	0.1%	0.5%	0.1%	0.05%	0.05%	0.0%	0.5%	
Washwater (lbs)*	289 ✓	1,445 ✓	289 ✓	145	145	0 ✓	1,445 ✓	CH, Bristol
				290				
Washwater (lbs)*	23 ✓	115 ✓	23 ✓	12	12	0 ✓	115 ✓	DuPont
				24 ✓				
*See Prospect Non-Haz tab								

1. Clean Harbors of CT ✓
CTD 000 604 488
51 Broderick Rd
Bristol, CT 06010

2. E.I. DuPont Deepwater
NJD 002 385 730
Chambers Works
Rt. 130
Deepwater, NJ 08023
GLOUCESTER county

3. ONYX Environmental Services
NJD 980 536 593 ✓
1 Eden Lane
Flanders, NJ 07836
MORRIS county

2005 Form R
non haz waste

Shipment Date	HWM Manifest #	B/L#	Waste Description	TSDF	TSDF EPA ID#	TSDF Profile	Total in Pounds	Total in Tons
01/07/05	N/A	62978	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	350	0.175
2/4/2005	N/A	58454	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	295	0.1475
2/18/2005	N/A	63108	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	228	0.114
3/18/2005	NYG 3892518	N/A	Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	781	0.3905
4/1/2005	N/A	58580	Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	169	0.0845
4/28/2005	N/A	144678	Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	175	0.0875
5/13/2005	N/A	63347	Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	413	0.2065
6/24/2005	N/A	63194	Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	154	0.077
7/12/2005	N/A	63456	Material (Absorbent Oil Filters)	Clean Harbors	MAD039322250	CH189102	210	0.105
8/15/2005	N/A	63426	Non DOT Regulated Material, (Absorbent Pads, Oil Filters)	Clean Harbors	MAD039322250	CH189102	698	0.349
8/25/2005	N/A	114890	Non DOT Regulated Material (Absorbent pads, oil filters)	Clean Harbors	MAD039322250	CH189102	147	0.0735
9/20/2005	N/A	63483	Non DOT Regulated Material, (Absorbent	Clean Harbors	MAD039322250	CH189102	400	0.2
10/7/2005	N/A	145008	Non DOT Regulated Material (Absorbent	Clean Harbors	MAD039322250	CH189102	499	0.2495
11/4/2005	145077	N/A	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	427	0.2135
11/18/2005	145092	N/A	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	194	0.097
12/30/2005	86172	N/A	Absorbent Pads, Oil Filters	Clean Harbors	MAD039322250	CH189102	199	0.0995
2/4/2005	N/A	58455	Magnesium oxide/titanium oxide	Clean Harbors	MAD039322250	CH189107	4,218	2.109

2/18/2005	N/A	63108	Magnesium oxide/titanium oxide	Clean Harbors	MAD039322250	CH189107	5,520	2.76
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Magnesium	Clean Harbors	MAD039322250	CH189107	2,721	1.3605
4/1/2005	N/A	58580	Non DOT Regulated Material (Magnesium	Clean Harbors	MAD039322250	CH189107	2,642	1.321
4/28/2005	N/A	144678	Non DOT Regulated Material (Magnesium	Clean Harbors	MAD039322250	CH189107	2,487	1.2435
5/23/2005	N/A	63352	Non DOT Regulated Material (Magnesium	Clean Harbors	MAD039322250	CH189107	1,354	0.677
6/21/2005	N/A	63448	Non DOT Regulated Material (Magnesium	Clean Harbors	MAD039322250	CH189107	13,842	6.921
6/24/2005	N/A	63194	Non DOT Regulated Material (Metal	Clean Harbors	MAD039322250	CH189107	4,477	2.2385
7/12/2005	N/A	63456	Non DOT Regulated Material (Titanium	Clean Harbors	MAD039322250	CH189107	6,111	3.0555
8/15/2005	N/A	63426	Material (Magnesium Oxide, Titanium Oxide)	Clean Harbors	MAD039322250	CH189107	2,162	1.081
9/20/2005	N/A	63483	Non DOT Regulated Material, (Magnesium oxide, Titanium oxide)	Clean Harbors	MAD039322250	CH189107	12,000	6
10/7/2005	N/A	145008	Material (Magnesium Oxide, Titanium Oxide)	Clean Harbors	MAD039322250	CH189107	985	0.4925
11/4/2005	145077	N/A	Water Soluble Oil	Clean Harbors	MAD039322250	CH189107	384	0.192
11/18/2005	145092	N/A	Magnesium oxide/titanium oxide	Clean Harbors	MAD039322250	CH189107	3,636	1.818
12/2/2005	145117	N/A	Magnesium oxide/titanium oxide	Clean Harbors	MAD039322250	CH189107	2,962	1.481
12/30/2005	86172	N/A	Magnesium oxide/titanium oxide	Clean Harbors	MAD039322250	CH189107	1,427	0.7135

5/13/2005	N/A	63347	Non DOT Regulated (Filters, PPE, Ceramic Powder)	Clean Harbors	MAD039322250	CH189109	785	0.3925
8/15/2005	N/A	63426	Material (Filters, PPE, Ceramic Powder	Clean Harbors	MAD039322250	CH189109	948	0.474
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Aluminum Oxide)	Clean Harbors	MAD039322250	CH189110	676	0.338
10/7/2005	N/A	145008	Non DOT Regulated (Aluminum Oxide)	Clean Harbors	MAD039322250	CH189110	666	0.333
01/07/05	N/A	62978	Petroleum oil	Clean Harbors	MAD039322250	CH189111	740	0.37
2/4/2005	N/A	58454	Petroleum oil	Clean Harbors	MAD039322250	CH189111	1,178	0.589
2/18/2005	N/A	63108	Petroleum oil	Clean Harbors	MAD039322250	CH189111	380	0.19
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	459	0.2295
4/28/2005	N/A	N/A	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	685	0.3425
5/23/2005	N/A	63352	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	418	0.209
7/12/2005	N/A	63456	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	216	0.108
8/15/2005	N/A	63426	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	442	0.221
8/25/2005	N/A	114890	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	888	0.444

9/20/2005	N/A	63483	Non DOT Regulated Material (Petroleum Oil)	Clean Harbors	MAD039322250	CH189111	471	0.2355
12/2/2005	145117	N/A	Petroleum oil	Clean Harbors	MAD039322250	CH189111	510	0.255
12/30/2005	86172	N/A	Petroleum Oil	Clean Harbors	MAD039322250	CH189111	803	0.4015
4/28/2005	N/A	144678	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	3,757	1.8785
01/07/05	N/A	62978	Metal/Ceramic Powder and Water	Clean Harbors	MAD039322250	CH189134	5,205	2.6025
2/18/2005	N/A	63108	Wet Ceramic	Clean Harbors	MAD039322250	CH189134	1,180	0.59
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	2,932	1.466
4/1/2005	N/A	58580	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	4,564	1.9685
5/23/2005	N/A	63352	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	7,831	3.9155
6/21/2005	N/A	63448	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	1,025	0.5125
7/12/2005	N/A	63456	Non DOT Regulated Material (Metal,Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	3,941	1.9705
8/15/2005	N/A	63426	Non DOT Regulated Material (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	3,937	1.9685
9/20/2005	N/A	63483	Non DOT Regulated (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	10,000	5

10/7/2005	N/A	145008	Non DOT Regulated (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	2,774	1.387
10/21/2005	N/A	144940	Non DOT Regulated (Metal/Ceramic Powder & Water)	Clean Harbors	MAD039322250	CH189134	4,109	2.0545
11/4/2005	145077	N/A	Non DOT Regulated Material	Clean Harbors	MAD039322250	CH189134	443	0.2215
12/30/2005	86172	N/A	Metal/Ceramic Powder and Water	Clean Harbors	MAD039322250	CH189134	2,416	1.208
01/07/05	N/A	62978	Water Soluble Oil	Clean Harbors	MAD039322250	CH189141	1,025	0.5125
2/4/2005	N/A	58454	Water Soluble Oil	Clean Harbors	MAD039322250	CH189141	420	0.21
2/18/2005	N/A	63108	Water Soluble Oil	Clean Harbors	MAD039322250	CH189141	899	0.4495
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	1,411	0.7055
4/1/2005	N/A	58580	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	931	0.4655
4/28/2005	N/A	144678	Non DOT Regulated Matrial (Water Soluble)	Clean Harbors	MAD039322250	CH189141	927	0.4635
5/23/2005	N/A	63352	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	495	0.2475
6/24/2005	N/A	63194	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	971	0.4855
8/15/2005	N/A	63426	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	506	0.253
8/25/2005	N/A	114890	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	441	0.2205
9/20/2005	N/A	63483	Non DOT Regulated (Water soluble oil)	Clean Harbors	MAD039322250	CH189141	900	0.45
10/7/2005	N/A	145008	Non DOT Regulated Material (Water Soluble Oil)	Clean Harbors	MAD039322250	CH189141	503	0.2515
11/4/2005	145077	N/A	Nylon Solids	Clean Harbors	MAD039322250	CH189141	617	0.3085

12/2/2005	145117	N/A	Water Soluble Oil	Clean Harbors	MAD039322250	CH189141	496	0.248
12/30/2005	86172	N/A	Water Soluble Oil	Clean Harbors	MAD039322250	CH189141	980	0.49
01/07/05	N/A	62978	Nylon Solids	Clean Harbors	MAD039322250	CH189144	547	0.2735
2/4/2005	N/A	58454	Nylon Solids	Clean Harbors	MAD039322250	CH189144	768	0.384
3/18/2005	NYG 3892518	N/A	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	136	0.068
4/1/2005	N/A	58580	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	218	0.109
5/13/2005	N/A	63347	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	409	0.2045
6/24/2005	N/A	63194	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	1,331	0.6655
7/12/2005	N/A	63456	Non Regulated Material (Nylon Turnings)	Clean Harbors	MAD039322250	CH189144	104	0.052
8/15/2005	N/A	63426	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	178	0.089
8/25/2005	N/A	114890	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	194	0.097
9/20/2005	N/A	63483	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	171	0.0855
10/7/2005	N/A	145008	Non DOT Regulated Material (Nylon Solids)	Clean Harbors	MAD039322250	CH189144	155	0.0775
11/4/2005	145077	N/A	Metal/Ceramic Powder and Water	Clean Harbors	MAD039322250	CH189144	821	0.4105
12/2/2005	145117	N/A	Nylon Solids	Clean Harbors	MAD039322250	CH189144	418	0.209
12/30/2005	86172	N/A	Nylon Solids	Clean Harbors	MAD039322250	CH189144	148	0.074
10/7/2005	N/A	145008	Non DOT Regulated (Oily soap)	Clean Harbors	MAD039322250	CH36427	956	0.478
11/18/2005	145092	N/A	Non DOT Regulated Material	Clean Harbors	MAD039322250	CH36427	438	0.219

12/2/2005	145117	N/A	Not DOT Regulated Material	Clean Harbors	MAD039322250	CH36427	427	0.2135
12/30/2005	63554	N/A	Oily Soap	Clean Harbors	MAD039322250	CH36427	394	0.197
8/15/2005	N/A	63426	Non DOT Regulated (HEPA Filters)	Clean Harbors	MAD039322250	CH54862	2,386	1.193
10/7/2005	N/A	145008	Non DOT Regulated (HEPA Filters)	Clean Harbors	MAD039322250	CH64062	1,043	0.5215
01/07/05	N/A	62978	HEPA Filters	Clean Harbors	MAD039322250	CH64862	658	0.329
2/18/2005	N/A	63108	HEPA Filters	Clean Harbors	MAD039322250	CH64862	878	0.439
5/13/2005	N/A	63347	NON DOT Regulated Material (HEPA Filters)	Clean Harbors	MAD039322250	CH64862	1,569	0.7845
7/12/2005	N/A	63456	Non DOT Regulated (HEPA Filters)	Clean Harbors	MAD039322250	CH64862	521	0.2605
8/25/2005	N/A	114890	Non DOT Regulated (HEPA Filters)	Clean Harbors	MAD039322250	CH64862	365	0.1825
11/4/2005	145077	N/A	HEPA Filters	Clean Harbors	MAD039322250	CH64862	1,023	0.5115
11/4/2005	145077	N/A	HEPA Filters	Clean Harbors	MAD039322250	CH64862	475	0.2375
12/30/2005	86172	N/A	HEPA Filters	Clean Harbors	MAD039322250	CH64862	728	0.364
2/4/2005	N/A	58454	Kitchen Grease	Clean Harbors	MAD039322250	CH66105	432	0.216
11/4/2005	NYG2323161	N/A	Kitchen Grease	Clean Harbors	MAD039322250	CH66105	471	0.2355
6/21/2005	N/A	63448	Non DOT Regulated Material (Organic Binder Solutions)	Clean Harbors	MAD039322250	CH66106	3,107	1.5535
01/03/05	CT F1172669	N/A	Non DOT Regulated Material, Ceramic Oxide	Clean Harbors	MAD039322250	CH82414		
01/20/05	CTF 1172680	N/A	Non DOT Regulated Material, Ceramic Oxide	Clean Harbors	MAD039322250	CH82414		
2/24/2005	CTF 1172711	N/A	Non DOT Regulated Material, Ceramic Oxide	Clean Harbors	MAD039322250	CH82414BB		
3/11/2005	CTF 1172720	N/A	Non DOT Regulated Material, Ceramic Oxide	Clean Harbors	MAD039322250	CH82414BB		
3/23/2005	CTF 1172733	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		

4/8/2005	CTF 1172754	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
4/20/2005	CTF 1172778	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
5/4/2005	CTF 1172783	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb	1,000	
5/17/2005	CTF1239400	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
5/31/2005	CTF 1239398	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
6/23/2005	CTF 1239399	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
7/13/2005	CTF 1239360	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
7/13/2005	CTF 1239360	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
7/25/2005	CTF 1172785	N/A	Material (Water, Sludge)	Clean Harbors	MAD039322250	CH82414bb		
8/8/2005	CTF 1239351	N/A	Non DOT Regulated Material (Ceramic Oxide)	Clean Harbors	MAD039322250	CH82414bb		
8/30/2005	CTF 1149223	N/A	Non DOT Regulated Material (Ceramic	Clean Harbors	MAD039322250	CH82414bb		
9/16/2005	CTF 1149225	N/A	Non DOT Regulated Material (Ceramic	Clean Harbors	MAD039322250	CH82414bb		
10/31/2005	CTF 1149233	N/A	Ceramic Oxide	Clean Harbors	MAD039322250	CH82414bb		
11/16/2005	CTF 1149241	N/A	Ceramic Oxide	Clean Harbors	MAD039322250	CH82414BB	12,367	6.1835
12/5/2005	CTF 1149242	N/A	Ceramic Oxide	Clean Harbors	MAD039322250	CH82414BB	5,199	2.5995
12/27/2005	CTF 1148488	N/A	Ceramic Oxide	Clean Harbors	MAD039322250	CH82414BB	10,014	5.007

2/4/2005	N/A	58455	Metal oxides	Clean Harbors	MAD039322250	CH83772	3,636	1.818
02/01/05	CTF 1172590	N/A	Non DOT Regulated Material	Clean Harbors	MAD039322250	CH83772B		
01/07/05	N/A	62978	Universal Waste Light Bulbs	Clean Harbors	MAD039322250	CHCFL1-63	12	0.006
2/4/2005	N/A	58454	Universal Waste Light Bulbs	Clean Harbors	MAD039322250	CHCFL1-63	40	0.02
4/1/2005	N/A	58580	Non DOT Regulated Material (Univeral Waste Light Tubes)	Clean Harbors	MAD039322250	CHCFL1-63	44	0.022
4/28/2005	N/A	144678	Non DOT Regulated Material (Univeral Waste Light Tubes)	Clean Harbors	MAD039322250	CHCFL1-63	63	0.0315
8/15/2005	N/A	63425	Non DOT Regulated Material (Univeral Waste Light Tubes)	Clean Harbors	MAD039322250	CHCFL1-63	33	0.0165
9/20/2005	N/A	63483	Material (Univeral Waste Light Tubes)	Clean Harbors	MAD039322250	CHCFL1-63	10	0.005
10/7/2005	N/A	145006	Material (Univeral	Clean Harbors	MAD039322250	CHCFL1-63	43	0.0215
11/18/2005	145092	N/A	Univeral Waste Light Tubes	Clean Harbors	MAD039322250	CHCFL1-63	83	0.0415
12/30/2005	86172	N/A	Univeral Waste Light Tubes	Clean Harbors	MAD039322250	CHCFL1-63	15	0.0075
01/07/05	N/A	62978	Mercury containing bulbs	Clean Harbors	MAD039322250	CHCFL2-48	3	0.0015
4/28/2005	N/A	144678	Universal Waste Light Bulbs	Clean Harbors	MAD039322250	CHCFL2-48	7	0.0035
8/15/2005	N/A	63425	Universal Waste (Mercury containing Bulbs)	Clean Harbors	MAD039322250	CHCFL2-48	1	0.0005
12/22/2005	Z158989	N/A	Empty Totes	Onyx	NJD080631369	N/A	1,500	0.75
5/23/2005	N/A	63352	NON DOT Regulated Material (HEPA Filters)	Clean Harbors	MAD039322250	NJD#CH07259	696	0.348
6/16/2006	Z134867	N/A	Material for Recycling	Onyx	NJD080631369	ON372925	3,693	1.8465

11/16/2005	Z135159	N/A	Non Hazardous Material (General Exhaust)	Onyx	NJD080631369	WIP372925	41,250	20.625
11/17/2005	Z135160	N/A	Non Hazardous Material (General Exhaust)	Onyx	NJD080631369	WIP372925	40,900	20.45
12/22/2005	Z158989	N/A	Non Hazardous Material (General Exhaust)	Onyx	NJD080631369	WIP372925	8,200	4.1
10/3/2005	Z 135059	N/A	Non Hazardous Material (General Exhaust)	Onyx	NJD980536593	WIP372925	37,881	18.9405
10/7/2005	N/A	Z135058	Non Hazardous Material (General Exhaust)	Onyx	NJD980536593	WIP372925	32,125	16.0625
							164,049	
10/7/2005	N/A	Z135058	Non Hazardous Material (Spent Filter Cartridges)	Onyx	NJD980536593	WIP640421	968	0.484
10/7/2005	N/A	Z135058	Non Hazardous Material (Spent Filter Cartridges/Debris)	Onyx	NJD980536593	WIP640421	388	0.194
							1,356	
			Washwater to Clean Harbors*				289,090	
			Washwater to DuPont*				23,070	

TRI FACILITY ID: 11590-PRKNL-1101P
DATE: 12/13/93

PERKIN-ELMER CORP. METCO DIV.
1101 PROSPECT AVE.
WESTBURY, NY 11590

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-92-06547390-8-NY	CHROMIUM	007440-47-3

5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	48
5.3.A	Discharges to water bodies NA	NA
5.3.B	Discharges to water bodies NA	NA
5.3.C	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI JO SCRAP METAL	500 - 999
6.2.02	Transfer to other off-site	NA
6.1.A	Total quantity transferred to POTWs	NA
8.1.A	Quantity released	0
8.1.B	Quantity released	0
8.1.C	quantity released	0
8.1.D	Quantity released	0
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	180
8.5.B	Quantity recycled off-site	830
8.5.C	Quantity recycled off-site	840
8.5.D	Quantity recycled off-site	840
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.95

HAZARD NOTICE: This material is for the thermal spraying process. Consult the METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.
Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.
Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.
2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.
Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning and stinging.
Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.
Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.
Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.
Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney dysfunction.
Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.
Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.
Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1-800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120°F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
	** Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 36°F
UN1263 PAINT
WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

HAZARD NOTICE: This material is for the thermal spraying process. Consult the METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Isobutyl Acetate: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause irritation of the respiratory tract, skin and eyes.
Ethyl Benzene: Hazard by inhalation, skin and eye contact. Inhalation, skin and eye contact may cause severe irritation of the upper respiratory tract, skin and eyes.
Toluene: Hazard by inhalation, skin absorption and eye contact. Inhalation may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation and insomnia. Chronic exposure may cause leukopenia/enlarged liver. Skin contact may cause dermatitis and contribute to overall exposure. Eye contact may cause irritation.
2 Butoxyethanol: Hazard by inhalation, skin and eye contact. Inhalation may cause upper respiratory tract irritation, reproductive effects and anemia. Skin and eye contact may cause irritation.
Denatured Ethyl Alcohol: Hazard by inhalation, ingestion, skin absorption/contact, eye contact. Acute/chronic inhalation may cause irritation of the upper respiratory tract/coughing, central nervous system depression resulting in headache, dizziness and drowsiness. Skin contact may result in redness, burning and defatting. Ingestion may result in severe narcosis and chronic ingestion may result in degenerative changes in the liver, kidney, brain. Eye contact may cause burning and stinging.
Isopropyl Alcohol: Hazard by inhalation, skin and eye contact. Eye/skin contact may cause mild irritation of the eyes/skin. Inhalation may cause mucous membrane irritation, drowsiness, dizziness, headache.
Aluminum: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritant due to abrasive action.
Petroleum Solvent: Hazard by inhalation, skin and eye contact. Inhalation may cause headache, intoxication and nausea. Skin and eye contact may cause irritation and dermatitis.
Xylene: Hazard by inhalation, skin absorption, eye contact and ingestion. Inhalation may cause dizziness, excitement, drowsiness, incoherence, irritated eyes and mucous membranes. Eye contact may cause corneal damage and irritation. Skin contact may cause dermatitis and irritation. Chronic inhalation exposure may cause liver or kidney dysfunction.
Methyl Ethyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause dizziness, headache, narcosis and drowsiness. Eye/skin contact may be strongly irritating.
Diacetone Alcohol: Hazard by inhalation, skin and eye contact. Inhalation may cause intoxication, headache, nausea and nose/throat irritation. Skin and eye contact may cause irritation.
Target Organs: Respiratory tract, Central nervous system, Peripheral nervous system, blood forming organs, reproductive organs, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam) designed to extinguish NFPA Class 1B flammable liquid fires.
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed container may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible auto-ignition or explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical static or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.

IN CASE OF SPILL
CALL CHEMTREC - DAY OR NIGHT
1-800-424-9300

Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.

Special Precautions:
Precautions to be Taken in Handling and Storing: Do not store above 120°F.
Other Precautions: Do not take internally. Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of in accordance with local, State and Federal regulations.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH**	3
	** Note: If an asterisk is present, see section 2 and 8 of the MSDS for further information.
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 36°F
UN1263 PAINT
WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

Form Approved OMB No 2070-0093
Approval Expires 01/91
Page 1 of 5

(Important: Type or print; read instructions before completing form.)

U.S. Environmental Protection Agency

EPA

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

EPA FORM **R**

Section 313, Title III of The Superfund Amendments and Reauthorization Act of 1986

(This space for EPA use only)

PART I. FACILITY IDENTIFICATION INFORMATION

1. 1.1 Does this report contain trade secret information? ☐ Yes (Answer 1.2) ☒ No (Do not answer 1.2)
1.2 Is this a sanitized copy? ☐ Yes ☒ No
1.3 Reporting Year: 1988

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Patrick A. Tighe, Superintendent, Facilities

Signature: Patrick A. Tighe

Date signed: June 29, 1989

3. FACILITY IDENTIFICATION

3.1 Facility or Establishment Name: METCO DIVISION PERKIN-ELMER CORPORATION
Street Address: 1101 Prospect Avenue
City: Westbury
County: Nassau
State: New York
Zip Code: 11519-

3.2 This report contains information for: (check one)
a. ☐ An entire covered facility.
b. ☒ Part of a covered facility.

3.3 Technical Contact: Patrick A. Tighe
Telephone Number (include area code): (516) 334-1300 Ext. 495

3.4 Public Contact: Same as 3.3
Telephone Number (include area code): ( ) -

3.5 a. SIC Code: 3542
b.
c.

3.6 Latitude: Deg. 07 Min. 50 Sec. 90
Longitude: Deg. 02 Min. 75 Sec. 31.6

3.7 Dun & Bradstreet Number(s)
a. 05-771-1663
b. - -

3.8 EPA Identification Number (RCRA I.D. No.)
a. NYD113118651
b.

3.9 NPDES Permit Number(s)
a.
b.

Where to send completed forms:

U.S. Environmental Protection Agency
P.O. Box 70266
Washington, DC 20024-0266
Attn: Toxic Chemical Release Inventory

3.10 Name of Receiving Stream(s) or Water Body(s)
a. N/A
b.
c.

3.11 Underground Injection Well Code (UIC) Identification No.
N/A

4. PARENT COMPANY INFORMATION

4.1 Name of Parent Company: Perkin-Elmer Corp.

4.2 Parent Company's Dun & Bradstreet No.: 00-118-4410

(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

1. PUBLICLY OWNED TREATMENT WORKS (POTW)

Facility Name: N/A

Street Address:

City: | County:

State: | Zip:

2. OTHER OFF-SITE LOCATIONS - Number these locations sequentially on this and any additional page of this form you use

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name:

Street Address:

City: | County:

State: | Zip:

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name:

Street Address:

City: | County:

State: | Zip:

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Other off-site location

EPA Identification Number (RCRA ID. No.)

Facility Name:

Street Address:

City: | County:

State: | Zip:

Is location under control of reporting facility or parent company? ☐ Yes ☐ No

☐ Check if additional pages of Part II are attached.

(Important: Type or print; read instructions before completing form.)

(This space for EPA use only.)

EPA FORM R
PART III. CHEMICAL SPECIFIC INFORMATION

1. CHEMICAL IDENTITY

1.1	☐ Trade Secret (Provide a generic name in 1.4 below. Attach substantiation form to this submission.)
1.2	CAS # 0 0 7 4 4 0 - 4 8 - 4 (Use leading zeros if CAS number does not fill space provided.)
1.3	Chemical or Chemical Category Name: COBALT POWDER
1.4	Generic Chemical Name (Complete only if 1.1 is checked.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you have completed Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation))

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture:	a. ☐ Produce	b. ☐ Import	c. ☐ For on-site use/processing
		d. ☒ For sale/distribution	e. ☐ As a byproduct	f. ☐ As an impurity
3.2	Process:	a. ☐ As a reactant	b. ☐ As a formulation component	c. ☐ As an article component
		d. ☐ Repackaging only		
3.3	Otherwise Used:	a. ☐ As a chemical processing aid	b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON SITE AT ANY TIME DURING THE CALENDAR YEAR

Ø 3 (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT

You may report releases of less than 1,000 lbs. by checking ranges under A.1.		A. Total Release (lbs/yr) A.1 Reporting Ranges 0	1–499	500–999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a	0.0				5.1b ☐	
5.2 Stack or point air emissions	5.2a	0.0				5.2b ☐	
5.3 Discharges to water (Enter letter code from Part I Section 3.10 for streams(s).) 5.3.1 ☐	5.3.1a	N/A				5.3.1b ☐	5.3.1c
5.3.2 ☐	5.3.2a	N/A				5.3.2b ☐	5.3.2c
5.3.3 ☐	5.3.3a	N/A				5.3.3b ☐	5.3.3c
5.4 Underground Injection	5.4a	N/A				5.4b ☐	
5.5 Releases to land 5.5.1 ☐☐☐ (enter code)	5.5.1a	N/A				5.5.1b ☐	
5.5.2 ☐☐☐ (enter code)	5.5.2a					5.5.2b ☐	
5.5.3 ☐☐☐ (enter code)	5.5.3a					5.5.3b ☐	

☐ (Check if additional information is provided on Part IV-Supplemental Information.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 lbs. by checking ranges under A.1.	A. Total Transfers (lbs/yr)				B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
	A.1 Reporting Ranges			A.2 Enter Estimate		
	0	1-499	500-999			
6.1 Discharge to POTW		N/A			6.1b	
6.2 Other off-site location (Enter block number from Part II, Section 2.)		N/A			6.2b	6.2c
6.3 Other off-site location (Enter block number from Part II, Section 2.)		N/A			6.3b	6.3c
6.4 Other off-site location (Enter block number from Part II, Section 2.)		N/A			6.4b	6.4c

(Check if additional information is provided on Part IV-Supplemental Information)

7. WASTE TREATMENT METHODS AND EFFICIENCY

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a N/A	7.1b	7.1c	7.1d	7.1e %	7.1f	
7.2a	7.2b	7.2c	7.2d	7.2e %	7.2f	
7.3a	7.3b	7.3c	7.3d	7.3e %	7.3f	
7.4a	7.4b	7.4c	7.4d	7.4e %	7.4f	
7.5a	7.5b	7.5c	7.5d	7.5e %	7.5f	
7.6a	7.6b	7.6c	7.6d	7.6e %	7.6f	
7.7a	7.7b	7.7c	7.7d	7.7e %	7.7f	
7.8a	7.8b	7.8c	7.8d	7.8e %	7.8f	
7.9a	7.9b	7.9c	7.9d	7.9e %	7.9f	
7.10a	7.10b	7.10c	7.10d	7.10e %	7.10f	
7.11a	7.11b	7.11c	7.11d	7.11e %	7.11f	
7.12a	7.12b	7.12c	7.12d	7.12e %	7.12f	
7.13a	7.13b	7.13c	7.13d	7.13e %	7.13f	
7.14a	7.14b	7.14c	7.14d	7.14e %	7.14f	

(Check if additional information is provided on Part IV-Supplemental Information.)

8. OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of modification (enter code)	B. Quantity of the chemical in the wastestream prior to treatment/disposal			C. Index	D. Reason for action (enter code)
	Current reporting year (lbs/yr)	Prior year (lbs/yr)	Or percent change		
			%		

(Important: Type or print, read instructions before completing form.)

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Parts I and III. Number or letter this information sequentially from prior sections (e.g., D,E, F, or 5.54, 5.55).

(This space for EPA use only.)

ADDITIONAL INFORMATION ON FACILITY IDENTIFICATION (Part I - Section 3)

3.5	SIC Code		
3.7	Dun & Bradstreet Number(s)		
3.8	EPA Identification Number(s) RCRA I.D. No.)		
3.9	NPDES Permit Number(s)		
3.10	Name of Receiving Stream(s) or Water Body(s)		

ADDITIONAL INFORMATION ON RELEASES TO LAND (Part III - Section 5.5)

Releases to Land	A. Total Release (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)
5.5___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b
5.5___ (enter code)	5.5___a					5.5___b

ADDITIONAL INFORMATION ON OFF-SITE TRANSFER (Part III - Section 6)

	A. Total Transfers (lbs/yr)	A.1 Reporting Ranges 0	1-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.___ Discharge to POTW	6.___a					6.___b	
6.___ Other off-site location (Enter block number from Part II, Section 2.)	6.___a					6.___b	6.___c.
6.___ Other off-site location (Enter block number from Part II Section 2.)	6.___a					6.___b	6.___c.

ADDITIONAL INFORMATION ON WASTE TREATMENT (Part III - Section 7)

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	
7.___a	7.___b	7.___c	7.___d	7.___e %	7.___f	

Facility Reporting: Notifying Under Section 302

POLICY GUIDE

Facilities that use extremely hazardous substances or chemicals may be subject to Section 302 of the Emergency Planning and Community Right-To-Know Act. The EHS chemical list includes a threshold planning quantity for each substance. If this amount is present at any manufacturing plant, warehouse, hospital, farm, small business, or other facility, the owner or operator must notify the state emergency response commission. This lets planners know what hazardous chemicals are being used and stored in your community.

Failure to comply with this provision could lead to penalties of up to $25,000 a day for each day the violation continues.

With the exception of federal facilities, businesses were required to provide Section 302 notifications **by May 17, 1987, or within 60 days** after the facility first begins handling an extremely hazardous substance in excess of its TPQ.

APPLICATION OF POLICY

How To Notify

Notification should be in writing, and should specify the name and an accurate street address (not post office box number) of the facility. (See p. 591:1001 for the names and addresses of the state emergency response commissioners.) You do not have to notify the Environmental Protection Agency or the local committee. This initial notification is required to be made only to the state emergency response commission. EPA, however, has requested that the state commissions notify the appropriate EPA federal regional offices of the names and addresses of the facilities providing notification.

Following that initial notification, however, if EPA makes additions to the EHS list, companies must notify the SERC and the local emergency planning if they have a reportable quantity of the newly listed substance. That notification must be made within 60 days of EPA's listing.

Businesses also must provide dual-notification within 60 days after they first begin handling the EHS in excess of its threshold planning quantity.

Facilities that are covered by the law, because they have a listed chemical in sufficient quantity, but fail to notify their state commission face the possibility of substantial fines (See p. 551:4001 for a rundown of the penalties for non-compliance.)

Calculating the Threshold Planning Quantity

To determine whether a facility has a reportable amount of an extremely hazardous substance that equals or exceeds the threshold planning quantity, the facility owner or operator must determine the total amount of the substance present **at any one time.**

Storage of the substance at several different areas of the same facility, the method of storage of the substance, or the number of containers the substance is stored in does not matter in making this determination. **The factor that determines whether the threshold planning quantity is met is the total amount of the substance present.**

Calculating TPQs for Mixtures

Note: EPA says that if a facility produces, uses, or stores mixtures "knows or reasonably should know" the components of a mixture (and at least one of those components is covered), they must notify the state commission and participate in local emergency planning. However, EPA says the facility is not obligated to ask the manufacturer about a mixture's components.

To determine whether a sufficient amount to meet or exceed the TPQ for a listed substance is present, special attention should be given to mixtures. EPA adopted the so-called **1 percent de minimis limit** of the extremely hazardous substance in mixtures, solutions, or formulations for determining quantities applicable to the threshold planning quantities.

What this means is that at concentrations of less than 1 percent in a mixture, calculations are not necessary to determine if the total amount of the hazardous substance meets the emergency planning TPQ.

EXAMPLE: If the threshold planning quantity for a chemical on the list is 100 pounds and that chemical is 2 percent by weight of a mixture, notification would be necessary if 5,000 pounds or more of that mixture is present at a facility.

Note: *Alloys, amalgams, or polymers are not considered mixtures by EPA for the purpose of TPQ*

Copyright © 1991 by The Bureau of National Affairs, Inc.
0-87179-939-1/91/$0+.50

calculation to determine emergency planning eligibility. Also do not to confuse the emergency planning notification requirements with the emergency release notification requirement. There is no de minimis quantity under either Section 103 of the Superfund law (CERCLA) or EPCRA Section 304 (emergency release notification). When determining if notification is required for a release of mixtures and solutions containing extremely hazardous substances or hazardous substances, EPA applies the weight percent calculations as illustrated in the example in this section. See p. 511:1151 of this guide for mixture rule under Section 103 of the Superfund law.

Calculating the TPQ for Solids

Extremely hazardous substances that are solids are subject to either of two threshold planning quantities, 10,000 pounds or 500 pounds as shown in the table of substances found in **Section 531:3001** of this guide. The lower quantity applies only if the solid exists in powdered form, and has a particle size of less than 100 microns; or is handled in solution or in molten form; or meets the criteria for a National Fire Protection Association (NFPA) rating of 2, 3, or 4 for reactivity. If the solid does not meet any of the above criteria, it is subject to the 10,000 pound threshold.

You can determine the 100 micron level by multiplying the weight percent of solid with a particle size less than 100 microns in a particular container by the quantity of solid in the container.

You can determine the amount of solid in solution by multiplying the weight percent of solid in solution in a particular container by the quantity of solution in the container.

The amount of solid in molten form must be multiplied by 0.3 to find out if the lower threshold planning quantity is met.

Facility Emergency Coordinator

Facilities that meet the criteria outlined above, in addition to informing the state emergency response commission of this fact, also must designate a facility representative to work with the local emergency planning committee. The company must notify the local planning committee of the designation of the facility representative.

Providing Information To The Committees

The law gives broad information gathering powers to the local committees. The owner or operator of a facility is responsible for informing the local planning committee of any changes occurring at the site that might be relevant to emergency planning. The determination of what is relevant rests with the facility owner or operator. Furthermore, the owner or operator, at the request of the local emergency planning committee, must promptly provide the local committee with any information necessary to develop or carry out the local emergency plan.

0-87179-939-1/91/$0+.50

Section 3.2 Determining When Reporting of Releases and Other Waste Management Quantities for the Qualified Alloys is Required

Where Am I: Lead and Lead Compounds Guidance Document

As discussed above, there is only one reporting threshold for lead compounds, and that is 100 pounds. Hence, a facility that either manufactures, processes or otherwise uses more than 100 pounds annually of a single lead compound, or more than one lead compound, will have to report releases and other waste management quantities of the lead contained in the lead compound(s). For lead metal (Pb0), there are three reporting thresholds: 25,000 pounds; 10,000 pounds; and 100 pounds, that pertain to the manufacture, processing or otherwise use of this chemical. A facility must file an EPCRA section 313 report if it manufactures, processes, or otherwise uses more than 100 pounds of lead (not contained in stainless steel, brass, or bronze alloy) during the calendar year. For lead contained in stainless steel, brass or bronze alloy the 25,000 pound threshold for manufacturing and processing, and the 10,000 pound threshold for otherwise use, is applied. As illustrated in Figure 3-1, facilities that manufacture, process, or otherwise use lead and stainless steel, brass, or bronze alloys that contain lead must apply all quantities of lead (regardless of whether they are in an alloy) to the 25,000 pound threshold for manufacturing and processing or the 10,000 pound threshold for otherwise use. When conducting threshold evaluations a facility must consider the amount of lead not in stainless steel, brass, or bronze alloys toward both the 100 pound threshold AND the 25,000 and 10,000 pound thresholds (see Figure 3-1). Of course, facilities that manufacture, process, or otherwise use lead only when it is not contained in any of the qualified alloys would only have to consider the 100 pound threshold.

Thus, the qualification for lead contained in stainless steel, brass or bronze alloys creates three potential scenarios for facilities that may manufacture, process, or otherwise use lead as well as stainless steel, brass or bronze alloys that contain lead: 1) all lead is in forms other than stainless steel, brass, or bronze alloy; 2) all lead is in stainless steel, brass, or bronze alloy; and 3) some lead is in stainless steel, brass, or bronze alloy and some is not; i.e., some lead may be manufactured, processed, or otherwise used elsewhere at the facility. Table 3-3 summarizes what a facility needs to consider in determining whether they need to report releases and other waste management quantities under each of these scenarios and, if reporting is required, what options the facility has in filing reports. Table 3-3 refers to the following three **variables**: 1) Form A Certification Statement; 2) range reporting for Sections 5 and 6 of Part II of the Form R; and 3) *de minimis* exemption. These variables, as well as their applicability, are discussed in Chapter 1, Section 1.3. Additional details on these variables can be found in the "Toxic Chemical Release Inventory Reporting Forms & Instructions" package, which is published annually by EPA and can be obtained from the Internet at http://www.epa.gov/tri.

Example 5 demonstrates some of the points described in the above threshold determination scenarios. Other examples are included in Appendix B, which presents a series of questions and answers regarding the reporting of lead and lead compounds. The first part of Appendix B repeats selected questions and answers about EPCRA section 313 reporting of metal and metal compounds that have been published elsewhere (1), while the second part of Appendix B presents questions and answers received by the Agency since the promulgation of the lead rule that are specific to the reporting of lead and lead compounds and that have not yet been published elsewhere.

It is important to note that if a facility exceeds the 100 pound threshold for lead not contained in stainless steel, brass, or bronze alloys, they must complete a Form R. Keep in mind that the *de minimis* exemption may apply when estimating the amounts of release and otherwise managed quantities associated with the lead in the qualified alloys. Clarification on "melting" qualified alloys is presented in Part 2 of Appendix B, Q&A 6.

Brief Overview of Lead and Lead Compounds Reporting Requirements

Where am I: More on Topics Document

For TRI reporting purposes, lead and lead compounds are listed separately and therefore, facilities should perform separate threshold determinations for lead and lead compounds.

The lead compounds category is subject to a 100 pound threshold for manufacturing, a 100 pound threshold for processing, and a 100 pound threshold for otherwise use of all lead compounds undergoing threshold activities at the facility. The *de minimis* exemption, Form A certification statements, and range reporting for sections 5 and 6 of Part II of the Form R may not be considered for lead compounds.

Further, for lead compounds, if a facility's release or other waste management estimates support reporting an amount that is more precise than whole numbers and two significant digits, then the facility should report that more precise amount.

In selecting lead for reporting make sure you understand that all non-exempt quantities of lead (e.g., lead not eligible for some exemption such as the structural component exemption) at your facility should be counted toward the appropriate 25,000/10,000-pound threshold. Those non-exempt quantities of lead at your facility that are not in stainless steel, brass, or bronze alloy should also be considered toward the appropriate 100-pound threshold.

As for the *de minimis* exemption, you may consider this exemption for quantities of lead in stainless steel, brass, or bronze alloy. However, the *de minimis* exemption may NOT be considered for quantities of lead not in stainless steel, brass, or bronze alloy.

If you have exceeded the 25,000/10,000-pound threshold for lead, all non-exempt amounts of lead (both in stainless steel, brass, and bronze alloy and not in stainless steel, brass, and bronze alloy) need to be reported.

If you have exceeded the 100-pound threshold for lead:

1) You may not submit a Form A for lead.
2) You may not use range codes for Part II, Section 5 (Quantity of the toxic chemical entering each environmental medium onsite) and Section 6 (Transfers of the toxic chemical in wastes to off-site locations) of your Form R for lead.
3) You should report release estimates and other waste management quantities to the level of accuracy that your data supports. TRI-ME allows estimates up to a maximum precision of seven (7) digits to the right of the decimal.

If you have exceeded the 100-pound threshold for lead not in stainless steel, brass, or bronze alloy, but have NOT also exceeded the 25,000/10,000-pound threshold for all non-exempt lead at your facility, including the lead not in stainless steel, brass, and bronze alloy, only non-exempt amounts of lead not in stainless steel, brass, and bronze alloy need to be reported.

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Aluminum Powder

WHERE TO SEND COMPLETED FORMS:

1. EPCRA Reporting Center
   P.O. Box 3348
   Merrifield, VA 22116-3348
   ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?

[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: J Macri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Metco Division Perkin-Elmer Corporation

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address): 1101 Prospect Avenue

City: Westbury

State: New York

Zip Code: 11590

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: Joe Macri	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.

4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	47	00

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663	b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570	b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A	b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7429-90-5
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Aluminum (fume or dust)
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing d. [ ] For sale/distribution e. [ ] As a byproduct f. [ ] As an impurity
3.2	Process the toxic chemical:	a. [ ] As a reactant b. [ ] As a formulation component	c. [X] As an article component d. [X] Repackaging
3.3	Otherwise use the toxic chemical:	a. [ ] As a chemical processing aid b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name N/A				
5.3.2	Stream or Water Body Name N/A				
5.3.3	Stream or Water Body Name N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3 Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pound
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Aluminum Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 6100	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounds; C = 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Aluminum Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Chemical, Category, or Generic Name
Aluminum Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	1800	6100	6200	6200
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10	Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.			
	Source Reduction Activities [enter code(s)]	Methods to identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)	YES	NO
			X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: N/A
2. Page 1 of 1
3. Emergency Response Phone: (410) 377-3742
4. Manifest Tracking Number: 001251044 JJK

GENERATOR

5. Generator's Name and Mailing Address: SULZER METCO (US) 1101 PROSPECT AVE. WESTBURY, NY 11590
Generator's Site Address (if different than mailing address)
Generator's Phone: (516) 338-2331

6. Transporter 1 Company Name: BEDROCK, DBA, TRI-STATE MOTOR TRANSIT
U.S. EPA ID Number: MOD 095 038 995

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
U.S. EPA ID Number: TXD 988 088 464
Facility's Phone:

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes		
	1. RADIOACTIVE MATERIAL, EXCEPTED PACKAGE, LIMITED QUANTITY OF MATERIAL, 7, UN 2910	46	DM	6,192	K	NONE		
	2.							
	3.							
	4.							

14. Special Handling Instructions and Additional Information: NRC MANIFEST SM 71203-02

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

U.S. EPA Form 8700-22

Read all instructions before completing this form.

1. This form has been designed for use on a 12-pitch (elite) typewriter which is also compatible with standard computer printers; a firm point pen may also be used—press down hard.
2. Federal regulations require generators and transporters of hazardous waste and owners or operators of hazardous waste treatment, storage, and disposal facilities to complete this form (EPA Form 8700–22) and, if necessary, the continuation sheet (EPA Form 8700–22A) for both inter- and intrastate transportation of hazardous waste.

Public reporting burden for this collection of information is estimated to average: 30 minutes for generators, 10 minutes for transporters, and 25 minutes for owners or operators of treatment, storage, and disposal facilities. This includes time for reviewing instructions, gathering data, completing, reviewing and transmitting the form. Any correspondence regarding the PRA burden statement for the manifest must be sent to the Director of the Collection Strategies Division in EPA's Office of Information Collection at the following address: U.S. Environmental Protection Agency (2822T), 1200 Pennsylvania Ave., NW., Washington, DC 20460. Do not send the completed form to this address.

I. Instructions for Generators

Item 1. Generator's U.S. EPA Identification Number

Enter the generator's U.S. EPA twelve digit identification number, or the State generator identification number if the generator site does not have an EPA identification number.

Item 2. Page 1 of ___

Enter the total number of pages used to complete this Manifest (*i.e.*, the first page (EPA Form 8700-22) plus the number of Continuation Sheets (EPA Form 8700-22A), if any).

Item 3. Emergency Response Phone Number

Enter a phone number for which emergency response information can be obtained in the event of an incident during transportation. The emergency response phone number must:

1. Be the number of the generator or the number of an agency or organization who is capable of and accepts responsibility for providing detailed information about the shipment;
2. Reach a phone that is monitored 24 hours a day at all times the waste is in transportation (including transportation related storage); and
3. Reach someone who is either knowledgeable of the hazardous waste being shipped and has comprehensive emergency response and spill cleanup/incident mitigation information for the material being shipped or has immediate access to a person who has that knowledge and information about the shipment.

Note: Emergency Response phone number information should only be entered in Item 3 when there is one phone number that applies to all the waste materials described in Item 9b. If a situation (*e.g.*, consolidated shipments) arises where more than one Emergency Response phone number applies to the various wastes listed on the manifest, the phone numbers associated with each specific material should be entered after its description in Item 9b.

Item 4. Manifest Tracking Number

This unique tracking number must be pre-printed on the manifest by the forms printer.

Item 5. Generator's Mailing Address, Phone Number and Site Address

Enter the name of the generator, the mailing address to which the completed manifest signed by the designated facility should be mailed, and the generator's telephone number. Note, the telephone number (including area code) should be the normal business number for the generator, or the number where the generator or his authorized agent may be reached to provide instructions in the event the designated and/or alternate (if any) facility rejects some or all of the shipment. Also enter the physical site address from which the shipment originates only if this address is different than the mailing address.

Item 6. Transporter 1 Company Name, and U.S. EPA ID Number

Enter the company name and U.S. EPA ID number of the first transporter who will transport the waste. Vehicle or driver information may not be entered here.

Item 7. Transporter 2 Company Name and U.S. EPA ID Number

If applicable, enter the company name and U.S. EPA ID number of the second transporter who will transport the waste. Vehicle or driver information may not be entered here.

If more than two transporters are needed, use a Continuation Sheet(s) (EPA Form 8700-22A).

Item 8. Designated Facility Name, Site Address, and U.S. EPA ID Number

Enter the company name and site address of the facility designated to receive the waste listed on this manifest. Also enter the facility's phone number and the U.S. EPA twelve digit identification number of the facility.

Item 9. U.S. DOT Description (Including Proper Shipping Name, Hazard Class or Division, Identification Number, and Packing Group)

Item 9a. If the wastes identified in Item 9b consist of both hazardous and nonhazardous materials, then identify the hazardous materials by entering an "X" in this Item next to the corresponding hazardous material identified in Item 9b.

Item 9b. Enter the U.S. DOT Proper Shipping Name, Hazard Class or Division, Identification Number (UN/NA) and Packing Group for each waste as identified in 49 CFR 172. Include technical name(s) and reportable quantity references, if applicable.

Note: If additional space is needed for waste descriptions, enter these additional descriptions in Item 27 on the Continuation Sheet (EPA Form 8700-22A). Also, if more than one Emergency Response phone number applies to the various wastes described in either Item 9b or Item 27, enter applicable Emergency Response phone numbers immediately following the shipping descriptions for those Items.

Item 10. Containers (Number and Type)

Enter the number of containers for each waste and the appropriate abbreviation from Table I (below) for the type of container.

TABLE I.--TYPES OF CONTAINERS

BA = Burlap, cloth, paper, or plastic bags.	DT = Dump truck.
CF = Fiber or plastic boxes, cartons, cases.	DW = Wooden drums, barrels, kegs.
CM = Metal boxes, cartons, cases (including roll-offs).	HG = Hopper or gondola cars.
CW = Wooden boxes, cartons, cases.	TC = Tank cars.
CY = Cylinders.	TP = Portable tanks.
DF = Fiberboard or plastic drums, barrels, kegs.	TT = Cargo tanks (tank trucks).
DM = Metal drums, barrels, kegs.	

Item 11. Total Quantity

Enter, in designated boxes, the total quantity of waste. Round partial units to the nearest whole unit, and *do not* enter decimals or fractions. To the extent practical, report quantities using appropriate units of measure that will allow you to report quantities with precision. Waste quantities entered should be based on actual measurements or reasonably accurate estimates of actual quantities shipped. Container capacities are not acceptable as estimates.

Item 12. Units of Measure (Weight/Volume)

Enter, in designated boxes, the appropriate abbreviation from Table II (below) for the unit of measure.

TABLE II.–UNITS OF MEASURE

G = Gallons (liquids only).	N = Cubic Meters.
K = Kilograms.	P = Pounds.
L = Liters (liquids only).	T = Tons (2000 Pounds).
M = Metric Tons (1000 kilograms).	Y = Cubic Yards.

Note: Tons, Metric Tons, Cubic Meters, and Cubic Yards should only be reported in connection with very large bulk shipments, such as rail cars, tank trucks, or barges.

Item 13. Waste Codes

Enter up to six federal and state waste codes to describe each waste stream identified in Item 9b. State waste codes that are not redundant with federal codes must be entered here, in addition to the federal waste codes which are most representative of the properties of the waste.

Item 14. Special Handling Instructions and Additional Information

1. Generators may enter any special handling or shipment-specific information necessary for the proper management or tracking of the materials under the generator's or other handler's business processes, such as waste profile numbers, container codes, bar codes, or response guide numbers. Generators also may use this space to enter additional descriptive information about their shipped materials, such as chemical names, constituent percentages, physical state, or specific gravity of wastes identified with volume units in Item 12.
2. This space may be used to record limited types of federally required information for which there is no specific space provided on the manifest, including any alternate facility designations; the manifest tracking number of the original manifest for rejected wastes and residues that are re-shipped under a second manifest; and the specification of PCB waste descriptions and PCB out-of-service dates required under 40 CFR 761.207. Generators, however, cannot be required to enter information in this space to meet state regulatory requirements.

Item 15. Generator's/Offeror's Certifications

1. The generator must read, sign, and date the waste minimization certification statement. In signing the waste minimization certification statement, those generators who have not been exempted by statute or regulation from the duty to make a waste minimization certification under section 3002(b) of RCRA are also certifying that they have complied with the waste minimization requirements. The Generator's Certification also contains the required attestation that the shipment has been properly prepared and is in proper condition for transportation (the shipper's certification). The content of the shipper's certification statement is as follows: "I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent." When a party other than the generator prepares the shipment for transportation, this party may also sign the shipper's certification statement as the offeror of the shipment.
2. Generator or Offeror personnel may preprint the words, "On behalf of" in the signature block or may hand write this statement in the signature block prior to signing the generator/offeror certification, to indicate that the individual signs as the employee or agent of the named principal.

Note: All of the above information except the handwritten signature required in Item 15 may be pre-printed.

APPROVED BY OMB: NO. 3150-0164
EXPIRES: 06/30/2007

Estimated burden per response to comply with this information collection request: 45 minutes. This uniform manifest is required by NRC to meet reporting requirements of Federal and State Agencies for the safe transportation and disposal of low-level waste. Send comments regarding burden estimate to the Records and FOIA/Privacy Services Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0164), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 540 (6-2004) **U.S. NUCLEAR REGULATORY COMMISSION**

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER

1. EMERGENCY TELEPHONE NUMBER (Include Area Code): (410) 377-3742

ORGANIZATION: ECOLOGY SERVICES, INC.

2. IS THIS AN "EXCLUSIVE USE" SHIPMENT? ☐ YES ☑ NO

3. TOTAL NUMBER OF PACKAGES IDENTIFIED ON THIS MANIFEST ====> 46

4. DOES EPA REGULATED WASTE REQUIRING A MANIFEST ACCOMPANY THIS SHIPMENT? ☑ YES ☐ NO
If "Yes," provide Manifest Number ====>

EPA MANIFEST NUMBER: 0012511044 JJK

5. SHIPPER – NAME AND FACILITY
Sulzer-Metco (US), Inc.
1101 Prospect Avenue
Westbury, NY 11590

USER PERMIT NUMBER: NA
SHIPMENT NUMBER: 71203

CONTACT: Marian Feldhusen

6. CARRIER – Name and Address
Bedrock, d.b.a., Tri-State Motor Transit
P.O. Box 113
Joplin, MO 64802

CONTACT: Cassie Gardner

SIGNATURE – Authorized carrier acknowledging waste receipt

SHIPPER I.D. NUMBER: NA
☐ COLLECTOR
☐ PROCESSOR
☑ GENERATOR TYPE (Specify) 1

TELEPHONE NUMBER (Include Area Code): (516) 338-2331

EPA I.D. NUMBER: MOD095038998

SHIPPING DATE: 12/04/2007

TELEPHONE NUMBER (Include Area Code): 800-234-8768

DATE: 12/4/07

7. NRC FORM 540 AND 540A — PAGE 1 OF 5 PAGE(S)
NRC FORM 541 AND 541A — 11 PAGE(S)
NRC FORM 542 AND 542A — None PAGE(S)
ADDITIONAL INFORMATION — None PAGE(S)

8. MANIFEST NUMBER (Use this number on all continuation pages): SM 71203-02

9. CONSIGNEE - Name and Facility Address
WASTE CONTROL SPECIALISTS, LLC
9998 W. HWY 176
ANDREWS, TX 79714

CONTACT: Anne Dean

TELEPHONE NUMBER (Include Area Code): (505) 394-4300

SIGNATURE – Authorized consignee acknowledging waste receipt

DATE

10. CERTIFICATION

This is to certify that the herein-named materials are properly classified, described, packaged, marked, and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. This also certifies that the materials are classified, packaged, marked, and labeled and are in proper condition for transportation and disposal as described in accordance with the applicable requirements of 10 CFR Parts 20 and 61, or equivalent state regulations.

AUTHORIZED SIGNATURE | TITLE: SUPERVISOR | DATE: 12-04-07

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES	16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	117 LBS; 7.5 FT3	SM 71204-01
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	116 LBS; 7.5 FT3	SM 71204-02
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	117 LBS; 7.5 FT3	SM 71204-03
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	99 LBS; 7.5 FT3	SM 71204-04
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	108 LBS; 7.5 FT3	SM 71204-05
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT	5.6610E-01	NA	102 LBS; 7.5 FT3	SM 71204-06

FOR CONSIGNEE USE ONLY

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
SM 71203-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	125 LBS; 7.5 FT3	SM 71204-07
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	114 LBS; 7.5 FT3	SM 71204-08
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	119 LBS; 7.5 FT3	SM 71204-09
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	137 LBS; 7.5 FT3	SM 71204-10
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	143 LBS; 7.5 FT3	SM 71204-11
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	90 LBS; 7.5 FT3	SM 71204-12
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	579 LBS; 7.5 FT3	SM 71204-13
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	839 LBS; 7.5 FT3	SM 71204-14
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	806 LBS; 7.5 FT3	SM 71204-15
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	789 LBS; 7.5 FT3	SM 71204-16
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	118 LBS; 7.5 FT3	SM 71204-17
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	100 LBS; 7.5 FT3	SM 71204-18
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	135 LBS; 7.5 FT3	SM 71204-19

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
SM 71203-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	121 LBS; 7.5 FT3	SM 71204-20
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	100 LBS; 7.5 FT3	SM 71204-21
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	116 LBS; 7.5 FT3	SM 71204-22
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	155 LBS; 7.5 FT3	SM 71204-23
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	119 LBS; 7.5 FT3	SM 71204-24
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	126 LBS; 7.5 FT3	SM 71204-25
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	125 LBS; 7.5 FT3	SM 71204-26
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	140 LBS; 7.5 FT3	SM 71204-27
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	106 LBS; 7.5 FT3	SM 71204-28
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	142 LBS; 7.5 FT3	SM 71204-29
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	129 LBS; 7.5 FT3	SM 71204-30
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	135 LBS; 7.5 FT3	SM 71204-31
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	415 LBS; 7.5 FT3	SM 71204-32

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
SM 71203-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	1050 LBS; 7.5 FT3	SM 71204-33
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	118 LBS; 7.5 FT3	SM 71204-34
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	730 LBS; 7.5 FT3	SM 71204-35
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	800 LBS; 7.5 FT3	SM 71204-36
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	112 LBS; 7.5 FT3	SM 71204-37
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	122 LBS; 7.5 FT3	SM 71204-38
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	839 LBS; 7.5 FT3	SM 71204-39
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	970 LBS; 7.5 FT3	SM 71204-40
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	146 LBS; 7.5 FT3	SM 71204-41
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	145 LBS; 7.5 FT3	SM 71204-42
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	258 LBS; 7.5 FT3	SM 71204-43
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	141 LBS; 7.5 FT3	SM 71204-44
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	837 LBS; 7.5 FT3	SM 71204-45

NRC FORM 540A
(3-95)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST
SHIPPING PAPER (CONTINUATION)

8. MANIFEST NUMBER
(Use this number on all continuation pages)
SM 71203-02

11. U.S. DEPARTMENT OF TRANSPORTATION DESCRIPTION (Including proper shipping name, hazard class, UN ID number, and any additional information)	12. DOT LABEL "RADIOACTIVE"	13. TRANSPORT INDEX	14. PHYSICAL AND CHEMICAL FORM	15. INDIVIDUAL RADIONUCLIDES			16. TOTAL PACKAGE ACTIVITY (MBq)	17. LSA/SCO CLASS	18. TOTAL WEIGHT OR VOLUME (Use appropriate units)	19. IDENTIFICATION NUMBER OF PACKAGE
Radioactive material, excepted package-limited quantity of material, 7, UN 2910	NA	NA	SOLID: Zirconium Oxide WP-019353	U-NAT			5.6610E-01	NA	700 LBS; 7.5 FT3	SM 71204-46

APPROVED BY OMB: NO. 3150-0166
EXPIRES: 06/30/2007

Estimated burden per response to comply with this information collection request: 3.3 hours. This uniform manifest is required by NRC to meet reporting requirements of Federal and State Agencies for the safe transportation and disposal of low-level waste. Send comments regarding burden estimate to the Records and FOIA/Privacy Service Branch (T-5 F52), U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001, or by internet e-mail to infocollects@nrc.gov, and to the Desk Officer, Office of Information and Regulatory Affairs, NEOB-10202, (3150-0166), Office of Management and Budget, Washington, DC 20503. If a means used to impose an information collection does not display a currently valid OMB control number, the NRC may not conduct or sponsor, and a person is not required to respond to, the information collection.

NRC FORM 541
(6-2004)

U.S. NUCLEAR REGULATORY COMMISSION

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

Additional Nuclear Regulatory Commission (NRC) Requirements for Control, Transfer and Disposal of Radioactive Waste

1. MANIFEST TOTALS

NUMBER OF PACKAGES/ DISPOSAL CONTAINERS	NET WASTE VOLUME (m3)	NET WASTE WEIGHT (kg)	SPECIAL NUCLEAR MATERIAL (grams) U-233	U-235	Pu	Total
46	9.7704	6191.5359	NP	NP	NP	NP

ACTIVITY (MBq) ALL NUCLIDES	TRITIUM	C-14	Tc-99	I-129	SOURCE (kg)
2.6041E+01	NP	NP	NP	NP	4.6000E-01

2. MANIFEST NUMBER SM 71203-02

3. PAGE 1 OF 11 PAGE(S)

4. SHIPPER NAME Sulzer-Metco (US), Inc.

SHIPPER ID NUMBER NA

DISPOSAL CONTAINER DESCRIPTION 5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER: PHYSICAL DESCRIPTION 11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
SM 71204-01/SM	4	0.2124	53.0703	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-02/SM	4	0.2124	52.6167	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-03/SM	4	0.2124	53.0703	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

Note 1: Container Description Codes. For containers/ waste requiring disposal in approved structural overpacks the numerical code must be followed by "-OP."

1. Wooden Box or Crate
2. Metal Box
3. Plastic Drum or Pail
4. Metal Drum or Pail
5. Metal Tank or Liner
6. Concrete Tank or Liner
7. Polyethlene Tank or
8. Fiberglass Tank or Liner
9. Demineralizer
10. Gas Cylinder
11. Bulk, Unpackaged Waste
12. Unpackaged Components
13. High Integrity Container
19. Other. Describe in Item 6, or additional page

NOTE 2: Waste Descriptor Codes. (Choose up to three which predominate by volume.)

20. Charcoal
21. Incinerator Ash
22. Soil
23. Gas
24. Oil
25. Aqueous Liquid
26. Filter Media
27. Mechanical Filter
28. EPA or State Hazardous
29. Demolition Rubble
30. Cation Ion-exchange Media
31. Anion Ion-exchange Media
32. Mixed Bed Ion-exchange Media
33. Contaminated Equipment
34. Organic Liquid (except oil)
35. Glassware or Labware
36. Sealed Source/Device
37. Paint or Plating
38. Evaporator Bottoms/Sludges/Concentrates
39. Compactible Trash
40. Noncompactible Trash
41. Animal Carcass
42. Biological Material (except animal carcass)
43. Activated Material
59. Other. Describe in item 11, or additional page

Note3: For solidification media that meet disposal site structural stability requirements, the numerical code must be followed by "-S." For all solidification media, the vendor (manufacturer) and brand name must also be identified in Item 13. Code 100=NONE REQUIRED.

Sorption

60. Speedi Dri
61. Celetom
62. Floor Dry/ Superfine
63. Hi Dri
64. Safe T Sorb
65. Safe N Dri
66. Florco
67. Florco X
68. Solid A Sorb
69. Chemsil 30
70. Chemsil 50
71. Chemsil 3030
72. Dicaperl HP200
73. Dicaperl HP500
74. Petroset
75. Petroset II
76. Aquaset
77. Aquaset II
89. Other. Describe in item 13, or additional page.

Solidification

90. Cement
91. Concrete (encapsulation)
92. Bitumen
93. Vinyl Chloride
94. Vinyl Ester Styrene
99. Other. Describe in item 13, or additional page
100. None Required.

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

CONTAINER AND WASTE DESCRIPTION

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	
SM 71204-04/SM	4	0.2124	44.9056	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-05/SM	4	0.2124	48.9880	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-06/SM	4	0.2124	46.2664	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-07/SM	4	0.2124	56.6991	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-08/SM	4	0.2124	51.7095	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIP-TION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	PHYSICAL DESCRIPTION 11. WASTE DESCRIP-TOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFI-CATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
												Total 5.6610E-01 MBq	
SM 71204-09/SM	4	0.2124	53.9775	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-10/SM	4	0.2124	62.1422	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-11/SM	4	0.2124	64.8637	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-12/SM	4	0.2124	40.8233	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
SM 71204-13/SM	4	0.2124	262.6300	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-14/SM	4	0.2124	380.5640	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-15/SM	4	0.2124	365.5955	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-16/SM	4	0.2124	357.8844	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-17/SM	4	0.2124	53.5239	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	
												Total 5.6610E-01 MBq	
SM 71204-18/SM	4	0.2124	45.3592	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-19/SM	4	0.2124	61.2350	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-20/SM	4	0.2124	54.8847	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-21/SM	4	0.2124	45.3592	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			CHEMICAL DESCRIPTION		RADIOLOGICAL DESCRIPTION	
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
SM 71204-22/SM	4	0.2124	52.6167	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-23/SM	4	0.2124	70.3068	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-24/SM	4	0.2124	53.9775	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-25/SM	4	0.2124	57.1526	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-26/SM	4	0.2124	56.6991	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	
												Total 5.6610E-01 MBq	
SM 71204-27/SM	4	0.2124	63.5029	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-28/SM	4	0.2124		<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-29/SM	4	0.2124	64.4101	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-30/SM	4	0.2124	58.5134	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIP-TION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	PHYSICAL DESCRIPTION 11. WASTE DESCRIP-TOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFI-CATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
SM 71204-31/SM	4	0.2124	61.2350	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-32/SM	4	0.2124	188.2408	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-33/SM	4	0.2124	476.2720	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-34/SM	4	0.2124	53.5239	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-35/SM	4	0.2124	331.1225	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	PHYSICAL DESCRIPTION 11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	14. CHEMICAL DESCRIPTION CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	15. RADIOLOGICAL DESCRIPTION INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
												Total 5.6610E-01 MBq	
SM 71204-36/SM	4	0.2124	362.8739	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-37/SM	4	0.2124	50.8023	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-38/SM	4	0.2124	55.3383	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-39/SM	4	0.2124	380.5640	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIP-TION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIP-TOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL; OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFI-CATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
SM 71204-40/SM	4	0.2124	439.9846	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-41/SM	4	0.2124	66.2245	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-42/SM	4	0.2124	65.7709	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-43/SM	4	0.2124	117.0268	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-44/SM	4	0.2124	63.9565	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU

NRC FORM 541A
(3-95)

UNIFORM LOW-LEVEL RADIOACTIVE WASTE MANIFEST

CONTAINER AND WASTE DESCRIPTION

U.S. NUCLEAR REGULATORY COMMISSION

2. MANIFEST NUMBER
SM 71203-02

DISPOSAL CONTAINER DESCRIPTION							WASTE DESCRIPTION FOR EACH WASTE TYPE IN CONTAINER						
							PHYSICAL DESCRIPTION			14. CHEMICAL DESCRIPTION		15. RADIOLOGICAL DESCRIPTION	
5. CONTAINER IDENTIFICATION NUMBER/ GENERATOR ID NUMBER(S)	6. CONTAINER DESCRIPTION (See Note 1)	7. VOLUME (m3)	8. WASTE AND CONTAINER WEIGHT (kg)	9. SURFACE RADIATION LEVEL ☑ (µSv/hr) ☐ (mSv/hr)	10. SURFACE CONTAMINATION (MBq/100 cm2) ALPHA	BETA-GAMMA	11. WASTE DESCRIPTOR (See Note 2)	12. APPROXIMATE WASTE VOLUME(S) IN CONTAINER (m3)	13. SORBENT SOLIDIFICATION STABILIZATION MEDIA (See Note 3)	CHEMICAL FORM/ CHELATING AGENT	WEIGHT % CHELATING AGENT IF > 0.1%	INDIVIDUAL RADIONUCLIDES AND ACTIVITY (MBq) AND CONTAINER TOTAL, OR CONTAINER TOTAL ACTIVITY AND RADIONUCLIDE PERCENT	16. WASTE CLASSIFICATION AS-Class A Stable AU-Class A Unstable B-Class B C-Class C
												Total 5.6610E-01 MBq	
SM 71204-45/SM	4	0.2124	379.6568	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	
SM 71204-46/SM	4	0.2124	317.5147	<5.0000E+00	<3.6740E-06	<3.6740E-06	39	0.2124	100	Zirconium Oxide WP-019353/NP	NP	U-NAT 5.6610E-01 [1.0000E-02 kg]	AU
												Total 5.6610E-01 MBq	

Form WR — A site required to submit the 1992 Hazardous Waste Report must complete Form WR if, during 1992, it received RCRA hazardous waste from off site.

Form PS — A site required to submit the 1992 Hazardous Waste Report must complete a separate and independent Form PS for each on-site hazardous waste treatment, disposal, or recycling process system that, during 1992, was existing or that was in the closure process. Include all hazardous waste management units whether they are subject to RCRA permitting requirements or are exempt from them. Hazardous waste storage is not to be reported on this form.

Form OI — All filers are required to complete and submit the OI Form. This form documents the names and addresses of off-site installations and transporters. The instructions for Form OI are on the back of the form.

HOW TO COMPLETE THE FORMS

Technical Assistance Line

To obtain assistance in completing the forms in this package, please telephone (518) 457-3273. Assistance is available Monday through Friday from 9:00 a.m. to 4:00 p.m. Eastern Standard Time from January 4, 1993 through April 30, 1993.

Prior to calling make sure you have all applicable forms in front of you, have read the instructions and looked over the examples of completed forms in Appendix A. Additionally, have the appropriate form, section, and box relating to your question ready in order for staff to answer your question as quickly and easily as possible.

Copies of Report Forms and Instructions

To obtain additional copies of report instructions, contact us at (518) 457-3273. The forms at the back of the book may be photocopied as needed to complete the report.

Documents Helpful in Completing the Forms

In preparing the 1992 Hazardous Waste Report, you will need to consult your records on quantities and types of hazardous waste generated. Some records that might be helpful are listed below. Your site may not have all of the documents.

- Copies of records of quantities of hazardous waste generated or accumulated
- Hazardous Waste Manifest forms
- Results of laboratory analysis of your wastes
- Contracts or agreements with off-site facilities that manage your wastes
- Copies of permits for on-site waste management systems
- If your site submitted it, the 1990 Toxic Chemical Release Inventory Form required under Title III, Section 313 of the Superfund Amendment and Reauthorization Act (SARA 313)

Code Lists

Some of the codes required to complete this report have been changed from those used in previous Hazardous Waste Reports. Please use **only** the codes included in the instructions or lists of codes beginning on page 59.

Form Approved OMB No 2050 0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name PERKIN-ELMER CORPORATION METCO DIVISION
Street 220 MILLER PLACE
City HICKSVILLE County NASSAU State NY Zip 11801
SIC Code 3399 Dun & Brad Number 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name JOSEPH MACRI Phone (516) 334-1300
Mail Address 1101 PROSPECT AVENUE WESTBURY NY 11590

Emergency Contact
Name JOSEPH MACRI Title MANAGER FACILITIES
Phone (516) 334-1300 EXT. 2374 24 Hr Phone (800) 424-9300 CHEMTREC
Name Title
Phone ( ) 24 Hr Phone ( )

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name NICKEL POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name CHROMIUM POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐
CAS 7440 48 4 Trade Secret ☐ Chem. Name COBALT POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	X Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner operator OR owner operator s authorized representative

Signature

FEBRUARY 28, 1992
Date Signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE WESTBURY NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7429090 Trade Secret ☐ Chem. Name: ALUMINUM POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	X Fire Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐
CAS 1344281 Trade Secret ☐ Chem. Name: ALUMINUM OXIDE POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐
CAS 1314234 Trade Secret ☐ Chem. Name: ZIRCONIUM OXIDE POWDER Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE N 1 4 PRODUCTION LINES R 1 4 PRODUCTION LINES - HARDENED STEEL HOPPERS	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

FEBRUARY 28, 1992
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

EPA

EPA FORM R

PART III. CHEMICAL-SPECIFIC INFORMATION (continued)

(This space for your optional use.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)	A. Total Transfers (pounds/yr) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1.1 Discharge to POTW (enter location number from Part II, Section 1.) 1 .	[ ]	[ ]	[ ]		6.1.1b	
6.2.1 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.1b	6.2.1c M
6.2.2 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.2b	6.2.2c M
6.2.3 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.3b	6.2.3c M

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

7. WASTE TREATMENT METHODS AND EFFICIENCY

☐ Not Applicabl;e (NA) - Check if no on-site treatment is applied to any waste stream containing the chemical or chemical catagory

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a	7.1b	7.1c	7.1d [ ]	7.1e %	7.1f [ ]	[ ]
7.2a	7.2b	7.2c	7.2d [ ]	7.2e %	7.2f [ ]	[ ]
7.3a	7.3b	7.3c	7.3d [ ]	7.3e %	7.3f [ ]	[ ]
7.4a	7.4b	7.4c	7.4d [ ]	7.4e %	7.4f [ ]	[ ]
7.5a	7.5b	7.5c	7.5d [ ]	7.5e %	7.5f [ ]	[ ]
7.6a	7.6b	7.6c	7.6d [ ]	7.6e %	7.6f [ ]	[ ]
7.7a	7.7b	7.7c	7.7d [ ]	7.7e %	7.7f [ ]	[ ]
7.8a	7.8b	7.8c	7.8d [ ]	7.8e %	7.8f [ ]	[ ]
7.9a	7.9b	7.9c	7.9d [ ]	7.9e %	7.9f [ ]	[ ]
7.10a	7.10b	7.10c	7.10d [ ]	7.10e %	7.10f [ ]	[ ]

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

8. POLLUTION PREVENTION: OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of Modification (enter code)	B. Quantity of the Chemical in Wastes Prior to Treatment or Disposal: Current reporting year (pounds/year)	Prior year (pounds/year)	Or percent change (Check (+) or (-))	C. Index	D. Reason for Action (enter code)
M			☐ + ☐ - %	.	R

PROSPECT FACILITY
1994 REPORTING ON FORM R
POUNDS PER YEAR

Emission Point	Zirconium Oxide	Aluminum	Aluminum Oxide	Chromium	Cobalt	Nickel	Copper
021			0.106	0.055	0.071	0.613	0.052
022			0.212	0.109	0.142	1.23	0.104
027			0.026	0.014	0.018	0.15	0.013
029			0.026	0.014	0.018	0.153	0.013
030			0.026	0.014	0.018	0.153	0.013
031			0.053	0.027	0.035	0.307	0.026
032			0.132	0.069	0.088	0.767	0.065
033			0.053	0.027	0.035	0.307	0.026
034			0.106	0.055	0.071	0.613	0.052
035			0.106	0.055	0.071	0.613	0.052
038			0.021	0.011	0.014	0.122	0.01
039			0.021	0.011	0.014	0.122	0.01
040			0.021	0.011	0.014	0.122	0 01
046			5.873				
047			252.1				
050			0.212	0.109	0.142	1.2	0.104
051			0.417	0.224	0.287	2.4	0.207
052							
053							

P2SUL004651

MILLER PLACE FACILITY/
1994 REPORTING ON FORM R
POUNDS PER YEAR

Emission Point	Zirconium Oxide	Aluminum Oxide	Aluminum	Chromium	Cobalt	Nickel	Copper
003	38.75	2.05			1.35		
006							
007			0.375			0.375	
014							
044							
051			0.756	0.697	0.003	3.22	0.057
052	45.0	15.0					
054	2.08	0.119	0.035	0.0218	0.088	0.131	0.0079
055	38.75	2.05			1.35		
058	0.134	0.046	0.186	0.074	0.026	0.508	0.028
059							
061							
062							
063	5.3	0.30	0.089	0.0558	0.22	0.33	0.0043
064	5.3	0.30	0.089	0.0558	0.22	0.33	0.0043
TOTALS	135.31	19.87	1.53	0.904	3.26	4.89	0.1015
	135	20	2	1	3	5	Ø
	D	D	A	A	A	A	A
		X	✓	✓	✓	✓	✓

P2SUL004652

PROSPECT FACILITY
1994 REPORTING ON FORM R
POUNDS PER YEAR

Emission Point	Zirconium Oxide	Aluminum	Aluminum Oxide	Chromium	Cobalt	Nickel	Copper
054							
055			0.71	0.67	0.23	1.29	0.64
056			0.053	0.027	0.035	0.31	0.026
058-059							
060	0.00169		0.0143		0.00363	0.0519	0.00537
061	0.00169		0.0143	0.0278	0.00363	0.0519	0.00537
062	0.00169		0.0143	0.0278	0.00363	0.0519	0.00537
063	0.0459		0.387	0.751	0.0981	1.40	0.145
064-071							
072			0.053	0.027	0.035	0.304	0.026
073			0.053	0.027	0.035	0.304	0.026
074-076							
077			0.053	0.027	0.035	0.304	0.026
078-079							
080			0.024	0.012	0.015	0.135	0.011
081							
TOTALS	0.051		260.89	2.40	1.53	13.07	1.67

P2SUL004653

4

PROSPECT AVE

Emission Point #	Emission Rate #/Year Aluminum	Chromium Cr^{+3}/Cr^{+6}	Cobalt	Nickel	Copper	Aluminum Oxide
051	0.043	0.0146/0.00162	0.029	0.043	0.043	0.00542
080	0.0146	0.0082/0.00091	0.00985	0.0146	0.0146	0.00713
082	0.366	0.209/0.0233	0.247	0.366	0.366	0.185
083	0.0307	0.0111/0.00123	0.0208	0.0307	0.0307	0.00495
021	0.168	-----	0.113	-----	0.168	0.090
022	0.60	-----	0.81	-----	0.60	-----
027	0.168	-----	0.113	-----	0.168	0.09
029	0.84	-----	0.567	-----	0.840	0.450
030	0.168	-----	0.113	-----	0.168	0.090
031	0.168	-----	0.113	-----	0.168	0.09
032	1.26	-----	0.841	-----	1.26	0.675
038	0.420	-----	0.280	-----	0.420	0.225
052	0.0432	0.0889/0.00987	0.0288	0.0432	0.0432	0.126
055	0.420	-----	0.284	-----	0.42	0.225
056	0.84	-----	0.567	-----	0.84	0.45
072	0.60	-----	0.401	-----	0.60	-----
073	0.60	-----	0.401	-----	0.60	-----
046	-----	-----	-----	-----	-----	0.50
047	-----	-----	-----	-----	-----	6.50
Total	**6.75**	**0.332/0.037**	**4.94**	**0.497**	**6.75**	**9.71**
PROSPECT AVE	7#	Ø	5#	Ø	7#	10#
	A	A	A	A	A	A
	✓	✓	✓	✓	✓	✗

P2SUL004654

02-15-93

RECD FROM PAT GURSU

FOR ENV MGMT COMMITTEE

RPM SUBSIDIARY DATA SURVEY

METCO CONSOLIDATED (IN THOUSANDS)

	SALES	COST OF SALES
FISCAL 1988	121,339	62,959
FISCAL 1989	131,549	67,938
FISCAL 1990	148,642	78,345
FISCAL 1991	145,401	75,029
FISCAL 1992	124,055	67,084
CALENDAR 1988	126,581	64,651
CALENDAR 1989	135,204	71,026
CALENDAR 1990	155,012	80,960
CALENDAR 1991	133,132	69,878
CALENDAR 1992	123,711	66,598
CALENDAR YE 1993	106,721	59,463
CALENDAR YR 1994		

Domestic Trade (Div 10 & 20)

	Sales	Cost of Sales
Calendar Yr 1993	47,744	29,499
Calendar Yr 1994	42,835	28,549

.90 .97

1.37

SECTION 8.8

Domestic Trade (Div 10 & 20)

Calendar Year 1995	Sales	COGS
SMWES Co 30 AMERICAS	58,787	45,479
SMUS Co 20	all I/C transactions	

Div 10 & 20 Trade

Calendar Year 1996	Sales	COGS
SMWES Co 30	59006	46,881
SMUS Co 20	all I/C transactions	

1.00

P2SUL004655

EPA FORM R REPORTING YEAR 1995

PROSPECT MOLINE FACILITY

NO REMOVAL OF PROSPECT MOLINE THRESHOLD LISTED MATERIALS DURING THIS PERIOD.

P2SUL004656

EPA ID : NYD131318651

SULZER METCO (US) INC.
1101 PROSPECT AVE

WESTBURY NY 11590

Src	Form	System	Ship Date	Manifest	PG	LN	Pounds	Primary Waste Code	WIP #	Waste Name/ Additional Waste Cde	Destination
A94	B003	M141	6/29/95	NJA2177338	1	A	95	D001	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	1	B	262	D001	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	1	C	284	U154	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	1	D	10	D003	153408	PACKED LAB CHEMICALS VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	2	A	10	D001	153408	PACKED LAB CHEMICALS VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	2	B	90	D040	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	2	C	45	D002	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	2	D	45	D002	153373	TWI PLC REPACK VARI	NJD980536593 A E T C
A94	B003	M141	6/29/95	NJA2177338	2	E	10	D002	153408	PACKED LAB CHEMICALS VARI	NJD980536593 A E T C
				Total Pounds:			851				
A55	B309	M141	6/29/95	NJA2177338	2	F	40	D002	153425	LEAD ACID BATTERIES D002 D008	NJD980536593 A E T C
				Total Pounds:			40				
A59	B206	M141	6/29/95	NJA2177338	2	H	800	X726	153420	OIL - CUTTING AND HYDRAULIC X726	NJD980536593 A E T C
				Total Pounds:			800				

Total Pounds for EPA ID NYD131318651 : 1691

Transporters for EPA ID : NYD131318651

Transporter EPA ID	Name and Address
NJD991291584	ENVIRON TRANSFER CORP 3 GOLD MINE ROAD FLANDERS NJ 07836

End of report

AETS
ADVANCED ENVIRONMENTAL
TECHNICAL SERVICES

January 16, 1996

Dear Valued Customer:

Advanced Environmental Technical Services (AETS) has supplied an annual report summary of waste generated from your facility for materials managed by AETS and/or AETC. This summary will assist you in the completion of the 1995 Hazardous Waste Report required by the USEPA and your state environmental agency. This document is to serve as an outline to properly complete the appropriate report forms.

The information supplied in this annual summary report includes the following:

- Generator information and USEPA identification number (Located at the top of the report)
- Transporter information and USEPA identification number (Located at the bottom of the report)
- Source and form codes
- System Type (If sent to a former AETC facility, system type reflects storage)
- Shipping date
- Manifest number and page and line of manifest
- Total weight (Quantity) indicated in pounds
- Hazardous waste code utilized for shipment
- Waste Information Profile (WIP) # and Description of waste
- Additional waste codes applicable to the waste stream
- Destination facility information (USEPA identification number and facility name)
- Total weight in pounds of each waste group (Wastes are grouped together according to source and form codes and P-listed wastes are segregated)

The format of the Hazardous Waste Report has essentially remained the same. The appropriate forms - IC & GM must be completed accurately. Please follow the procedures outlined below to include the information supplied by AETS on the appropriate form.

FORM IC

Form IC is to be completed by all generators of hazardous waste. The name, location, mailing address, and contact person of the site must be indicated on the form.

P2SUL004658

3 Gold Mine Road • Flanders, New Jersey 07836 • 201-347-7111 • Fax: 201-691-3978 Printed on recycled paper

Generator status must also be indicated, as well as any on-site waste management status, waste minimization activities, and if source reduction or recycling strategies were limited or delayed during the course of the year.

Finally, the site contact must sign and date the form to certify that, to the best of his/her knowledge, the information submitted is true and accurate.

Form GM

Form GM is required for all hazardous waste generated or shipped off-site during 1995. This form is utilized to characterize and describe the waste. Separate GM forms must be completed for each hazardous wastestream, including different production or service activities, spill clean-up or remedial activities, or residuals from the on-site treatment, disposal, or recycling of existing hazardous wastestreams. Non-hazardous wastes **do not** have to be indicated on the GM forms. Procedures for packaged laboratory chemicals (PLC) and bulk containers are outlined below.

Bulk Containers

The site name and USEPA identification number must be indicated on all the GM forms. A waste description must be indicated for all wastestreams. The USDOT proper shipping names supplied by AETS on the packing slips may be utilized, however, you may group several shipping names into one (1) general narrative description that is consistent for the wastestream as listed on the annual summary report. This procedure is useful in reducing the number of pages necessary to complete the report.

The appropriate USEPA or state hazardous waste code and source, form, and system codes can be obtained from the annual summary report and must be indicated in Section I of the GM form. The remainder of Section I must be completed by the generator including the following:

- SIC Code — Code for the product or service associated with the generation of the waste.
- Origin Code — Code that describes the process or activity that was the source of the hazardous wastestream.
  This code is often either:
  - 1 - indicating that the waste was generated on site from a production process or service activity, or

P2SUL004659

Printed on recycled paper

2 - indicating that the waste was a result of a spill clean-up, equipmnent decommissioning, or other remedial clean-up.

- Point of Measurement — Code that best describes the point at which the waste was measured or estimated.

- RCRA Radioactive — Indicate if the material is mixed with a nuclear source as follows:
  1 - Yes
  2 - No

The SIC, origin, system type, source, and form codes can also be obtained from the packing slips prepared by AETS for the waste shipment.

In Section II of Form GM, the annual quantity and unit of measure must be indicated for the years of 1994 and 1995 for the hazardous wastestream. The 1995 information can be obtained from the annual summary report supplied by AETS. In Box D of Section II, the operator must indicate if any on-site treatment, recycling, disposal, or discharge to a sewer/POTW took place at the site. If the response is "yes", the additional information under the on-site system category must be completed. If the reply is "no", then you may skip to the next section.

Section III of Form GM must be completed for any off-site shipment of the wastestream. Information requested includes the USEPA identification number, the system type, the availability code, and the total quantity of material transported to the off-site facility. The USEPA identification numbers and the total quantity shipped can be obtained from the annual summary report.

Please note that although AETC and Chemical Waste Management Technical Services merged in early 1995 to form AETS, all AETC storage facilities retained the name AETC through the end of 1995. For the 1995 Annual Report, materials shipped to any of the former AETC facilities should reflect the following facility names, addresses, EPA ID numbers, system types, and off-site codes:

- For shipments to: AETC, 1 Eden Lane, Flanders, New Jersey
  USEPA ID #: NJD 980 536 593
  System Type: M141
  Off-Site Code: 1 (Commercial treatment facility)

P2SUL004660

Printed on recycled paper

- For shipments to: AETC, 2176 Will Suitt Rd., Creedmoor, North Carolina
  USEPA ID #: NCD 986 166 338
  System Type: M141
  Off-Site Code: 1 (Commercial treatment facility)

- For shipments to: CAETC, 1125 Hensley St., Richmond, California
  USEPA ID #: CAT 080 014 079
  System Type: M141
  Off-Site Code: 1 (Commercial treatment facility)

Waste minimization activities must be specified in Section IV of the form. This includes source reduction and recycling activities. In this section, materials destined for Advanced Environmental Recycling Corporation (AERC) should be indicated. This includes any mercuric wastestreams and fluorescents lamps manifested to AERC.

To complete the requirements of Form GM, a list of the hazardous waste manifests and dates shipped must be included for **New Jersey Generators Only** . This information is supplied on the annual report summary.

Lab Pack Chemicals

The procedures for completing Form GM for lab packs is slightly different. The lab packs can be consolidated onto two (2) GM Forms: one (1) for the acute lab packs (P listed and F020 series) and one (1) for all others. It is not necessary to indicate every EPA waste code for the batch of non-acute lab packs. The letters "LABP" may be entered in the first waste code field in Section I, Box B, and "NA" in the remainder.

Quantities for the lab packs must be summarized and indicated in Section II of the form. These weights can be obtained from the annual summary report. The lab pack wastestreams are indicated as B001-B004 or B009 in the form column on the left hand side of the summary.

All other sections of Form GM should be completed in the same manner as bulk containers.

FORM OI

This is no longer required by USEPA. Please refer to the instructions supplied with your states report forms to determine if your state requires Form OI.

P2SUL004661

Printed on recycled paper

Form OI is a document that indicates the names, addresses of off-site transporters and installations utilized during 1995. This includes all treatment, storage, and disposal facilities, as well as all hazardous waste transporters.

To complete this form, your site name and USEPA identification number should be indicated in the upper left hand corner of the form. The USEPA identification number, name, and address for each TSDF must be indicated. For transporters, only the USEPA identification number, name and type has to be entered in Boxes A, B, and C respectively. The address does not have to be reported. This information can be obtained from the annual summary report.

Please be aware that if your facility has an on-site treatment, disposal or recycling process, an additional Form PS must also be completed. In addition, if your facility accepts waste from off-site generators, Form WR must be submitted.

If there are any questions concerning the 1995 Hazardous Waste Report format, the AETS annual summary report, or the proper completion of the appropriate forms, please contact me at (201) 691-7323 or Andrew Babij at (201) 691-3907.

Sincerely,

Mary Gaskill

Mary Gaskill
Records & Reporting
Coordinator

MG:mg

cc: Andrew Babij, AETS
James Bell, AETS

P2SUL004662

Printed on recycled paper

4

EPA FORM R

CALENDAR YEAR 1995

AS PER PETE LONGEBARD, THE FORM OF ALUMINUM WIDE WE PURCHASE IS NON-FIBROUS ONLY.

THUS FAR WE DO NOT HAVE TO REPORT ALUMINUM OXIDE.

T-M VACUUM PRODUCTS, INC.
PHONE: 609-829-2000 FAX: 609-829-0990

101 FP 110 Sec 134 SP105 & 2 XP 1134

50 - 135 140 341 380

X X X X

134 - 101 — CAS 1344-28-1
137 — 105
138 105 SFP

10-03-96
PETE LONGEBARD

HIGH VACUUM EQUIPMENT
ENGINEERING – DESIGN – FABRICATION

P2SUL004663

X

EPA FORM R

REPORTING YEAR 1995

ASPER JOHN CUSATI AND TONY DELA ROSA
IMPORT THE FOLLOWING METALS:

ALUMINUM - ✓ CANADA SHERRITT GORDON

COBALT - ✓ ZAIRE MINED

NICKEL - ✓ CANADA SHERRITT GORDON

CHROMIUM - ✓ CANADA SHERRITT GORDON

COPPER - N/A PURCHASE DOMESTIC

ALUMINUM OXIDE - ✓ IMPORT

P2SUL004664

FACSIMILE TRANSMITTAL

DONNELLY ENGINEERING
P. O. BOX 876
Nesconset, New York 11767
TEL: 516/979-7788
FAX: 516/979-7819

TO: CONSTANCE CONROY, ADMIN. OF OPERATIONS

OF: SULZER METCO

FAX #: 338-2336

RE: Form R Reporting

FROM: JOSEPH J. SALVO

DATE: 7/21/95 **TIME:** 2:30

PAGES TRANSMITTED (INCLUDING THIS SHEET): 5

MESSAGE:

PER YOUR REQUEST

IF THERE IS A PROBLEM WITH THIS TRANSMISSION PLEASE CONTACT PAT OF THIS OFFICE

P2SUL004665

DONNELLY ENGINEERING

LAWRENCE A. DONNELLY, P.E.

July 21, 1995

Ms. Constance Conroy
Admin. of Operations
Sulzer Metco
1101 Prospect Avenue
Westbury, NY 11590

Re: Form R Reporting

Dear Ms. Conroy:

Per our telephone conversation, enclosed please find the Miller Place and the Prospect Avenue facilities' Form R reporting requirements for those constituents that you have asked me to calculate.

It should be noted that these figures are obtained from Form 76-19-3 Air Applications, and actual usages throughout the year night be either greater or less than these figures. Form R does require that calculations be done every year for each emission point, so that actual emissions are reported.

If there are any further questions, please feel free to call.

Very truly yours,

DONNELLY ENGINEERING

Joseph J. Salvo
Project Manager

JJS/pf
Encls.

P2SUL004666

P.O. BOX 676, NESCONSET, NEW YORK 11767-0676 TELEPHONE (516) 979-7788 FAX (516) 979-7819

PERKIN ELMER

Metco Perkin-Elmer
1101 Prospect Avenue
P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 334-6692
Telex 967759

July 1, 1991

State Emergency
Response Commission
c/o State Emergency
Management Office
Building 22, State Campus
Albany, NY 12226-5000

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Very truly yours,

Patrick A. Tighe
Superintendent
Facilities Coordination

PAT:mbf
Enclosures
cc: A.B. Mazzone

See file
U.S. Env. Toxic
Agency - 1991

PERKIN ELMER

Metco Perkin-Elmer
1101 Prospect Avenue
P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 334-6692
Telex 967759

July 1, 1991

EPCRA Reporting Center
P.O. Box 23779
Washington, D.C. 20026-3779
Attn: Toxic Chemical Release Inventory

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Very truly yours,

Patrick A. Tighe
Superintendent
Facilities Coordination

PAT:mbf
Enclosures
cc: A.B. Mazzone

See file-
U.S. Env.
Toxic Agency-
1991

PERKIN ELMER

Metco Perkin-Elmer
1101 Prospect Avenue
P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 334-6692
Telex 967759

July 1, 1991

New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Response
50 Wolf Road/Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Very truly yours,

Patrick A. Tighe
Superintendent
Facilities Coordination

PAT:mbf
Enclosures
cc: A.B. Mazzone

see file
U.S. Env.
Toxic Agency
1991

PERKIN ELMER

Metco Perkin-Elmer
1101 Prospect Avenue
P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 334-6692
Telex 967759

July 1, 1991

Local Emergency
Planning Committee
c/o Civil Preparedness
Office
140 15th Street
Mineola, NY 11501

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Very truly yours,

Patrick A. Tighe
Superintendent
Facilities Coordination

PAT:mbf
Enclosures
cc: A.B. Mazzone

See file
U.S. Env.
Toxic Agency-
1991

CABOT

Cabot Corporation
Cab-O-Sil Division
P.O. Box 188
Tuscola, IL 61953
(217) 253-3370
(800) 222-6745
(800) 252-3705 (IL)

Technical Data

OCT 12 1989

Information about Cab-O-Sil fumed silica, a Cabot performance chemical.

MATERIAL SAFETY DATA SHEET

CODE	DATE ISSUED	DATE REVISED	ISSUED BY
CAB-O-SIL® TS-720	June, 1988	August, 1989	Regulatory Compliance Office

SECTION I - IDENTIFICATION OF MATERIAL

CHEMICAL NAME OR COMPOSITION

Hydrophobic Silicon Dioxide, Amorphous - CAS #67762-90-7

TRADE NAME & SYNONYMS

CAB-O-SIL® TS-720
Treated Fumed Silica, Colloidal Silica, Synthetic Silica

HAZARD RATING
FIRE 0
HEALTH 2
REACT. 0
0

CHEMICAL FAMILY

Surface Treated Oxide

MOLECULAR FORMULA

Surface Treated SiO_2

SECTION II - SIGNIFICANT COMPONENTS AND CONTAMINANTS

CAS NO.	COMPONENT	PERCENT	PERMISSIBLE EXPOSURE LIMIT	ACGIH Respirable Dust	ACGIH Total Dust
67762-90-7	Siloxanes and Silicones, di-Me, reaction products with silica	100	20 mppcf	5 mg/m³	10 mg/m³

SECTION III - PHYSICAL DATA

PHYSICAL CHARACTERISTICS

Fine White Hydrophobic Powder, Odorless

BOILING POINT	FREEZING POINT	SPECIFIC GRAVITY (WATER = 1.0)
NA	NA	1.8

VAPOR PRESSURE (mm OF MERCURY)	pH
NA	NA

VAPOR DENSITY (AIR = 1)	SOLUBILITY IN WATER
NA	Insoluble

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (SPECIFY METHOD)	FLAMMABLE (EXPLOSIVE) LIMITS (PERCENTAGE BY VOLUME)	
	LOWER EXPLOSIVE LIMIT	UPPER EXPLOSIVE LIMIT
Greater than 535°F COC-ASTM D-92	NA	NA

FIRE EXTINGUISHING MEDIA

Water, A, B, C Dry Chemical, Halon, Foam

SPECIAL FIRE FIGHTING PROCEDURES

Use self-contained breathing apparatus when fighting fires in an enclosed area.

UNUSUAL FIRE AND EXPLOSION HAZARDS

See Section IX

CAB-O-SIL® is a registered trademark of CABOT Corporation.

SECTION V - HEALTH HAZARD DATA

TOXICITY

Cab-O-Sil TS-720 treated fumed silica is not considered a carcinogen by IARC, NTP, or OSHA. Primary routes of entry: Inhalation, Ingestion, Oral LD 50 = Greater than 5gm/kg. Acute effects on lung—gasping, shortness of breath. No chronic effects

EFFECTS OF OVEREXPOSURE	ACUTE Inhalation: Temporary discomfort
	Eyes: Mild irritant.
	CHRONIC None

EMERGENCY AND FIRST AID PROCEDURES

Eyes: Flush with water.

Inhalation: Remove to fresh air.

SECTION VI - REACTIVITY DATA

GENERAL REACTIVITY

Stable

INCOMPATABILITY (MATERIALS TO AVOID)

None

HAZARDOUS DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATION	CONDITIONS TO AVOID
None	NA

SECTION VII - SPILL PROCEDURES / DISPOSAL REQUIREMENTS

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Spilled Cab-O-Sil TS-720 treated fumed silica is not a hazardous waste under U.S. Federal RCRA regulation.

WASTE DISPOSAL METHOD Cab-O-Sil TS-720 treated fumed silica may be swept up, or vacuumed for normal disposal. Vacuuming is recommended. NIOSH approved dust protection respirator recommended during clean up.

CONTAINER DISPOSAL

Ordinary methods for non-hazardous waste.

SECTION VIII - SPECIAL PROTECTION INFORMATION (SPECIFY IN DETAIL)

EYE PROTECTION	GLOVES
Safety glasses recommended	Not necessary

RESPIRATORY

NIOSH approved respirator recommended for concentrations at or above the PEL (20 mppcf)

VENTILATION	OTHER
Adequate for dusty environments	None

SECTION IX - SPECIAL PRECAUTIONS

Dry powdered materials can build static electrical charges when subjected to friction.

Proper precautions should be taken when using Cab-O-Sil TS-720 treated fumed silica in the presence of flammable or explosive liquids to prevent accidents. (SEE NFPA-77 "Static Electricity").

SECTION X - PROPER SHIPPING NAME

CAB-O-SIL TS-720 treated fumed silica is Not Restricted/Non-Hazardous

The data and conclusions contained herein are based on studies made in Cabot Corporation laboratories and are believed to be reliable. However, we do not guarantee that similar results and/or conclusions will be obtained by others. We disclaim any liability resulting from the use of the contents of this report since the conditions of use are beyond our control. Furthermore, nothing contained herein shall be construed as a recommendation to use any product in conflict with existing patents covering any material or its use.

1992 HAZARDOUS WASTE REPORT

TABLE OF CONTENTS
(Continued)

PAGE

SPECIAL INSTRUCTIONS 47

Lab Packs 47
Asbestos and waste oils 47
Contaminated Groundwater 48
RCRA-radioactive mixed wastes 48
Wastes from Conditionally Exempt Small Quantity Generators (CESQG) 48
Wastes from foreign countries 48
RCRA hazardous wastes managed in units exempt from RCRA permitting requirements 48
Supplemental or Continuation Pages 49

DEFINITIONS 50

STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES 59

Agriculture 59
Mining 59
Construction 59
Manufacturing 59
Transportation and Utilities 61
Wholesale Trade 62
Retail Trade 62
Finance, Insurance, and Real Estate 62
Services 63
Public Administration 64
Nonclassification Establishments 64

EXCLUDED WASTES 65

EPA HAZARDOUS WASTE CODES 67

Characteristic Hazardous Waste (D Codes) 67
Hazardous Waste from Nonspecific Sources (F Codes) 67
Hazardous Waste from Specific Sources (K Codes) 67
Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof--Acute Hazardous Waste (P Codes) 67
Discarded Commercial Chemical Products Off-Specification Species, Container Residues, and Spill Residues Thereof -- Toxic Waste (U Codes)..... 78

SOURCE CODES 86

FORM CODES 87
Lab Packs 87
Liquids 87
Solids 87
Sludges 87
Gases 89

METCOSEAL ST-1

(THINNER)

A SPECIAL THINNER USED IN CONJUNCTION WITH FINISHING TREATMENT OF THERMAL SPRAYED COATINGS.

INSTRUCTIONS:
A thinner for use with certain METCOSEAL Coatings used in SULZER METCO Systems of Corrosion Prevention.

See SULZER METCO System Specifications and Instructions for full data on use.

NOTE:
There are several METCOSEAL Thinners. Use this thinner where specifically called for on the METCOSEAL Label.

CONTENTS 1 GALLON U.S.

HAZARD NOTICE: This material is for the thermal spraying process. Consult the SULZER METCO Instruction Manual, the Material Safety Data Sheet, and applicable Federal and local jurisdiction safety and health regulations before utilizing this product. This product should not be ingested; inhalation and skin contact should be avoided. Local ventilation, skin and respiratory protection should be used during handling. Good housekeeping and personal hygiene should be practiced. Some individuals may show unusual sensitivity to exposure. Failure to observe proper practices may result in health hazards.

FOR EMERGENCY ASSISTANCE CALL
CHEMTREC - DAY OR NIGHT
1-800-424-9300

WARNING FLAMMABLE. HARMFUL IF INHALED. HARMFUL OR FATAL IF SWALLOWED. USE ONLY WITH ADEQUATE VENTILATION. FOR INDUSTRIAL USE ONLY.

Specific Effects Of Overexposure:
Methyl Isobutyl Ketone: Hazard by inhalation, ingestion, skin and eye contact. Inhalation and ingestion may cause irritation to the mucous membranes, headache, narcosis and possible coma. Skin contact may cause dermatitis. Eye contact may cause irritation.
Toluene: Hazard by inhalation, ingestion, skin absorption, skin and eye contact. Inhalation, ingestion and skin absorption may cause fatigue, weakness, confusion, euphoria, dizziness, headache, dilated pupils, lacrimation, nervousness, muscle fatigue, insomnia, anemia leucopenia and enlarged liver may be found in rare cases. Skin contact may cause dermatitis. Eye contact may cause irritation.
Diisobutyl Ketone: Hazard by inhalation, skin and eye contact. Inhalation may cause nose and throat irritation, headache and dizziness. Narcotic in high concentrations. Skin contact may cause dermatitis. Eye contact may cause irritation.
Isopropyl Alcohol Anhydrous: Hazard by inhalation, skin and eye contact. Inhalation may cause irritation to the eyes and mucous membranes, drowsiness, dizziness and headache. Skin contact may cause dermatitis. Eye contact may cause irritation.
Target Organs: Respiratory system, central nervous system, liver, kidney, skin and eyes.

In Case of Fire:
Extinguishing Media: Use National Fire Protection Association (NFPA) Class B extinguishers (carbon dioxide, dry chemical or foam).
Unusual Fire and Explosion Hazards: Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flames, or other sources of ignition. Closed containers may explode if exposed to extreme heat. Do not apply to hot surfaces.
Special Fire Fighting Procedures: Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible explosion when exposed to extreme heat. If water is used, fog nozzles are preferable.
In Case of Spill or Leak:
Remove all sources of ignition (flames, hot surfaces, electrical or frictional sparks). Avoid breathing vapors. Ventilate area. Remove with inert absorbent and non-sparking tools. IMPORTANT: Hazardous product residue may be present after contents have been removed. Do not reuse empty package without commercial cleaning or reconditioning.
Special Protection Information:
Adequate local/general ventilation should be provided when using this product. Appropriate respiratory, skin, eye and hand protection should be utilized when using this product.
Special Precautions:
Precautions to be Taken in Handling and Storing: Store away from incompatibles. Keep containers closed when not in use. Do not store in open, unlabeled or mislabeled containers. Do not transfer contents to bottles or other unlabeled containers. Store in a cool and dry area. Do not use in poorly ventilated or confined areas. Do not store above 120°F.
Other Precautions: Containers should be grounded when pouring. Avoid free fall of liquid in excess of a few inches. DO NOT FLAME CUT, BRAZE OR WELD EMPTY CONTAINERS. KEEP CONTAINERS CLOSED WHEN NOT IN USE.
Waste Disposal Method: Dispose of the chemical materials and/or their containers in accordance with federal, state or local laws/regulations regarding disposal.

USING THE NATIONAL PAINT AND COATINGS ASSOCIATION'S HAZARDOUS MATERIALS IDENTIFICATION SYSTEM, THIS PRODUCT'S HAZARD CLASSIFICATION IS:

HEALTH	3
FLAMMABILITY	3
REACTIVITY	0
PERSONAL PROTECTION	See the MSDS for proper personal protective equipment.

Flash Point: 40°F
UN1263 PAINT

WARNING: This product contains a chemical known to the STATE OF CALIFORNIA to cause cancer and/or reproductive harm.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risks in connection with the use of this material. SULZER METCO shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

Field Investigation
Article XI Facility
Nassau County Department of Health

☐ Tank Test ☐ Retest
☑ Tank Removal ☐ Compliant
☐ Installation

Date of Job 12/16 Time _____ Facility ID# 34042
Date Received 12/17 Time 2:49 Spill No. _____
Contractor RICE 350/487 R08
Telephone # _____

Establishment Name METCO
Address 1101 PROSPECT AVE.
Town WESTBURY Telephone # _____
Cross Street: _____
No. of Tanks 3 Type of Test _____

Tank #							
System Test							
Tank Test							
Size	~~20K~~	~~20K~~	~~1K~~				
Product							
Leak Rate							
Pass/Fail							
Fee							
Fee Paid							
Retest Needed							

Tank Removal	Rear of Bldg	Rear of Bldg		Front of Bldg			
Tank #	#1	—		#2			
Visible Hole	NONE	NONE		NONE			
# Holes	—	—		—			
Size	20,000	1,000		20,000			
Location	—	—		—			
Photo	NO	NO		NO			

Excavation: ☒ Clean ☐ Contanimated Soil ☐ Free floating oil

Soil Removed (Y/N) Amount

Installation: Tank size _____ Approved plans ☐ Yes ☐ No

Notes: 12/16 11:00 - NO ONE ON SITE, Removal NOT STARTED yet. (12/16/87) RR
12/17/87 - 8" Sewer line broken during removal of 20,000 gal tank in Rear of Bldg. Tank Cut & Cleaned by Rice.
12/21/87 - 20,000 removed, Cut & Cleaned by Rice. RR

Inspector R. Rhode Supervisor _____

Employee Number 178 Date 12/16/87 ☐ Continued on Reverse Side

(#2) 20,000 + 1,000 gal tanks Cut, Clean + transported off site on 12/22/87. RR

#4564H

Field Investigation
Article XI Facility
Nassau County Department of Health

☐ Tank Test ☐ Retest
☒ Tank Removal ☐ Compliant
☐ Installation

Date of Job 2/2/88 Time _____
Date Received 1/28/88 Time _____
Contractor Rice Tank
Telephone # _____

Facility ID# ~~00326~~ 54043
Spill No. _____
033 H88 R12

Establishment Name Met-Co
Address Duffy Ave (325)
Town Hicksville Telephone # _____
Cross Street: _____
No. of Tanks 1 Type of Test _____

Tank #							
System Test							
Tank Test							
Size							
Product							
Leak Rate							
Pass/Fail							
Fee							
Fee Paid							
Retest Needed							

Tank Removal

Tank #	1	2					
Visible Hole		NO					
# Holes		None					
Size	10,000	20000					
Location							
Photo							

Excavation: ☒ Clean ☐ Contanimated Soil ☐ Free floating oil

Soil Removed (Y/(N)) Amount

Installation: Tank size _____ Approved plans ☐ Yes ☐ No

Notes: TANK #1 ABANDONED IN PLACE - TOP CUT - TANK CLEANED AND FILLED WITH SAND - SITE WELL (one) TO BE INSTALLED SOUTH OF TANK. 2/10/88 - INSPECTED SITE - NO SITE WELLS IN AS YET.

Inspector _____ Supervisor _____

Employee Number _____ Date _____ ☐ Continued on Reverse Side

[illegible] ASP Teicher

ENVIRONMENTAL
HEALTH
Continuation Sheet
Nassau County Health Department

Owner or Agent : Meteo
Address: 325 Duffy ave. Hicksville

DATE	COMMENTS
2/17/88	Mr O'Leary & I met with Frank F. Busch Jr. and John Murphy* at their location. We gave them a copy of article XII regulations and discussed site well installation. They have contacted Marine Pollution. The well will be located 10-15' due south of edge of tank: K. Morris * JWP Energy System Inc.
2/26/88	SITE INSPECTION REVEALED SITE WELLS NOT INSTALLE AS YET. McCloskey
7/15/88	SPOKE TO MARINE POLLUTION CONTROL - JOHN EMINGTON - SITE WELL INSTALLED IN MAY 88 - THEY ARE MONITORING IT. - McCloskey

EH 109a 1/68
DH-1198, 9/71

Field Investigation
Article XI Facility
Nassau County Department of Health

☐ Tank Test ☐ Retest
☒ Tank Removal ☐ [illegible]
☐ Installation

Date of Job 7/17/87 Time AM Facility ID# 54041
Date Received 7/16/87 Time Spill No. 874323
Contractor RICE TANK CLEANERS
Telephone # 582-4888

Establishment Name METCO. (Facility Super. MR. Teicher)
Address 220 MILLER PLACE
Town Hicksville Telephone # 334-1300
Cross Street:
No. of Tanks 3 Type of Test

Tank #						
System Test						
Tank Test						
Size						
Product						
Leak Rate						
Pass/Fail						
Fee/						
Fee Paid						
Retest Needed						

Tank Removal

Tank #	1		2				
Visible Hole	10,000 gal		5,000		3,000		
# Holes	NO		NO		NO		
Size	—		—		—		
Location	10,000		5,000 gal		3,000 gal		
Photo	~~[illegible]~~						
	YES		NO		NO		

Excavation: ☐ Clean ☐ Contanimated Soil ☐ Free floating oil

Soil Removed (Y/N) Amount

Installation: Tank size _____ Approved plans ☐ Yes ☐ No

Notes: 7/17 10,000 gal. tank was removed, some contaminated soil was present. It was removed and placed in buckets until a DEC chem could be obtained. (approx 3½ buckets were filled) 7/21 5,000 + 3,000 gal. tanks were removed, cut + cleaned. There were

Inspector [illegible] Supervisor

Engineer [illegible] Date 7/17/87 ☐ Continued on Reverse Side

~~[illegible]~~ RR

entered 8/4/87

7/21 (Continued) no usable holes in the tanks ~~or~~ and no contaminated soil in the hole. RR.
Facility has converted to gas so there will be no tank installations at this site RR.

INITIAL REPORT OF PETROLEUM SPILL
Nassau County Department of Health

☒ Add ☐ Change ☐ Delete ☐ Key Change

~~I.D. No.~~ 87U323

Date of Spill 7/17/87

Time of Spill PM

Reinspection Date

Estab. Name METCO. (MR. Teicher Facility Supt)

Tel. No. Area 334 No. -1300 Ext.

Estab. Address 220 Miller Place

Complainant Name

Compl. Tel.

Complainant Address

Type of Spill
☐ Surface - Land
☐ Surface - Water
☒ Underground

Source of Report
☐ NCDH ☐ Fire Marshal ☐ Contractor
☐ DEC ☐ DPW ☐ USCG
☐ DOT ☒ Spiller ☐ Complaint

Type of Product #2 Fuel Oil

Est. Amount of Spill 1-2 gal.

Report Received By:

Date

Time

DEC No.

Date Open DEC

SPDES ☐ No ☐ Yes If yes, number

Spiller		Owner/Representive	
Name METCO.		Name	
Address 220 Miller pl.		Address	
Village Hicksville	Zip	Village	Zip
Telephone 334-1300		Telephone	

Emergency Contact		Contractor WARREN Ulmet Mg.	
Name	Title	Name Rice Tank Cleaning	
Address		Address 147 Reconic AVE	
Village	Zip	Village MEDFORD NY	Zip
Telephone		Telephone 475-5663	

Product Information

	Product	Code	% of Spill	Tank Type	Tank Size	Year Installed
1	#2 Fuel	B		1	10,000 gal	
2						
3						
4						
5						

Scavenger Name

Scavenger DEC No.

Brand of Product

Waste Tank Size

Number of Recovery Wells

Number of Other Wells

Recovery Type ☐ Drawdown ☐ Thieving ☐ Excavation ☐ Other

Census Tract

Section

Block

Lot(s)

Coordinates N E

Nearest Intersection

Referred to ☐ DEC ☐ Fire Marshal ☐ Other (Specify)

Further Action Required ☐ DEC ☐ Legal ☐ Follow-up

Reason Closed DEC ☐ Retested ☒ Excavation ☐ No Visible Product ☐ Other (Specify) Date 7/17/87

Reason Closed NCDH ☐ Retested ☐ Excavation ☐ No Visible Product ☐ Other (Specify) Date

Signature of Investigator Robin Rhode

Emp. No. 178

Date of Investigation 7/17/87

Checked By:

EH 749 11/85

Date	REMARKS
7/17/87	~~AA~~ Less than 1 cubic yard of contaminated soil was removed from the hole which contained the 10,000 gal tank. The soil is to be disposed of by Rize tank cleaning corp. PR.

PRODUCT CODES

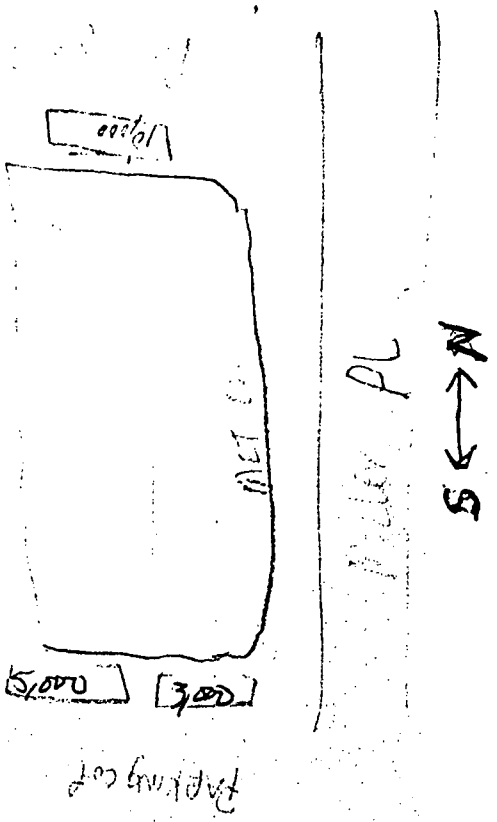
A Hydraulic	H Transmission Fluid
B Fuel Oil 2	I Transformer Oil
C Fuel Oil 4	J Gas, Leaded
D Fuel Oil 6	K Gas, No Lead
E Diesel	L Gas, Premium No Lead
F Kerosene	M Misc.
G Motor Oil	

TANK CODES

1 Steel	4 Double Wall
2 Fiberglass	5 Truck
3 Fiberglass Coated Steel	6 Other

EH 749A 11/85
DH-1472 12/85

TANK Proposed
Locations



TRI FACILITY ID: 11801-PRKNL-220MI
DATE: 11/15/94

PERKIN-ELMER CORP. METCO DIV.
220 MILLER PL.
HICKSVILLE, NY 11801

R E L E A S E V A L U E R E P O R T

Document Control Nbr.	Chemical Name	CAS Number
13-93-07524991-8-NY	ALUMINUM (FUME OR DUST)	007429-90-5

5.1	Fugitive or non-point air emissions	NA
5.2	Stack or point air emissions	1 - 10
5.3.A	Discharges to water bodies NA	NA
5.4	Underground injections on-site	NA
5.5.1	Releases to landfill	NA
5.5.2	Releases to land treatment/application farming	NA
5.5.3	Releases to surface impoundment	NA
5.5.4	Releases to other land disposal	NA
6.2.01	Transfer to other off-site LONI-JO METAL CORP.	6,100
6.2.02	Transfer to other off-site	NA
6.1.A	Total quantity transferred to POTWs	NA
8.1.A	Quantity released	0
8.1.B	Quantity released	0
8.1.C	quantity released	0
8.1.D	Quantity released	0
8.2.A	Quantity used for energy recovery on-site	0
8.2.B	Quantity used for energy recovery on-site	0
8.2.C	Quantity used for energy recovery on-site	0
8.2.D	Quantity used for energy recovery on-site	0
8.3.A	Quantity used for energy recovery off-site	0
8.3.B	Quantity used for energy recovery off-site	0
8.3.C	Quantity used for energy recovery off-site	0
8.3.D	Quantity used for energy recovery off-site	0
8.4.A	Quantity recycled on-site	0
8.4.B	Quantity recycled on-site	0
8.4.C	Quantity recycled on-site	0
8.4.D	Quantity recycled on-site	0
8.5.A	Quantity recycled off-site	1,800
8.5.B	Quantity recycled off-site	6,100
8.5.C	Quantity recycled off-site	6,200
8.5.D	Quantity recycled off-site	6,200
8.6.A	Quantity treated on-site	0
8.6.B	Quantity treated on-site	0
8.6.C	Quantity treated on-site	0
8.6.D	Quantity treated on-site	0
8.7.A	Quantity treated off-site	0
8.7.B	Quantity treated off-site	0
8.7.C	Quantity treated off-site	0
8.7.D	Quantity treated off-site	0
8.8	Quantity released from catastrophic/remedial action	NA
8.9	Production ratio or activity index	.89

NOVA ISLAND MESSENGER SERVICE CORP.

Nova- Island Messenger Corp.

224 Gerard Rd. Yaphank, N.Y. 11980

631-286-3900 Fax: 631-286-7563

127236

DATE 10/22/07

FROM	TO
Solar Meter	Eco Test
Westbury	NBabylon

AT		DT		☐ REG ☐ SPECIAL ☐ RUSH ☐ EXCLUSIVE	

SPECIAL INSTRUCTIONS

CUSTOMER JOB NUMBER

PICK-UP DRIVER: 13

DELIVERY DRIVER: 13

Residential Deliveries: Shipper sign here if consignee signature required.

If consignee signature is not required, Nova-Island Messenger Corp. will deliver this shipment without obtaining a signature and the shipper agrees to indemnify and hold harmless Nova-Island Messenger Corp. from any resulting claims.

DESCRIPTION AND NO. OF PIECES	ENVELOPES	SKIDS	CARTONS	PACKAGES	OTHER
					Samples

CONSIGNEE SIGN FULL NAME X

ABOVE GOODS RECEIVED IN GOOD CONDITION

AM PM

Please print last name:

CHARGES	
RE-DELIVER	
RE-PICK-UP	
WAITING TIME	
WEIGHT	
BULK	
PICK-UP CHARGE	
CHECK NO.	
CASH	
TOTAL	

The shipper hereby releases the property to a value not exceeding 100.00 per shipment for theft only.

MATERIAL SAFETY DATA SHEET

AQUALON
A Division of Hercules Incorporated
1313 North Market Street
P. O. Box 8740
Wilmington, Delaware 19899-8740
Phone #: (302) 594-5000 (24 hrs)

AQUALON* CELLULOSE GUM

MSDS No.: 300 0080 0000-07

Supersedes MSDS No: 300 0080 0000-06

Date: 09/28/91

RECEIVED
APR 21 1994

I. PRODUCT IDENTIFICATION

WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE.
MAY FORM FLAMMABLE DUST-AIR MIXTURES.
DUST CAUSES MILD EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION IF INHALED.
SURFACES SUBJECT TO SPILLS OR DUSTING WITH THIS PRODUCT CAN BECOME SLIPPERY WHEN WET.

AQUALON* CELLULOSE GUM
(Minimum purity of 99.5%, dry basis; various levels of substitution, viscosity, and particle size)

HMIS RATINGS: (1)

Health hazard:	1	Slight
Flammability hazard:	1	Slight
Reactivity hazard:	0	Minimal

CASRN: 9004-32-4

CHEMICAL & COMMON NAMES: Sodium carboxymethyl cellulose; Sodium CMC; Cellulose, carboxymethyl ether, sodium salt

APPEARANCE AND ODOR: White to off white granular powder; odorless

* Trademark of Aqualon

(1) Explanation of acronyms:
HMIS: Hazardous Materials Identification System rating for product as supplied.
CASRN: Chemical Abstracts Service Registry Number
AIHA WEEL: American Industrial Hygienists Association - Workplace Environmental Exposure Level.
OSHA: Occupational Safety and Health Administration.
TLV: Registered trademark of American Conference of Governmental Industrial Hygienists for Threshold Limit Values.
TWA: Time Weighted Average
STEL: Short term exposure limit (See 29 CFR 1910.1048, March 1, 1989, revision)
C: Ceiling exposure concentration (See 29 CFR 1910.1000, March 1, 1989, rev.)
SKIN: May be absorbed through skin (See 29 CFR 1910.1048, March 1, 1989, rev.)
N/A: Not applicable

II. HAZARDOUS INGREDIENTS & EXPOSURE LIMITS

This material is not expected to cause physiologic impairment at low concentration. Until a specific TLV(1) is adopted by the ACGIH (American Conference of Governmental Industrial Hygienists), or an OSHA (Occupational Safety & Health Administration) standard is issued, Aqualon Company suggests that this material be treated as a NUISANCE DUST OR PARTICULATE in accordance with the recommendations of ACGIH.

III. TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS

CAUTION! SURFACES SUBJECT TO SPILLS OR DUSTING WITH THIS PRODUCT CAN BECOME SLIPPERY WHEN WET.

BOILING POINT: N/A

SOLUBILITY IN WATER: Limited by viscosity

VAPOR PRESSURE @ 20 C: N/A

SPECIFIC GRAVITY: 1.59

VAPOR DENSITY: N/A

pH: N/A

VOLATILE (WT.) %: Negligible @ 20 C

EVAPORATION RATE: N/A

FREEZING POINT: N/A

MOISTURE CONTENT, %: 8 max. (as packed)

IV. FIRE, EXPLOSION, & REACTIVITY HAZARD DATA

WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE.
MAY FORM FLAMMABLE DUST-AIR MIXTURES.

BROWNING TEMPERATURE: 227 C (440 F)

FLAMMABLE LIMITS: Not determined

AUTOIGNITION TEMPERATURE: Above 370 C (698 F) Dust

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide, or halon

SPECIAL FIREFIGHTING PROCEDURES: Not known

UNUSUAL FIRE & EXPLOSION HAZARDS: May form flammable dust-air mixtures.

STABILITY CONSIDERATIONS: Stable

INCOMPATIBILITY WITH: Sunlight or ultraviolet light

Continued...

IV. FIRE, EXPLOSION, & REACTIVITY HAZARD DATA

...Continued

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS PRODUCTS OF COMBUSTION: Carbon monoxide, carbon dioxide, and smoke

HAZARDOUS POLYMERIZATION: Will not occur.

V. HEALTH HAZARD DATA

WARNING! DUST CAUSES MILD EYE IRRITATION.
MAY CAUSE RESPIRATORY IRRITATION IF INHALED.

SIGNS & SYMPTOMS OF OVEREXPOSURE IN THE WORKPLACE:

EYES:	Contact with dust causes mild eye irritation.
SKIN:	None
INHALATION:	Inhaling dust may cause respiratory irritation.
INGESTION:	None

EMERGENCY & FIRST AID PROCEDURES:

EYES: In case of contact, immediately flush with plenty of low-pressure water for at least 15 minutes. Remove any contact lenses to assure thorough flushing. Call a physician.

INHALATION: Remove to fresh air. Treat any irritation symptomatically. Call a physician.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:
None

PRIMARY ROUTE OF ENTRY:
Following standard industrial hygiene and recommended procedures, entry of the compound into the body is not expected.

CANCER INFORMATION:
Not listed as a carcinogen by NTP (National Toxicology Program); not regulated as a carcinogen by OSHA (Occupational Safety & Health Administration); not evaluated by IARC (International Agency for Research on Cancer).

REPORTED HUMAN EFFECTS:
Laxative effect reported after repeated oral ingestion of large amounts (10 grams). A single case of allergic contact dermatitis reported after repeated long-term (8 years) skin contact.

Continued...

V. HEALTH HAZARD DATA

...Continued

REPORTED ANIMAL EFFECTS:

Eye irritation after exposure to dust. Laxative effect (loose stools) from repeated ingestion of 10% or greater in diet; lesser amounts are not reported to cause this effect. Laboratory studies indicate that sodium carboxymethyl cellulose is not a mutagen, not a teratogen, not a carcinogen and does not cause effects on reproduction.

VI. SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES:

Sweep up spilled material for use or disposal. Surfaces subject to spills or dusting with this product can become slippery when wet.

WASTE DISPOSAL METHOD:

Incineration of waste material in a permitted facility in accordance with local, state, and federal regulations is the recommended disposal method. Landfilling in a licensed facility equipped with leachate collection is a suitable alternative.

This product is biodegradable. Wastewater containing this product can be considered for treatment in an acclimated biological treatment system of adequate capacity.

Refer to Section VIII for specific Federal Environmental and Regulatory Data regarding use or disposal of this product.

VII. APPLICABLE CONTROL MEASURES

APPROPRIATE HYGIENIC PRACTICES:

Avoid contact with eyes, skin, and clothing.
Avoid breathing dust.
Wash thoroughly after handling.

PERSONAL PROTECTIVE EQUIPMENT:

Safety glasses
Impervious gloves
Appropriate respiratory protection is required when exposure to an airborne contaminant is likely to exceed acceptable limits. Respirators should be selected and used in accordance with OSHA, Subpart I (29 CFR 1910.134) and manufacturer's recommendations.

Continued...

VII. APPLICABLE CONTROL MEASURES

...Continued

WORK PRACTICES:

Eyewash fountains and safety showers should be easily accessible.
Surfaces subject to spills or dusting with this product can become slippery when wet.
Keep floors clean and dry.

HANDLING AND STORAGE PRECAUTIONS:

WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE. MAY FORM FLAMMABLE DUST-AIR MIXTURES. Avoid ignition sources such as sparks and flame. Ground all equipment. In addition, when emptying bags where flammable vapors may be present, blanket vessel with inert gas, ground operator, and pour material slowly into conductive, grounded chute.
To protect product quality, store in sealed containers in a dry place away from heat and sunlight.

ENGINEERING CONTROLS:

Adequate ventilation should be provided to keep dust concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE:

Eliminate ignition sources.
Keep area clean. Product will burn.

VIII. ENVIRONMENTAL & REGULATORY DATA

The following environmental and regulatory data are provided to assist users of this product in defining their regulatory environmental compliance obligations.

A. PRODUCT COMPOSITION

PRODUCT (P) or COMPONENT NO.	TRADE NAME or CHEMICAL COMPONENT	CAS NUMBER	WT. PERCENT
P	AQUALON* CELLULOSE GUM	9004-32-4	100

B. SARA TITLE III (See footnotes)

COMPONENT NO.	SEC. 304 EHS RQ (lbs)	SEC. 302 EHS TPQ (lbs)	SEC. 311/312 HAZARD CATEGORY	SEC. 313 TOXIC CHEMICAL (YES, NO)
P	N/A	N/A	HC-1, HC-3	N/A

C. CERCLA (40 CFR 302.4 HAZARDOUS SUBSTANCE & REPORTABLE QUANTITIES)

This product does NOT contain any hazardous substances listed in 40 CFR 302.4.

D. RCRA INFORMATION

This product is not listed in federal hazardous waste regulation 40 CFR 261.33, paragraph (e) or (f) - i.e., chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261, Subpart C. State or local hazardous waste regulations may apply if they are different from the federal regulation.

E. OTHER

None

Continued...

VIII. ENVIRONMENTAL REGULATORY DATA

...Continued

FOOTNOTES:

SEC. 302 - Threshold Planning Quantity, Extremely Hazardous Substance (EHS) (40 CFR 355 Emergency Planning and Notification regulations)

N/A: This chemical is not an EHS. Therefore, there is no Threshold Planning Quantity (TPQ).

SEC. 304 - Reportable Quantity for Releases of an EHS (40 CFR 355. Appendix A)

N/A: This chemical is not an EHS. Therefore, there is no Reportable Quantity (RQ).

SEC. 311/312 - 40 CFR 370 Hazardous Chemical Reporting Requirements "Hazard Categories"

HC-1 Immediate (acute) health hazard
HC-2 Delayed (chronic) health hazard
HC-3 Fire hazard
HC-4 Sudden release of pressure hazard
HC-5 Reactive hazard
NHH Not a health hazard
NPH Not a physical hazard

SEC. 313 - 40 CFR 372 Toxic Chemical Release Reporting Requirements

NO: This component is NOT subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements.

YES: This component is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements. Percent composition (or estimated range) is listed above.

N/A: This product is a mixture. As such, it is not listed as a Toxic Chemical under 40 CFR 372, Sect. 313 reporting requirements. Reportable constituents are listed individually where they exceed threshold concentration limits.

AQUALON COMPANY HAS COMPILED THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS MATERIAL SAFETY DATA SHEET FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE MOST REASONABLE CURRENT OPINION ON THE SUBJECT WHEN THE MSDS WAS PREPARED. NO WARRANTY, GUARANTY OR REPRESENTATION IS MADE AS TO THE CORRECTNESS OR SUFFICIENCY OF THE INFORMATION. THE USER OF THIS PRODUCT MUST DECIDE WHAT SAFETY MEASURES ARE NECESSARY TO SAFELY USE THIS PRODUCT, EITHER ALONE OR IN COMBINATION WITH OTHER PRODUCTS, AND DETERMINE ITS ENVIRONMENTAL REGULATORY COMPLIANCE OBLIGATIONS UNDER ANY APPLICABLE FEDERAL OR STATE LAWS.

(IMPORTANT: Type or print; read instructions before completing form)

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 93

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms) [X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Joe Macri, Manager Facilities and Transportation

Signature: JMacri

Date Signed: June 30, 1994

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: Metco Division Perkin-Elmer Corporation

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address): 1101 Prospect Avenue

City: Westbury

State: New York

Zip Code: 11590

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility		b. [X] Part of a facility			
4.3	Technical Contact	Name: Joe Macri			Telephone Number (include area code): (516) 334-1300		
4.4	Public Contact	Name: Joe Macri			Telephone Number (include area code): (516) 334-1300		
4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	47	00
4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663					
		b.					
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570					
		b.					
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A					
		b.					
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A					
		b.					

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA Perkin-Elmer Corporation
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	Cobalt
1.3	Generic Chemical Name (Important: Complete only if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

			If produce or import:
3.1	Manufacture the toxic chemical:	a. ☐ Produce b. ☐ Import	c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	Process the toxic chemical:	a. ☐ As a reactant b. ☐ As a formulation component	c. ☒ As an article component d. ☒ Repackaging
3.3	Otherwise use the toxic chemical:	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	A	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name: N/A				
5.3.2	Stream or Water Body Name: N/A				
5.3.3	Stream or Water Body Name: N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 11 - 499 poun
C = 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3	Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			
5.3.__	Stream or Water Body Name			
	N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name		6.1.B.__ POTW Name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pounc
C - 500 - 999 pounds

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: Loni-Jo Metal Corporation

Street Address: 70 Kinkel Street

City: Westbury

County: Nassau

State: New York

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 790	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2. Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11 - 499 pour

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
Cobalt Powder

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: Cobalt Powder

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Chemical, Category, or Generic Name: Cobalt Powder

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1992 (pounds/year)	Column B 1993 (pounds/year)	Column C 1994 (pounds/year)	Column D 1995 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	240	790	800	800
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.89			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b. T06	c.
8.10.2	W39	a. T04	b. T10	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

DIMETRICS, INC. Talley™ Industries

DATE: 10/26/92

TO: ALL SUPPLIERS

SUBJECT: CONTROLLED SUBSTANCE

Recently, Dimetrics, Inc. has been advised that the United States Environmental Protection Agency (EPA) is preparing to release a new regulation requiring the labeling of products. EPA will mandate that any product that contains or had been processed with Class I Ozone Depleting Chemicals (ODC's) will be required to have a warning label attached to it. This regulation is targeted to take effect May 15, 1993.

What this means is that materials and or components shipped to Dimetrics, Inc. that contain Class I ODC's or have used Class I ODC's in their manufacturing process must have a warning label attached. The text of the required labels prescribed by statute as follows:

> WARNING. Contains (name of Chemical), a substance which harms public health and environment by destroying ozone in the upper atmosphere.
>
> WARNING. Manufactured with (name of chemical), a substance which harms public health and environment by destroying ozone in the upper atmosphere.

If you label materials and or products shipped to Dimetrics, Inc. for inclusion in our products, this in turn forces Dimetrics, Inc. to label our final product.

DIMETRICS, INC. • a Talley Industries Company
404 Armour Street, P.O. Box 339 • Davidson, North Carolina 28036 • Telephone (704) 892-8872 • FAX (704) 892-4713

As the proposed regulation is currently written, there is no "de minimis" amount. Unless the final regulation is changed, this means that if any amount of a Class I ODC is contained in or came in contact with the product, the product must bear the required label. The most common Class I ODC uses would include, but are not limited to: cleaners, mold release substances, an ingredient in open cell flexible foam, etc. I have attached a list of Class I ODC's for your reference.

I would like you to review your manufacturing site (s) and determine whether the products that you sell to Dimetrics, Inc. contain Class I ODC's or use Class I ODC's in the manufacturing process. After you survey, please let me know whether or not your manufacturing processes use Class I ODC's. I would like your written response no later than December 1, 1992.

If I can answer any questions, please feel free to contact me. Thank you for your cooperation in this matter.

Sincerely,

Gary R. Taylor

Gary R. Taylor
Purchasing Manager

GRT/sb

Enclosure

cc. A. Squicciarini
G. Sokolowski
S. Stamper
K. Watlington

CONTROLLED SUBSTANCE

A. Class I

1. Group I:

$CFCl_3$ - Trichlorofluoromethane (CFC-11)
$CFC_2 Cl_2$ - Dichlorodifluoromethane (CFC-12)
$C_2 F_3 Cl_3$ - Trichlorotrifluoroethane (CFC-113)
$C_2 F_4 Cl_2$ - Dichlorotetrafluoroethane (CFC-114)
$C_2 F_5 Cl$ - Monochloropentafluoroethane (CFC-115)
All isomers of the above chemicals

2. Group II:

$CF_2 ClBr$ - Bromochlorodifluoromethane (Halon-1211)
CF_3 Br-Bromotrifluoroethane (Halon-1301)
$C_2 F_4 Br_2$ - Dibromotetrafluoroethane (Halon-2402)
All isomers of the above chemicals

3. Group III:

$CF_3 Cl$ - Chlorotrifluoromethane (CFC-13)
$C_2 FCl_5$ - (CFC-111)
$C_2 F_2 Cl_4$ - (CFC-112)
$C_3 FCl_7$ - (CFC-211)
$C_3 F_2 Cl_6$ - (CFC-212)
$C_3 F_3 Cl_5$ - (CFC-213)
$C_3 F_4 Cl_4$ - (CFC-214)
$C_3 F_5 Cl_3$ - (CFC-215)
$C_3 F_6 Cl_2$ - (CFC-216)
$C_3 F_7 Cl$ - (CFC-217)
All isomers of the above chemicals

4. Group IV:

CCl - Carbon Tetrachloride

5. Group V:

$C_2 H_3 Cl_3$ -1,1,1 Trichloroethane (Methyl chloroform)
All isomers of the above chemical except 1,1,2-trichloroethane

Part V

LARGE QUANTITY GENERATOR

Sulzer Hetco - Westbury
NYD 131 318 651
June 2003

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

The generator who generates 1,000 kilograms or more per month of non-acute hazardous waste or generates greater than 1 kg per month of acute hazardous waste has complied with the following:

1. General Requirements

(a) ___ The generator has made a determination as to whether or not his solid waste is a hazardous waste - 372.2(a)(2). X

(b) ___ The generator has obtained an EPA identification number - 372.2(a)(3). X

2. Accumulation Area Requirements - 372.2(a)(i)

(a) ___ The containers appear to be in good condition and are not in danger of leaking - 373-3.9(b). X

(b) ___ Hazardous waste is stored in containers made of compatible materials - 373-3.9(c). X

(c) ___ All containers except those in use are closed - 373-3.9(d)(1). X

(d) ___ Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the containers or cause them to leak - 373-3.9(d)(2). X

(e) X Containers are marked with the words "Hazardous Waste" and with other words that identify the contents of the containers - 372.2(a)(8)(i)(a)(2). ___

(f) ___ Hazardous waste may be accumulated in excess of 55 gallons or 1 quart of acutely hazardous waste at or near the point of generation provided that Section 372.2(a)(8)(ii) requirements are met within 3 days, and the container holding the excess accumulation is marked with the date the excess amount began accumulating - 372.2(a)(8)(i)(b). X

3. 90 Day Storage - 372.2(a)(8)(ii)

(a) ___ All wastes are shipped off-site to an authorized treatment, storage or disposal facility (TSDF) in 90 days or less - 372.2(a)(8)(ii). X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(b) X The date upon which each period of accumulation begins is clearly marked and visible for inspection on each container - 372.2(a)(8)(ii), 373-1.1(d)(1)(iii)(c)(2), 373-1.1(d)(1)(iv)(d). Corrected @ time of inspection ___

Container Storage Requirements (This section will also be completed for interim status TSDF's as referred from Part VI.)

(c) ___ The containers appear to be in good condition and are not in danger of leaking. (If containers are leaking, describe the type, condition, contents and number that are leaking or corroded. Be detailed and specific) - 373-3.9(b). X

(d) ___ Hazardous waste is stored in containers made of compatible materials - 373-3.9(c). (If not, please explain.) X

(e) ___ All containers except those in use are closed - 373-3.9(d)(1). X

(f) ___ Containers holding hazardous waste must not be opened, handled or stored in a manner which may rupture the containers or cause them to leak - 373-3.9(d)(2). X

(g) X Each container is marked with the words "Hazardous Waste" and with other words to identify the contents - 373-3.9(d)(3). Corrected @ time of inspection ___

(h) ___ The container storage area is inspected at least weekly - 373-3.9(e). X

(i) ___ The generator complies with the following special requirements for storage of ignitable or reactive wastes - 373-3.9(f): NA

(1) ___ Containers holding ignitable or reactive waste are located at least 15 meters (50 feet) from the facility property line - 373-3.9(f).

(2) ___ Generator has taken precautions to prevent accidental ignition or reaction of ignitable or reactive waste by separating and protecting such waste from sources of ignition or reaction - 373-3.2(h)(1).

(3) ___ Generator has placed "No Smoking" signs conspicuously wherever there is a hazard from ignitable or reactive waste - 373-3.2(h)(1). NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(j) ___ The generator complies with the following special requirements related to incompatible wastes - 373-3.9(g): NA

(1) ___ Incompatible wastes, or incompatible wastes and materials, are not placed in the same container, or in an unwashed container that previously held an incompatible waste or material unless the placement is conducted to prevent the following - 373-3.9(g)(1) & (2):

(a) ___ the generation of extreme heat or pressure, fire or explosion, or violent reaction - 373-3.2(h)(2)(i);

(b) ___ production of uncontrolled toxic mists, fumes, dusts or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(ii);

(c) ___ production of uncontrolled flammable fumes or gases in sufficient quantities to pose a risk of fire or explosions - 373-3.2(h)(2)(iii);

(d) ___ damage to the structural integrity of the device or facility containing the waste - 373-3.2(h)(2)(iv); or

(e) ___ a threat to human health or the environment - 373-3.2(h)(2)(v).

(2) ___ Containers holding a hazardous waste that is incompatible with any waste or other materials stored nearby in other containers, piles, open tanks, or surface impoundments must be separated from the other materials or protected from them by means of a dike, berm, wall, or other device - 373-3.9(g)(3).

(3) ___ The owner or operator shall manage all hazardous waste placed in containers in accordance with the applicable requirements of sections 373-3.27, 373-3.28 and 373-3.29 of the Subpart (Complete Appendix X) - 373-3.9(h). NA

(k) ___ Special requirements for generators of liquid hazardous waste over sole source aquifers or generators that store more than 8,800 gallons of liquid hazardous waste - 373-1.1(d)(1)(iii), 373-1.1(d)(1)(iv). NA

(l) ___ The container storage areas are within a secondary containment system designed and operated in accordance with the following* - 373-1.1(d)(1)(iv)(f):

(a) ___ The base under the containers must be free of cracks or gaps and sufficiently impervious to contain collected material until it is removed - 373-2.9(f)(1)(i).

(b) ___ The base must be sloped or the containment system otherwise designed and operated to drain and remove liquid unless the containers are elevated or protected from contact with accumulated liquids - 373-2.9(f)(1)(ii). NA

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(c) ___ The containment system must have sufficient capacity to contain 10 percent of the volume of containers or the volume of the largest container, whichever is greater. Containers that do not contain free liquids are not considered in this determination - 373-2.9(f)(1)(iii). NA

(d) ___ Run-on is prevented unless the system has sufficient excess capacity over that required in (3) - 373-2.9(f)(1)(iv).

(e) ___ Accumulated waste and precipitation must be removed as necessary to prevent overflow - 373-2.9(f)(1)(v). NA

* This requirement does not apply to generators of liquid hazardous waste over a sole source aquifer if the container storage volume does not exceed 185 gallons.

(2) ___ The generator of liquid hazardous waste over a sole source aquifer has a written closure plan - 373-3.7(c)(1). NA

(3) ___ The closure plan identifies the steps necessary to perform partial and/or final closure of the facility at any point during its active life. The closure plan must contain the information required by 373-3.7(c)(2)(i) - (vii)** - 373-3.7(c)(2). NA

** If a violation is checked, please attach a sheet listing the deficiencies in the closure plan.

4. Tank Storage Requirements - 373-3.10

1. ___ Generators must complete Appendix E, except for 373-3.10(h)(3) Items 9C1 through 5. In addition, 373-3.7 and 3.8 which are cross-referenced do not apply except for 373-3.7(b) and (e).

2. ___ Generators over sole-source aquifers complete Appendix E, except for 373-3.10(h)(3), Items 9C1 through 5 and 373-3.8 (financial requirements).

5. Manifest, Reporting and Recordkeeping Requirements

(a) ___ Hazardous waste is shipped off-site with an accompanying manifest - 372.2(b)(5)(i). X

If violation is checked, please provide details.

_____

_____

(b) List the frequency of shipments and the amount of waste per shipment.

Approx 100gal D001 · 6 MOS to 1YR.
1000 lbs D002 1-2 MOS
2000 lbs D007 / 6 MOS.

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(c) ___ The transporter has a valid Part 364 permit or is otherwise authorized to transport the waste to the designated facility - 372.2(b)(5)(ii). X

(d) ___ The generator offers for shipment or ships hazardous waste to an authorized facility. - 372.2(b)(5)(iii). X

If violation is checked, please provide details.

_____

_____

_____

(e) ___ Each manifest is completed in accordance with the instructions found in Appendix 30 of Part 372 - 372.2(b)(1). [Indicate items in violation]

		Generator	Trans 1	Trans 2	TSDF	
(1) ___	Name of	X	X	X	X	X
(2) ___	EPA ID No. of	X	X	X	X	X
(3) ___	Mailing Address of	X			X	X
(4) ___	Telephone No. of	X	X	X	X	X
(5) ___	Manifest Document #					X
(6) ___	The proper USDOT description.					X
(7) ___	The appropriate: X quantity, X container number, X container type, and X waste type by units of weight or volume.					X
(8) ___	Signed certification that the materials are properly classified, described, packaged, marked and labeled, and are in proper condition for transportation under regulations of the USDOT and NYSDEC.					X

(f) ___ The generator has received signed copies (from the TSD facility) of all manifests for wastes shipped off-site more than 45 days ago: X

___ If not, exception reports have been submitted covering these shipments - 372.2(c)(3). NA

(g) ___ The generator must distribute copies of the manifest as specified on the manifest form, postmarked within five (5) business days of the shipment date - 372.2(b)(3). X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(h) ___ For international shipments the generator has done the following - 372.2(b)(4)(i):

(1) ___ The EPA and the Department have been notified 60 days prior to shipment of the hazardous waste destined for treatment, storage or disposal outside the United States - 372.5(c)(1). NA

(2) ___ Primary exporters of hazardous waste must file with the Administrator and the Department no later than March 1 of each year, a report summarizing the types, quantities, frequency, and ultimate destination of all hazardous waste exported during the previous calendar year - 372.5(f)(1). NA

(i) ___ The generator has complied with the requirements of Section 372.6 for interstate shipments - 372.2(b)(4)(ii). X

(j) ___ The generator has complied with the requirements for shipping by rail or water (bulk) found in Section 372.7 - 372.2(b)(4)(iii). NA

(k) ___ A copy of each manifest has been kept for at least three years from the date the waste was accepted by the initial transporter - 372.2(c)(1)(i). X

(l) ___ A copy of each Annual Report and Exception Report must be kept for a period of at least three years from the due date of the report - 372.2(c)(1)(ii). NA

(m) ___ A generator must keep records of any test results, waste analyses, or other determinations made in accordance with Part 372.2(a)(2) for at least three years - 372.2(c)(1)(iii). X

(n) ___ All records required under subdivision 372.2(c) were furnished upon request, or made available at a reasonable time for inspection - 372.2(c)(1)(iv). X

(o) ___ There is written communication that the designated treatment, storage or disposal facility is authorized for the hazardous wastes being offered for shipment, has capacity to accept such hazardous waste, and will assure the ultimate disposal method is followed - 372.2(b)(2)(i). X

(p) ___ There is written communication that the designated transporter is authorized to deliver the waste to the facility on the manifest - 372.2(b)(2)(ii). X

(q) ___ A generator who ships hazardous waste <u>off-site</u> to a treatment, storage or disposal facility located within the United States must submit an Annual Report on forms specified by the Commissioner - 372.2(c)(2). X

Indicate:	Indicate:
X Violations	X Satisfactory NA Not Applicable

6. Personnel Training - 373-3.2(g)

(a) ___ The following documents and records are maintained at the facility - 373-3.2(g)(4): X

(1) ___ the job title for each position at the facility related to hazardous waste management and name of the employee filling each job - 373-3.2(g)(4)(i); X

(2) ___ a written job description for each position - 373-3.2(g)(4)(ii); X

(3) ___ a written description of the type and amount of both introductory and continuing training that will be given to each person related to hazardous waste management - 373-3.2(g)(4)(iii); and X

(4) ___ records that document that the training or job experience required has been given to and completed by facility personnel - 373-3.2(g)(4)(iv). X

(b) ___ The training program is directed by a person trained in hazardous waste management procedures and must include instruction which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to the positions in which they are employed. The components are - 373-3.2(g)(1)(i), (ii) and (iii): X

(1) ___ Procedures for using, inspecting, repairing and replacing facility emergency and monitoring equipment; X

(2) ___ Key parameters for automated waste feed cutoff systems; X

(3) ___ Communications or alarm systems; X

(4) ___ Response to fires and explosions; X

(5) ___ Response to groundwater contamination incidents; and X

(6) ___ Shutdown of operations. X

(c) ___ Facility personnel have successfully completed the program by the effective date of these regulations or six months after the date of their employment - 373-3.2(g)(2). X

(d) ___ Facility personnel have taken part in an annual review of the initial training required - 373-3.2(g)(3). X

(e) ___ Training records on current personnel have been kept permanently at the facility (until closure) - 373-3.2(g)(5). X

Indicate:	Indicate:
X Violations	X Satisfactory NA Not Applicable

(f) __ Training records on former employees have been kept for at least three years from the date the employee last worked at the facility - 373-3.2(g)(5). X

7. Preparedness and Prevention - 373-3.3

(a) ___ The facility is maintained and operated to minimize the possibility of a fire or explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil or surface water - 373-3.3(b). X

(b) ___ The facility must be equipped with the following, unless none of the hazards posed by waste handled at the facility could require a particular kind of equipment specified below - 373-3.3(c): X

(1) ___ An internal communication or alarm system capable of providing immediate emergency instruction (voice or signal) to facility personnel - 373-3.3(c)(1); X

(2) ___ A device, such as a telephone (immediately available at the scene of operations) or a hand-held, two-way radio capable of summoning emergency assistance from local police departments, fire departments, or emergency response teams - 373-3.3(c)(2); X

(3) ___ Portable fire extinguishers, fire control equipment, spill control equipment and decontamination equipment - 373-3.3(c)(3); and X

(4) ___ Water at adequate volume and pressure to supply water hose streams, or foam-producing equipment, or automatic sprinklers, or water spray systems - 373-3.3(c)(4). X

(c) ___ Facility communications or alarm systems, fire protection equipment, and spill control equipment are tested and maintained as necessary to assure their proper operation in time of emergency - 373-3.3(d). X

(d) ___ Personnel involved in hazardous waste operations have immediate access to an internal alarm or emergency communication device either directly or through visual or voice contact with another employee - 373-3.3(e). X

(e) ___ The owner or operator must maintain aisle space to allow the unobstructed movement of personnel, fire protection equipment, spill control equipment, and decontamination equipment to any area of facility operation in an emergency unless aisle space is not needed for any of these purposes - 373-3.3(f). X

(f) ___ The facility owner or operator has attempted to make the following arrangements as appropriate with local authorities for the type of waste handled at the facility and the potential need for the services of these organizations - 373-3.3(g)(1): X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(1) ___ Arrangements to familiarize police, fire departments and emergency response teams with the functions and layout of the facility - 373-3.3(g)(1)(i); X

(2) ___ Where more than one police and fire department might respond to an emergency, an agreement designating primary emergency authority to a specific police and a specific fire department, and agreements with any others to provide support to primary emergency authority - 373-3.3(g)(1)(ii); NA

(3) ___ Agreements with State emergency response teams, emergency response contractors, and equipment suppliers - 373-3.3(g)(1)(iii); and NA

(4) ___ Arrangements to familiarize local hospitals with the properties of hazardous waste handled at the facility and the types of injuries or illnesses which could result from fires, explosions or releases at the facility - 373-3.3(g)(1)(iv). X

(g) ___ Where state or local authorities decline to enter into such arrangements, the owner or operator has documented the refusal in the operating record - 373-3.3(g)(2). NA

8. Contingency Plan - 373-3.4

(a) ___ The facility has a contingency plan or some other emergency plan which incorporates hazardous waste management - 373-3.4(b)(1). X

(b) ___ If the facility has a Spill Prevention, Control, and Countermeasure Plan (SPCC) or some other emergency plan, that plan need only be modified to incorporate hazardous waste management provisions that are sufficient to comply with the Contingency plan requirements - 373-3.4(c)(2). NA

(c) ___ The following are included in the contingency plan - 373-3.4(c): X

(1) ___ A description of the actions facility personnel must take in response to fires, explosions or any unplanned sudden or non-sudden releases of hazardous waste or hazardous waste constituents to air, soil or surface water; 373-3.4(c)(1). X

(2) ___ A description of arrangements agreed to by local police departments, fire departments, hospitals, contractors, and State and local emergency response teams to coordinate emergency services; 373-3.4(c)(3). X

(3) ___ Names, addresses and office and home phone numbers of all persons qualified to act as emergency coordinator; 373-3.4(c)(4). X

Indicate:

X Violations

Indicate:

X Satisfactory
NA Not Applicable

(4) ___ An up-to-date list of all emergency equipment at the facility, and decontamination equipment, where this equipment is required; 373-3.4(c)(5). X

(5) ___ The location and a physical description of each item on the list, and a brief outline of its capabilities; 373-3.4(c)(5). X

(6) ___ An evacuation plan for facility personnel, where there is a possibility that evacuation could be necessary - 373-3.4(c)(6). X

(d) ___ Copies of the contingency plan are maintained at the facility - 373-3.4(d)(1). X

(e) ___ Copies of the contingency plan have been submitted to all local police departments, fire departments, hospitals, and State and local emergency response teams that may be called upon to provide emergency services - 373.3.4(d)(2). X

(f) ___ The contingency plan has been amended, as necessary, when applicable regulations were revised, the plan failed in an emergency, the facility changes or the list of emergency coordinators or equipment changes - 373-3.4(e). X

(g) ___ There is at least one employee either on the facility premises or on call with the responsibility and authority for coordinating all emergency response measures - 373-3.4(f). X

9. Emergency Procedures - 373-3.4(g)

(a) ___ During a past emergency situation the emergency coordinator (or his designee when the emergency coordinator is not on call) immediately activated emergency procedures - 373-3.4(g).* NA

*Do not go back further than the previous inspection date.

(b) ___ The following was done:

(1) ___ Activated internal facility alarms or communication systems;

(2) ___ Notified appropriate state or local agencies;

(3) ___ Immediately identified the character, exact source, amount and areal extent of any released materials;

(4) ___ The emergency coordinator assessed possible hazards to human health and the environment;

(5) ___ The emergency coordinator, after determining that the facility had a release, fire or explosion which could threaten human health or NA

the environment outside the facility, reported his findings;

(6) ___ During the emergency, the emergency coordinator took all reasonable measures necessary to ensure that fire, explosions and releases do not occur, recur or spread to other hazardous waste;

(7) ___ The emergency coordinator monitored for leaks, pressure buildup, gas generation or ruptures in valves, pipes or other equipment, where appropriate during the facility's response to the emergency;

(8) ___ The emergency coordinator provided for treating, storing or disposing of recovered waste, contaminated soil or surface water, or any other material that resulted from a release, fire or explosion at the facility;

(9) ___ The emergency coordinator ensured that in the affected area no waste that may be incompatible with the released material was treated, stored or disposed of until cleanup procedures were completed;

(10) ___ The emergency coordinator ensured that all emergency equipment listed in the contingency plan was cleaned and fitted for its intended use before operations were resumed;

(11) ___ The owner or operator notified the Commissioner that the facility is in compliance with Part 373-3.4(g)(8) before operations were resumed in the affected areas of the facility;

(12) ___ The owner or operator noted in the operating record the time, date and details of the incident that required implementation of the contingency plan;

(13) ___ The owner or operator submitted a complete written report on the incident within 15 days after the incident occurred.

NA

NA

1. Rumpke Sanitary Landfill, Inc.
2. Clean Harbors London ON
3. Clean Harbors – St Catherine, PQ
4. Clean Harbors, – Cincinnati, OH
5. Clean Harbors. – Corunna, ON: incin + landfill
6. Modern Landfill
7. Clean Harbors – Cleveland, OH
8. Clean Harbors, Thorold, ON
9. Clean Harbors – Chicago, IL
10. Clean Harbors – S. Portland, ME

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Modern Landfill (PAD987395803)	31223J1	SPENT FILTERS	35	PAL	NONE	15,750		Modern Landfill
						15,750		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH14936	ACTREL, 105 SOLVENT	1	55DM	D001,D039	300	ENERGY RECOVERY	Essroc Logansport IN
						300		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	688	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	2	55DM	NONE	400	LANDFILL	Rumpke Sanitary Landfill, Inc
						1,088		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	2	30DM	CR05,MA99,NONE	4,500		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	1	55DF	CR05,MA99,NONE	3,000		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	2	05DF	CR05,MA99,NONE	3,000		Clean Harbors - Cincinnati, OH
						10,500		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	62	55DM	NONE	39,062	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	40	55DM	NONE	23,401	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	40	55DM	NONE	29,575	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	9	55DM	NONE	5,875	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	34	55DM	NONE	15,769	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	8	55DM	CR05,MA99,NONE	4,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	3	PAL	CR05,MA99,NONE	1,800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	1	55DM	CR05,MA99,NONE	800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	8	55DM	CR05,MA99,NONE	4,500	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	7	20DM	CR05,MA99,NONE	1,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	18	20DF	CR05,MA99,NONE	3,000	LANDFILL	Rumpke Sanitary Landfill, Inc
						128,782		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	3	55DF	D007	900	STABILIZATION	Clean Harbors London ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	4	55DM	D007	1,200	STABILIZATION	Clean Harbors London ON
						2,100		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189110	GRIT BLAST MATERIAL	1	55DM	NONE	650	LANDFILL	Rumpke Sanitary Landfill, Inc
						650		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189112	MIXED SPENT ACIDS	1	30DF	D002,D006,D007,D008	250	INCINERATION	Clean Harbors-St Catherine, PQ
						250		

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	4	55DM	CR04,MA99,NONE	2,000		Clean Harbors - Cincinnati, OH
						2,000		
Clean Harbors Bristol, CT (CTD000604488)	CH189134	METAL/CERAMIC POWDER & WATER	8.16	TON	CR04,MA99,NONE	20,000	LANDFILL	Geological Reclamation
						20,000		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	28	55DM	NONE	17,748	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	8	55DM	NONE	5,438	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	8	55DM	NONE	4,966	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	4	55DM	NONE	1,834	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	9	55DM	CR04,MA99,NONE	4,500	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	2	55DM	CR04,MA99,NONE	1,800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	1	85DM	CR04,MA99,NONE	2,000	LANDFILL	Rumpke Sanitary Landfill, Inc
						38,286		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	2	55DF	CR05,MA99,NONE	400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	2	20DF	CR05,MA99,NONE	400		Clean Harbors - Cincinnati, OH
						800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	1	30DF	CR05,MA99,NONE	400	LANDFILL	Rumpke Sanitary Landfill, Inc
						400		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	1	55DM	NONE	221	ENERGY RECOVERY	Essroc Logansport IN
						221		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	1	55DM	NONE	504	LANDFILL	Rumpke Sanitary Landfill, Inc
						504		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	4	55DM	NONE	850	LANDFILL	Rumpke Sanitary Landfill, Inc
						850		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	2	20DM	CR05,MA99,NONE	800		Clean Harbors - Cincinnati, OH
						800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	22	55DM	CR05,MA99,NONE	11,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	1	30DM	CR05,MA99,NONE	150	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	4	PAL	CR05,MA99,NONE	3,200	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	18	55DM	CR05,MA99,NONE	10,800	LANDFILL	Clean Harbors - Corunna, ON

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	5	PAL	CR05,MA99,NONE	2,500	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	2	FBIN	CR05,MA99,NONE	2,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	2	55DM	CR05,MA99,NONE	800	LANDFILL	Clean Harbors - Corunna, ON
						30,450		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	61	55DM	NONE	27,917	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	2	55DM	NONE	1,300	LANDFILL	Rumpke Sanitary Landfill, Inc
						29,217		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	8	55DM	NONE	4,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	6	PAL	NONE	4,800	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	1	55DM	NONE	200	LANDFILL	Clean Harbors - Corunna, ON
						9,000		
Clean Harbors - Baltimore, MD (MDD980555189)	CH64862	SPENT FILTERS	8	PAL	NONE	4,023	LANDFILL	Modern Landfill
						4,023		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	1	30DF	CR04,MA99	700		Clean Harbors - Cincinnati, OH
						700		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	1	55DF	CR04,MA99	700	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	1	55DM	CR04,MA99	400	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	2	55DF	CR04,MA99	500	INCINERATION	Clean Harbors - Corunna, ON
						1,600		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74857	Methanol	7	55DM	U154	2,600	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74857	Methanol	1	55DM	U154	400	ENERGY RECOVERY	Essroc Logansport IN
						3,000		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	3	55DF	CR04,MA99	1,500	OTHER RECOVERY	Consolidated Recycling Company
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	3	55DF	CR04,MA99	1,500	OTHER RECOVERY	Consolidated Recycling Company
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	2	55DF	CR04,MA99	400	OTHER RECOVERY	Consolidated Recycling Company
						3,400		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	2	55DM	D001	800		Clean Harbors - Cincinnati, OH
						800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	1	30DM	D001	800	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	1	55DF	D001	400	ENERGY RECOVERY	Essroc Logansport IN
						1,200		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74868	Acetic Acid/water	1	55DF	D002	400	INCINERATION	Clean Harbors Deer Park, TX
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74868	Acetic Acid/water	1	55DF	D002	400	INCINERATION	Clean Harbors Deer Park, TX
						800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74872	WATER/OIL	1	30DF	CR02,MA01,NONE	150	AQUEOUS ORGANIC TREATMENT	Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74872	WATER/OIL	1	55DM	CR02,MA01,NONE	900	OTHER RECOVERY	Clean Harbors - Cincinnati, OH
						1,050		

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	1	55DM	CR04,MA99	800		Clean Harbors - Cincinnati, OH
						800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	1	85DM	CR04,MA99	800	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	2	30DM	CR04,MA99	800	ENERGY RECOVERY	Essroc Logansport IN
						1,600		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	1	30DM	NONE	10,400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	27	20DM	NONE	10,400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	7	20DF	NONE	1,500		Clean Harbors - Cincinnati, OH
						22,300		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	9	55DM	NONE	10,400	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	3	FBIN	NONE	6,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	2	20DM	NONE	1,500	LANDFILL	Clean Harbors - Corunna, ON
						17,900		

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH14936	ACTREL, 105 SOLVENT	1	55DM	D001,D039	316	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH14936	ACTREL, 105 SOLVENT	1	55DM	D001,D039	134	ENERGY RECOVERY	Essroc Logansport IN
						450		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH14936	ACTREL, 105 SOLVENT	1	55DM	D001,D039	178	ENERGY RECOVERY	Systech - Paulding, OH
						178		
Clean Harbors - Baltimore, MD (MDD980555189)	CH189102	OIL SPILL CLEANUP/FILTERS	2	55DM	NONE	381	LANDFILL	Modern Landfill
						381		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	172	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	4	55DM	NONE	693	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	2	55DM	NONE	358	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	2	55DM	NONE	290	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	207	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	150	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	173	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	1	55DM	NONE	225	LANDFILL	Rumpke Sanitary Landfill, Inc
						2,268		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189103	KEROSENE	2	55DM	D001	558	ENERGY RECOVERY	Systech - Paulding, OH
						558		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189106	CAUSTIC COPPER DIP/SODIUM HYDROXIDE	3	55DM	D002,D006,D007,D008	1,437	INCINERATION	Clean Harbors - Cleveland, OH
						1,437		
Clean Harbors - Baltimore, MD (MDD980555189)	CH189107	METAL OXIDES & CERAMIC POWDERS	6	55DM	NONE	2,688	LANDFILL	Modern Landfill
Clean Harbors - Baltimore, MD (MDD980555189)	CH189107	METAL OXIDES & CERAMIC POWDERS	13	55DM	NONE	8,207	LANDFILL	Modern Landfill
						10,895		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	1	55DM	NONE	662	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	6	55DM	NONE	4,166	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	2	55DM	NONE	1,300	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	48	55DM	NONE	30,306	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	6	55DM	NONE	2,023	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	7	55DM	NONE	2,648	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	4	55DM	NONE	2,175	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	4	55DM	NONE	2,464	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	4	55DM	NONE	2,587	LANDFILL	Rumpke Sanitary Landfill, Inc
						48,331		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	6	55DM	D007	2,737	STABILIZATION	Clean Harbors London ON

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	1	55DM	D007	166	STABILIZATION	Clean Harbors London ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	3	55DM	D007	1,601	STABILIZATION	Clean Harbors Thorold ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	2	55DM	D007	1,189	STABILIZATION	Clean Harbors Thorold ON
						5,693		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	2	55DM	D007	634	STABILIZATION	In Cntnr No LGBATCH1
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	1	55DM	D007	346	STABILIZATION	In Cntnr No LGBATCH2
						980		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189109	FILTERS/PPE/METAL & CERAMIC POWDER	3	55DM	NONE	419	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189109	FILTERS/PPE/METAL & CERAMIC POWDER	2	PAL	NONE	1,311	LANDFILL	Rumpke Sanitary Landfill, Inc
						1,730		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189110	GRIT BLAST MATERIAL	1	55DM	NONE	759	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189110	GRIT BLAST MATERIAL	1	55DM	NONE	725	LANDFILL	Rumpke Sanitary Landfill, Inc
						1,484		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	1	55DM	NONE	152	LANDFILL	CHES Lone Mtn Waynoka, OK
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	1	55DM	NONE	454	OTHER RECOVERY	Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	6	55DM	NONE	2,624	OTHER RECOVERY	Oil, Chicago, IL
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	1	55DM	NONE	439	OTHER RECOVERY	Oil, Chicago, IL
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	3	55DM	NONE	1,242	OTHER RECOVERY	Oil, Chicago, IL
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	3	55DM	NONE	1,039	OTHER RECOVERY	Oil, Chicago, IL
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	1	55DM	NONE	358	OTHER RECOVERY	Oil, Chicago, IL
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189111	WASTE COMPRESSOR OIL	2	55DM	NONE	815	LANDFILL	Rumpke Sanitary Landfill, Inc
						7,123		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189112	MIXED SPENT ACIDS	2	30DF	D002,D007	573	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
						573		
Clean Harbors - Baltimore, MD (MDD980555189)	CH189134	METAL/CERAMIC POWDER & WATER	3	55DM	NONE	1,618	LANDFILL	Modern Landfill
Clean Harbors - Baltimore, MD (MDD980555189)	CH189134	METAL/CERAMIC POWDER & WATER	3	55DM	NONE	1,381	LANDFILL	Modern Landfill
						2,999		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	7	55DM	NONE	4,465	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	19	55DM	NONE	9,499	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	20	55DM	NONE	10,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	1	55DM	NONE	589	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	5	55DM	NONE	2,768	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	2	55DM	NONE	1,940	LANDFILL	Rumpke Sanitary Landfill, Inc

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
						28,261		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	1	55DM	NONE	509	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	9	55DM	NONE	3,890	INCINERATION	Clean Harbors Deer Park, TX
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	1	55DM	NONE	423	ENERGY RECOVERY	Covanta Indianapolis Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	1	55DM	NONE	293	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	5	55DM	NONE	2,401	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	3	55DM	NONE	1,633	LANDFILL	Rumpke Sanitary Landfill, Inc
						9,149		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189142	COPPER CLEANER/CHROMIC ACID	2	55DF	D002,D006,D007,D008	931	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189142	COPPER CLEANER/CHROMIC ACID	2	55DF	D002,D006,D007,D008	949	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189142	COPPER CLEANER/CHROMIC ACID	2	55DF	D002,D006,D007,D008	923	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189142	COPPER CLEANER/CHROMIC ACID	1	55DM	D002,D006,D007,D008	522	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
						3,325		
Clean Harbors - Baltimore, MD (MDD980555189)	CH189142	COPPER CLEANER/CHROMIC ACID	2	55DF	D002,D006,D007,D008	958	INCINERATION	Clean Harbors-St Catherine, PQ
						958		
Clean Harbors - Baltimore, MD (MDD980555189)	CH189144	NYLON TURNINGS	3	55DM	NONE	435	LANDFILL	Modern Landfill
						435		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	9	55DM	NONE	1,362	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	7	55DM	NONE	1,322	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	4	55DM	NONE	682	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	4	55DM	NONE	789	LANDFILL	Rumpke Sanitary Landfill, Inc
						4,155		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189146	TUMBLER WASTE SLUDGE	5	55DF	NONE	2,489	LANDFILL	Rumpke Sanitary Landfill, Inc
						2,489		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH36421	SAND	1	55DM	NONE	649	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH36421	SAND	1	55DM	NONE	726	LANDFILL	Rumpke Sanitary Landfill, Inc
						1,375		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH36427	Water/oil/soap	1	55DM	NONE	510	LANDFILL	Rumpke Sanitary Landfill, Inc
						510		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	9	55DM	NONE	4,402	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	6	55DM	NONE	4,077	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	8	55DM	NONE	5,508	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	3	55DM	NONE	2,854	LANDFILL	Rumpke Sanitary Landfill, Inc
						16,841		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	2	PAL	NONE	703	LANDFILL	CHES Lone Mtn Waynoka, OK
						703		

Recv Facility	Item No	Item Desc	Qty	UOM	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Baltimore, MD (MDD980555189)	CH64862	SPENT FILTERS	5	PAL	NONE	2,617	LANDFILL	Modern Landfill
						2,617		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66105	Kitchen Grease	2	55DM	NONE	832	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66105	Kitchen Grease	1	55DM	NONE	489	LANDFILL	Rumpke Sanitary Landfill, Inc
						1,321		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	2	55DF	NONE	985	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	2	55DM	NONE	783	INCINERATION	Clean Harbors - Corunna, ON
						1,768		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66118	Oil and Speedi dry	1	55DM	NONE	310	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66118	Oil and Speedi dry	1	55DM	CR05,MA01	359	LANDFILL	Rumpke Sanitary Landfill, Inc
						669		
Clean Harbors - Baltimore, MD (MDD980555189)	CH74437B	NON-RCRA FILTERS/FILTER BAGS	10	TON	NONE	50,000	LANDFILL	Modern Landfill
						50,000		
Clean Harbors - Baltimore, MD (MDD980555189)	CH74860	Glycol/water	1	55DF	NONE	449	OTHER TREATMENT	Clean Harbors - Baltimore, MD
						449		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH79100	COPPER CLEANER/CHROMIC ACID pH=10	1	55DF	D006,D007,D008	465	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH79100	COPPER CLEANER/CHROMIC ACID pH=10	1	55DM	D006,D007,D008	488	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Cleveland, OH
						953		
Clean Harbors - Baltimore, MD (MDD980555189)	CH82414	METAL/CERAMIC POWDER & 90% WATER	19	55DM	NONE	10,988	AQUEOUS INORGANIC TREATMENT	Clean Harbors - Chicago, IL
						10,988		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH82414	METAL/CERAMIC POWDER & 90% WATER	21	55DM	NONE	10,839	AQUEOUS ORGANIC TREATMENT	Clean Harbors - Cincinnati, OH
						10,839		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH82414	METAL/CERAMIC POWDER & 90% WATER	11	55DM	NONE	5,947	AQUEOUS INORGANIC TREATMENT	Rumpke Sanitary Landfill, Inc
						5,947		
Clean Harbors Bristol, CT (CTD000604488)	ch82414bb	METAL/CERAMIC POWDER & 90% WATER	2200	GAL	CR04,NONE	18,348		Clean Harbors - Cleveland, OH
						18,348		
Clean Harbors Bristol, CT (CTD000604488)	CH83772B	METAL/CERAMIC WASTEWATER	3000	GAL	NONE	25,020	OTHER RECOVERY	Clean Harbors - S Portland, ME
						25,020		
Clean Harbors - Cincinnati, OH (OHD000816629)	CHCFL1-63	STRAIGHT FLUORESCENT TUBES FOR RECLAIM	200	LBS	NONE	200		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CHCFL1-63	STRAIGHT FLUORESCENT TUBES FOR RECLAIM	30	LBS	NONE	30	LANDFILL	Rumpke Sanitary Landfill, Inc
						230		

MP

SCRAP INVENTORY

Notes	DRUM #	DATE	PRODUCT	JOB #	WEIGHT	% Ni/Al
1	61	2/15/05	320	1064006	620	80%Al
1	62	2/15/05	320	1064006	620	80%Al
1	66	3/3/05	320	1069015	407	80%Al
1	69	3/9/05	320	1069015		80%Al
1	72	3/11/05	320	1069015	342	80%Al
1	73	3/11/05	320	1069015	500	80%Al
1	74	3/11/05	320	1069015	520	80%Al
1	82	3/22/05	320	1069015	490	80%Al
1	83	3/22/05	320	1069015	502	80%Al
1	84	3/1/05	320	1069015	371	80%Al
1	85	3/25/05	320	1069015	508	80%Al
1	90	4/6/05	320	1069015	532	80%Al
1	97	4/11/05	320		561	80%Al
1	105	4/25/05	320	1069015	424	80%Al
1	106	4/25/05	320	1069015	380	80%Al
1	111	5/3/05	320	1074116	610	80%Al
1	112	5/3/05	320	1074116	415	80%Al
1	117	5/19/05	320	1075241	606	80%Al
1	124	5/9/05	320	1074116	372	80%Al
1	125	5/9/05	320	1074116	375	80%Al
1	126	5/9/05	320			80%Al
1	136	6/9/05	320			80%Al
1	137	6/9/05	320	1062752		80%Al
1	138	6/9/05	320	1062752		80%Al
1	143	6/9/05	320	1075241		80%Al
2	28	1/18/05	450	1064482	1794	93%Ni
2	36	1/22/05	450	1064482	1730	93%Ni
2	47	2/7/05	450	1064482	631	93%Ni
2	53	2/7/05	450	1066691	1177	93%Ni
2	54	2/11/05	450		1110	93%Ni
2	77	3/14/05	450	1066865	1562	93%Ni
2	78	3/14/05	450	1068652	42	93%Ni
2	81	3/21/05	450	1070767	1490	93%Ni
2	127	4/5/05	450	1073836		93%Ni
2	128	4/13/05	450	1072448	1200	93%Ni
2	129	6/4/05	450	1075102		93%Ni
2	130	6/4/05	450	1075101		93%Ni
2	131	3/24/05	450	Raw Material	211	93%Ni
2	132	3/24/05	450	Raw Material	659	93%Ni
2	133	3/31/05	450			93%Ni
2	134	1/28/05	450	1066691	492	93%Ni
2	135	2/9/05	450	1066691	1170	93%Ni
2	139	6/9/05	450		1823	93%Ni
2	147	6/9/05	450			93%Ni
2	148	6/9/05	450	1077019		93%Ni
2	149	9/9/05	450			93%Ni

1=320 - 2=450 - 3=Other Nickel - 4=Ready for shipment - 5=Non Nickel

Clad products (41)

M 320NS ✓
2311NS ×
310NS ✓
311NS ×
313NS ×
610NS ✓
308NS ✓
308NS-1 ✓
308NS-3 ✓
309NS-3 ✓
307NS ✓
307NS-2 ✓
307NS-3 ✓
312NS ✓
314NS ✓
301C-NS ✓
301NS ✓
446 ×
445 ✓
449P ×
350NS ✓
A 959 ✓
M 453 ✓
452 ✓
450P ×
A 956 ✓

M 450NS ✓
A 955 ×
M 404NS ✓
M 444 ✓
A 960 ✓
M 443NS ✓
461NS ✓
442 ✓
447NS ✓
D 3007 ✓
D 3006 ×
M 130 ✓
M 130SF ✓
M 136 CP
M 136F ✓

Thermal Spray Powders / Abradables and Plastics / Aluminum Base

Metco 320NS

Chemistry: Al 8Si 20BN
Particle Size: -212 +45 µm (-70 mesh +325 mesh)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: High quality abradable coating material for use in compressor section of jet engines. Superior corrosion resistance. Suitable for service temperatures to 480°C (900°F). Appropriate for use against titanium and ferrous blades.

OEM Specifications:
Rolls-Royce MSRR 9507/66

New! Sulzer Metco 2311NS

Chemistry: Al 7Si 23Graphite
Particle Size: -180 +7.8 µm (-80 mesh +7.8 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: Abradable coating materials appropriate for rear compressor applications with service temperature range of 260 - 427 °C (500 - 800 °F). Similar to Metco 311NS but coatings exhibit higher hardness. Formerly supplied as XPT 604.

OEM Specifications:
Rolls-Royce Allison EMS 56765

Metco 310NS

Chemistry: Al 8Si 23Graphite
Particle Size: -125 +5 µm (-120 mesh +5 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coating for use in the compressor section of jet engines. Operating temperature up to 480°C (900°F).

OEM Specifications:
Honeywell Allied Signal FP 5045, Type XXIV
Rolls-Royce MSRR 9507/30
Rolls-Royce Allison EMS 56764

Metco 311NS

Chemistry: Al 7Si 26Graphite
Particle Size: -180 +7.8 µm (-100 mesh +7.8 µm)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: High quality abradable coating material for use in the compressor section of jet engines. Operating temperature range of 315 - 415°C (600 - 800°F).

OEM Specifications:
Rolls-Royce Allison EMS 56764

Metco 313NS

Chemistry: Al 5.5Si 45.5Graphite
Particle Size: -150 +7.8 µm (-100 mesh +7.8 µm)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: High quality abradable coating material for use in the compressor section of jet engines. Operating temperature range of 315 - 415°C (600 - 800°F).

OEM Specifications:
Canada Pratt Whitney CPW 555
Rolls-Royce MSRR 9507/44
Volvo PM 819-64

P2SUL003579

Thermal Spray Powders / Abradables and Plastics / Copper Base

Metco 605NS

Chemistry: Aluminum Bronze Alloy 10 Polyester
Particle Size: -125 +11 µm (-120 mesh +11 µm)
Morphology: Blend
Processes: Air Plasma
Properties & Applications: Abradable coating material having operational temperatures up to 650°C (1200°F).

OEM Specifications:
GE A8Y5
Honeywell M3964
Honeywell Allied Signal EMS 57728
Rolls-Royce MSRR 9507/40

Metco 610NS

Chemistry: Aluminum Bronze Alloy 14 Polyester
Particle Size: -125 +11 µm (-120 mesh +11 µm)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: Abradable coating material having operational temperatures up to 650°C (1200°F).

OEM Specifications:
Honeywell Allied Signal EMS 57728

Metco 604NS

Chemistry: Aluminum Bronze Alloy 95 (Cu 9.5 Al 1 Fe)
Particle Size: -125 +11 µm (-120 mesh +11 µm)
Morphology: Blend
Processes: Air Plasma
Properties & Applications: Abradable coating material having operational temperatures up to 650°C (1200°F).

OEM Specifications:
Sikorsky SS9212 *(made to order as SP8847)*

P2SUL003580

Thermal Spray Powders / Abradables and Plastics / Nickel Base

Metco 308NS

Chemistry: Ni 15 Graphite
Particle Size: -90 +30 µm (-170 mesh +30 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Honeywell Allied Signal FP 5045AB, Type XI
Pratt Whitney PWA 1352-2

Metco 308NS-1

Chemistry: Ni 15 Graphite
Particle Size: -90 +30 µm (-170 mesh +30 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Rolls-Royce Allison EMS 56755

Metco 308NS-3

Chemistry: Ni 15 Graphite
Particle Size: -90 +30 µm (-170 mesh +30 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
GE B50TF53, Class B
MTU MTS 1071
Rolls-Royce MSRR 9507/16
Volvo PM 819-34

Metco 309NS-3

Chemistry: Ni 20 Graphite
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating can be used for friction reducing bearings.

OEM Specifications:
GE B50TF172, Class A
Honeywell Allied Signal EMS 57739
Volvo PM 819-45

Metco 307NS

Chemistry: Ni 25 Graphite
Particle Size: -90 +30 µm (-170 mesh +30 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Honeywell Allied Signal EMS 57739, Class 2 *(only)*
Honeywell Allied Signal FP 5045, Type XII, Table 1
Pratt Whitney PWA 1352-1
Volvo PM 819-41

Metco 307NS-2

Chemistry: Ni 25 Graphite
Particle Size: -90 +20 µm (-170 mesh +20 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Rolls-Royce MSRR 9507/6

P2SUL003581

Thermal Spray Powders / Abradables and Plastics / Nickel Base (continued)

Metco 307NS-3

Chemistry: Ni 25 Graphite
Particle Size: -90 +30 µm (-170 mesh +30 µm)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coatings for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
GE B50TF52, Class B
SNECMA DMR 33.084
Volvo PM 819-81

Metco 312NS

Chemistry: Ni 4Cr 4Al 21 Calcined Bentonite Clay
Particle Size: -150 +45 µm (-100 +325 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: Bentonite-containing abradable materials are suitable for higher operating temperatures to 815°C (1500°F).

OEM Specifications:
GE B50TF232, Class A
Honeywell Allied Signal FP 5045AB, Type XXV
Pratt Whitney PWA 1393
Rolls-Royce MSRR 9507/45
Volvo PM 819-54

Metco 314NS

Chemistry: Ni 4Cr 4Al 21 Calcined Bentonite Clay
Particle Size: -150 +75 µm (-100 +200 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: Bentonite-containing abradable materials are suitable for higher operating temperatures to 815°C (1500°F).

OEM Specifications:
Rolls-Royce MSRR 9507/54

Metco 301C-NS

Chemistry: Ni 14Cr 8Fe 5.5BN 3.5Al
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coating material for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Rolls-Royce MSRR 9507/10

Metco 301NS

Chemistry: Ni 14Cr 8Fe 5.5BN 3.5Al
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: High quality abradable coating material for use in the compressor section of jet engines. Operating temperatures up to approximately 480°C (900°F). Self-lubricating, can be used for friction reducing bearings.

OEM Specifications:
Honeywell M3970
Honeywell Allied Signal FP5045, Type XX
Pratt Whitney PWA 1342
Rolls-Royce Allison EMS 56730
SNECMA DMR 33.085
Volvo PM 819-66

P2SUL003582

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Aluminum Base

Metco 52C-NS

Chemistry: Al 12Si
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Salvage and build-up of parts made of aluminum, magnesium and their alloys. Good machine finish.

OEM Specifications:
Canada Pratt Whitney CPW 235
GE B50TF92, Class A
Honeywell M 3962
Honeywell Allied Signal EMS 57742
Pratt Whitney PWA 1335
Rolls-Royce MSRR 9507/60
Rolls-Royce Allison EMS 56766
SNECMA DMR 33.027
U. S. Military MIL-P-83348, Type 1, Comp. E
Volvo PM 819-35

AMDRY 355

Chemistry: Al 12Si
Particle Size: -45 µm (-325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Suitable for chambered plasma. May also be used for APS.

OEM Specifications:
Pratt Whitney PWA 1355

Metco 446

Chemistry: Al 25Fe 7Cr 5Ni
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Clad
Processes: Combustion Powder
Properties & Applications: Self-bonding, dense coatings. Good color match to aluminum and magnesium alloys. Excellent machinability.

P2SUL003583

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Copper Base

Metco 445

Chemistry: Cu 10 Al Aluminum Bronze
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Typical parts which may be coated are pumps (cavitation resistance), piston guides (soft bearing surfaces), shifter forks and compressor air seals. Moderate oxidation, wear and fretting resistance at low temperatures, good emergency dry running properties. Can be used for build-up and repair of copper base alloy parts. Melting temperature 1040°C (1900°F).

OEM Specifications:
Honeywell Allied Signal FP 5045, Type XVII
Rolls-Royce MSRR 9507/38
U. S. Military MIL 1687

Metco 51NS

Chemistry: Cu 9.5Al 1Fe
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Typical parts which may be coated are pumps (cavitation resistance), piston guides (soft bearing surfaces), shifter forks and compressor air seals. Moderate oxidation, wear and fretting resistance at low temperatures, good emergency dry running properties. Can be used for build-up and repair of copper base alloy parts. Melting temperature 1040°C (1900°F).

OEM Specifications:
GE B50TF161, Class A
Rolls-Royce MSRR 9507/24

Metco 51F-NS

Chemistry: Cu 9.5Al 1Fe Aluminum Bronze
Particle Size: -53 +11 µm (-270 mesh +11 µm)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Typical parts which may be coated are pumps (cavitation resistance), piston guides (soft bearing surfaces), shifter forks and compressor air seals. Moderate oxidation, wear and fretting resistance at low temperatures, good emergency dry running properties. Can be used for build-up and repair of copper base alloy parts. Melting temperature 1040°C (1900°F).

OEM Specifications:
Boeing BMS 10-67, Type II
CFM International CP 6011
GE B50TF161, Class B
Pratt Whitney PWA 1378-2
Rolls-Royce MSRR 9507/29
SNECMA DMR 33.092

Diamalloy 1004

Chemistry: Cu 9.5Al 1Fe Aluminum Bronze
Particle Size: -45 +15 µm (-325 mesh +15 µm)
Morphology: Spheroidal, Gas Atomized
Processes: HVOF
Properties & Applications: Typical parts which may be coated are pumps (cavitation resistance), piston guides (soft bearing surfaces), shifter forks and compressor air seals. Moderate oxidation, wear and fretting resistance at low temperatures, good emergency dry running properties. Can be used for build-up and repair of copper base alloy parts. Melting temperature 1040°C (1900°F).

Metco 57NS

Chemistry: Cu 38Ni
Particle Size: -75 +45 µm (-200 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are very dense with low porosity and oxide content.

OEM Specifications:
GE B50TF42, Class A
Pratt Whitney PWA 1369
SNECMA DMR 33.015
Volvo PM 819-42

P2SUL003584

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Iron Base

Metco 449P

Chemistry: Fe 3Al 3Mo 3C 0.1B
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Recommended for salvage and build-up of ferrous base substrates, such as crankshaft journals. High carbon "steel" composite.

New! Sulzer Metco 4052

Chemistry: Fe 1.4Cr 1.4Mn 1.2Cr
Particle Size: -38 +15 µm (-400 mesh +15 µm)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Produces hard surfaces to provide wear resistance in cylinder bore applications for the automotive industry.

Metco 42C

Chemistry: Fe 16Cr 2Ni 0.2C (AISI Type 431 stainless steel)
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Water Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Corrosion resistant coating used mostly for repair and wear applications requiring a hard ground finish. The coatings may contain martensitic phases.

Metco 41C-NS

Chemistry: Fe 17Cr 12Ni 2.5Mo 2.3Si 0.1C (AISI Type 316 stainless steel)
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Water Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Premium grade austenitic nickel-chrome stainless steel. Coatings can be easily machined. Recommended for cavitation and low temperature erosion resistance.

OEM Specifications:
Rolls-Royce MSRR 9507/26

Diamalloy 1003

Chemistry: Fe 17Cr 12Ni 2.5Mo 1Si 0.1C (AISI Type 316 stainless steel)
Particle Size: -45 +11 µm (-325 mesh +11 µm)
Morphology: Spheroidal, Gas Atomized
Processes: HVOF
Properties & Applications: Premium grade austenitic nickel-chrome stainless steel. Coatings can be easily machined. Recommended for cavitation and low temperature erosion resistance.

Diamalloy 1008

Chemistry: Fe 17Cr 11Mo 3Ni 3Si 3Cu 4B 0.4C
Particle Size: -45 +5.5 µm (-325 mesh +5.5 µm)
Morphology: Blend
Processes: HVOF
Properties & Applications: Iron based hardfacing material developed for corrosive wear applications below 650°C (1200°F).

P2SUL003585

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Iron Base (continued)

Metco 350NS

Chemistry: Fe 18Mo 3C 0.25Mn
Particle Size: -90 +11 µm (-170 mesh +11 µm)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Developed as an alternative to hard chrome plating. Protection against abrasive grains, wear from hard bearing surfaces and fretting.

Diamalloy 4010

Chemistry: Fe 30Mo 2C
Particle Size: -45 +5.5 µm (-325 mesh +5.5 µm)
Morphology: Blend
Processes: HVOF
Properties & Applications: Developed as an alternative to hard chrome plating. Protection against abrasive grains, wear from hard bearing surfaces and fretting.

AMDRY 959

Chemistry: Fe 37Ni 6Al
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Material undergoes an exothermic reaction during spraying and forms a strong metallurgical bond with the base metal. Machinable coatings that are oxidation resistant up to 815°C (1500°F).

Metco 453

Chemistry: Fe 35Ni 5Al 5Mo
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Recommended for salvage and repair of components such as diesel firedecks and cylinder heads.

Metco 452

Chemistry: Fe 38Ni 10Al
Particle Size: -125 +45 µm (-120 mesh +325
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Material undergoes an exothermic reaction during spraying and forms a strong metallurgical bond with the base metal. Machinable coatings which are oxidation resistant up to 815°C (1500°F).

P2SUL003586

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Nickel Base

Metco 450P

Chemistry: Ni 4.5 Al
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Premium grade composite powder results in coatings with excellent machinability. Coatings are dense and resistant to oxidation and abrasion. Recommended for use as oxidation-resistant bond coats which can be used up to 800°C (1470°F). Self-bonding and undergoes an exothermic reaction during spraying, resulting in excellent bonding to the substrate. Applications: salvage and build-up on machinable carbon and corrosion resistant steels, particle erosion resistance for exhaust valve seats, oxidation resistance for exhaust mufflers and heat treating fixtures.

OEM Specifications:
Rolls-Royce MSRR 9507/43

AMDRY 956

Chemistry: Ni 5Al
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are dense and resistant to oxidation and abrasion. Recommended for use as oxidation resistant bond coats which can be used up to 800°C (1470°F). Self-bonding and undergoes an exothermic reaction during spraying, resulting in excellent bonding to the substrate. Applications: salvage and build-up on machinable carbon and corrosion resistant steels, particle erosion resistance for exhaust valve seats, oxidation resistance for exhaust mufflers and heat treating fixtures.

OEM Specifications:
Canada Pratt Whitney CPW 247
GE B50TF56, Class A
Honeywell M3951
Honeywell Allied Signal EMS 57746, Type I
Honeywell Allied Signal FP 5045 XV
MTU MTS 1080
Pratt Whitney PWA 1337
Rolls-Royce MSRR 9507/5
Rolls-Royce Allison EMS 56757
Rolls-Royce Allison PMI 1163
SNECMA DMR 33.011
Turbomeca LA 657 Ed. 1 PA2 Ind. 0
Volvo PM 819-37
Williams WIMS 644

Metco 450NS

Chemistry: Ni 5Al
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are dense and resistant to oxidation and abrasion. Recommended for use as oxidation-resistant bond coats which can be used up to 800°C (1470°F). Self-bonding and undergoes an exothermic reaction during spraying, resulting in excellent bonding to the substrate. Applications: salvage and build-up on machinable carbon and corrosion resistant steels, particle erosion resistance for exhaust valve seats, oxidation resistance for exhaust mufflers and heat treating fixtures.

OEM Specifications:
Canada Pratt Whitney CPW 247
GE B50A891
GE B50TF56, Class A
Honeywell M3951
Honeywell Allied Signal EMS 57746, Type I
Honeywell Allied Signal FP 5045 XV
MTU MTS 1080
Pratt Whitney PWA 1337
Rolls-Royce MSRR 9507/5
Rolls-Royce Allison EMS 56757
SNECMA DMR 33.011
Williams WIMS 644

Metco 480NS

Chemistry: Ni 5Al
Particle Size: -90+45 µm (-170+325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are dense and resistant to oxidation and abrasion. Recommended for use as oxidation-resistant bond coats which can be used up to 800°C (1470°F). Self-bonding and undergoes an exothermic reaction during spraying, resulting in excellent bonding to the substrate. Applications: salvage and build-up on machinable carbon and corrosion resistant steels, particle erosion resistance for exhaust valve seats, oxidation resistance for exhaust mufflers and heat treating fixtures.

OEM Specifications:
Canada Pratt Whitney CPW 490
CFM International CP 6007
GE B50TF56, Class B
Honeywell Allied Signal EMS 57746, Type I, Class 1
Pratt Whitney PWA 1380
Rolls-Royce MSRR 9507/5
Volvo PM 819-56

P2SUL003587

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Nickel Base (continued)

Diamalloy 4008NS

OEM Specifications:
GE B50TF56, Class C
Rolls-Royce Allison EMS 39661

Chemistry: Ni 5Al
Particle Size: -45 +11 µm (-325 mesh +11 µm)
Morphology: Spheroidal, Gas Atomized
Processes: HVOF
Properties & Applications: Coatings are dense and resistant to oxidation and abrasion. Recommended for use as oxidation-resistant bond coats which can be used up to 800°C (1470°F). Self-bonding and undergoes an exothermic reaction during spraying, resulting in excellent bonding to the substrate. Applications: salvage and build-up on machinable carbon and corrosion resistant steels, particle erosion resistance for exhaust valve seats, oxidation resistance for exhaust mufflers and heat treating fixtures.

New! Sulzer Metco 7012

Chemistry: 91(Ni 10Cr 3Si 2.2B) 9(Ni 20Cr)
Particle Size: -106 +44 µm (-140 +325 mesh)
Morphology: Blend
Processes: Air Plasma. Combustion Powder
Properties & Applications: Coatings provide wear resistance and may be fused after spraying. Similar to Metco 12C but less prone to cracking and with somewhat lower hardness.

AMDRY 955

OEM Specifications:
GE B50TF13, Class B
Howmet 1097

Chemistry: Ni 18Al
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: Produces a coarser coating than Metco 404NS. Dense coatings, resistant to oxidation and abrasion. For oxidation resistant bond coats which will operate at temperatures below 650°C (1200°F).

Metco 404NS

OEM Specifications:
Chromalloy C-72
Chromalloy BZ-003, Type 2
GE B50TF33 Class A
Honeywell M3952
Honeywell Allied Signal EMS 57746, Type II Class 2
Honeywell Allied Signal FP5045, Type II
Pratt Whitney PWA 1321
Rolls-Royce MSRR 9507/4
SNECMA DMR 33.010
U. S. Military USAF 67A60753
Volvo PM 819-21

Chemistry: Ni 20Al
Particle Size: -90 +53 µm (-170 +270 mesh)
Morphology: Clad
Processes: Air Plasma
Properties & Applications: Dense coatings, resistant to oxidation and abrasion. For oxidation resistant bond coats which will operate at temperatures below 650°C (1200°F).

Metco 451

Chemistry: Ni 9.5Cr 2.5Si 1.5B 0.5Al
Particle Size: -106 +22 µm (-140 +22 µm)
Morphology: Blend
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are recommended for resistance to abrasive grains, particle erosion, cavitation resistance and salvage and build-up on grindable carbon and corrosion resistant steels.

P2SUL003588

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Nickel Base (continued)

AMDRY 7133

Chemistry: Ni 14Cr 2(Nb+Ta) 1 Ti 6Al 0.01B 0.1Zr 0.15C
Particle Size: -45 µm (-325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma,
Properties & Applications: Designed for use on superalloys, especially Inconel®* 713 and 718. Oxidation and corrosion resistant up to approximately 1000°C (1850°F).
(*Inconel is a registered trademark of INCO)

AMDRY 713C

OEM Specifications:
Pratt Whitney PWA 36118
SAE International AMS 5391 *(Chemistry Only)*

Chemistry: Ni 14Cr 2(Nb+Ta) 1 Ti 6Al 0.01B 0.1Zr 0.15C
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma,
Properties & Applications: Designed for use on superalloys, especially Inconel®* 713 and 718. Oxidation and corrosion resistant up to approximately 1000°C (1850°F).
(*Inconel is a registered trademark of INCO)

AMDRY 961

OEM Specifications:
Williams WIMS 654, Class A

Chemistry: Ni 17Cr 6Al 0.5Y
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Coatings are usually used in aerospace applications and subsequently heat treated. Used as protective coatings in hot corrosive or oxidizing environments at high temperature, e.g. to protect gas turbine blades or valve systems.

Metco 44

Chemistry: Ni 16Cr 8Fe
Particle Size: -106 +45 µm (-140 +325 mesh)
Morphology: Water Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Produces machinable "stainless" coatings useful for salvage and build-up applications on corrosion resistant steels, nickel, or nickel alloy substrates where high hardness is not required.

Metco 444

OEM Specifications:
Honeywell Allied Signal EMS 52432, Class XXIX
Rolls-Royce Allison EMS 56762

Chemistry: Ni 9Cr 5Al 5.5Mo 5Fe
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are self bonding, machinable. Excellent resistance to oxidation and corrosion.

P2SUL003589

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Nickel Base (continued)

AMDRY 960

Chemistry: (NiCr) 6Al
Particle Size: -125 +37 µm (-120 +400 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Plasma sprayed coatings are self bonding. ThermoSpray® coatings are not self bonding but can be used as abradable coatings, for ceramics or to resist oxidation and corrosion. Recommended for resistance to oxidation and corrosion at high temperatures. Applications: Salvage and build-up of worn or mis-machined nickel, nickel alloy or machinable corrosion resistant steel parts. Coatings can also be used as undercoats for ceramics.

OEM Specifications:
Canada Pratt Whitney CPW 369
GE B50TF119 Class A
Honeywell M3956
MTU MTS 1077
Pratt Whitney PWA 1347
Rolls-Royce MSRR 9507/14
SNECMA DMR 33.018
Turbomeca LA 657 Ed.1,PC.2, Ind. 0
Williams WIMS 646

Metco 443NS

Chemistry: (NiCr) 6Al
Particle Size: 125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Plasma sprayed coatings are self bonding. ThermoSpray® coatings are not self bonding but can be used as abradable coatings, for ceramics or to resist oxidation and corrosion. Recommended for resistance to oxidation and corrosion at high temperatures. Applications: Salvage and build-up of worn or mis-machined nickel, nickel alloy or machinable corrosion resistant steel parts. Coatings can also be used as undercoats for ceramics.

OEM Specifications:
Canada Pratt Whitney CPW 369
GE B50A890
GE B50TF119, Class A
Honeywell M3956
Honeywell Allied Signal EMS 57748
Honeywell Allied Signal FP5045, Type XVIII
MTU MTS 1077
Pratt Whitney PWA 1347
Rolls-Royce MSRR 9507/14
Rolls-Royce Allison EMS 56772
SNECMA DMR 33.018
Volvo PM 819-47
Williams WIMS 646

Metco 461NS

Chemistry: Ni 17.5Cr 5.5Al 2.5Co 0.5Y_2O_3
Particle Size: -150 +22 µm (-100 mesh +22 µm)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings are self bonding, oxidation and corrosion resistant. For use below 980°C (1800°F). Recommended for salvage and repair, and as bond coats for thermal barrier coatings systems.

Metco 442

Chemistry: Ni 8.5Cr 7Al 5Mo 2Si 2B 2Fe 3TiO_2
Particle Size: -125 +45 µm (-120 +325 mesh)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Hard "stainless" type, self-bonding coatings with excellent wear resistance and very good corrosion and oxidation resistance.

OEM Specifications:
Honeywell Allied Signal FP 5045, Type XXIII

AMDRY 963

Chemistry: Ni 25Cr 6Al 0.4Y
Particle Size: -75 +45 µm (-200 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Coatings are usually used in aerospace applications and subsequently heat treated. Used as protective coatings in hot corrosive or oxidizing environments at high temperature, e.g. to protect gas turbine blades or valve systems.

OEM Specifications:
Rolls-Royce MSRR 9507/48
Rolls-Royce Allison EMS 56719

P2SUL003590

Thermal Spray Powders / Metals, Alloys, Cermets and Blends / Nickel Base (continued)

AMDRY 718 Cl.B

Chemistry: Ni 19Cr 18Fe 3Mo 5(Nb+Ta) 0.5Al 1Ti .05C
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Oxidation and corrosion resistant up to approximately 1000°C (1850°F). Designed for use on superalloys, especially Inconel®* 713 and 718.
(Inconel is a registered trademark of INCO)

OEM Specifications:
CFM International CP 6025
GE B50TF202, Class B

AMDRY 1718

Chemistry: Ni 19Cr 18Fe 3Mo 5(Nb+Ta) 0.5Al 1Ti .05C
Particle Size: -270 mesh +15 µm
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma
Properties & Applications: Oxidation and corrosion resistant up to approximately 1000°C (1850°F). Designed for use on superalloys, especially Inconel®* 713 and 718.
(Inconel is a registered trademark of INCO)

OEM Specifications:
GE B50TF202, Class D
SNECMA DMR 33.502

EU AMDRY 350C

Chemistry: Ni 50Cr
Particle Size: -106 +38 µm (-140 +400 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, Combustion Powder
Properties & Applications: Coatings have higher corrosion resistance than 20% Cr materials. Used to combat fire-side corrosion of boiler tubes in fossil fuel power plants and can also be used as a corrosion resistant bond coat..

AMDRY 997

Chemistry: Ni 23Co 20Cr 8.5Al 4Ta 0.6Y
Particle Size: -37 µm (-400 mesh)
Morphology: Spheroidal, Gas Atomized
Processes: Air Plasma, ChamPro, HVOF,
Properties & Applications: Can be used as hot corrosion and oxidation resistant bond coats for thermal barrier coatings (TBC) of zirconia.

OEM Specifications:
Turbomeca LA 657 PF1 Ind. 0

Sulzer Metco 4538

Chemistry: Ni 23Fe 16Cr 1.5Si
Particle Size: -45 +16 µm (-325 mesh +16 µm)
Morphology: Spheroidal, Gas Atomized
Processes: HVOF
Properties & Applications: Heat and oxidation resistant coatings.

OEM Specifications:
GE B50TF290, Class A

Metco 447NS

Chemistry: Ni 5Mo 5.5Al
Particle Size: -90 +45 µm (-170 +325 mesh)
Morphology: Clad
Processes: Combustion Powder, Air Plasma
Properties & Applications: General purpose material for producing medium hard coatings for hard bearing and wear resistance applications. Coatings are self bonding, extremely tough and capable of exhibiting good erosion and impact resistance. Can be used to protect parts such as machine elements, bearing seats and valves.

OEM Specifications:
Dana Perfect Circle PC 110-265
GE B50TF166, Class A
Honeywell M3961
Honeywell Allied Signal EMS 57749
Honeywell Allied Signal FP 5045, Type XVI
Volvo PM 819-24
Williams WIMS 645

P2SUL003591

Thermal Spray Powders / Carbide Powders / Chrome Carbide (Continued)

Diamalloy 3007

Chemistry: Cr_3C_2 20(Ni 20Cr)
Particle Size: -45 +5.5 µm (-325 mesh +5.5 µm)
Morphology: Clad
Processes: HVOF
Properties & Applications: Coatings have the highest micro and macrohardness and finest as-sprayed surface finish of any Diamalloy chromium carbide. Recommended for severe abrasive and fretting wear applications in the temperature range between 540-815°C (1000-1500°F). Coatings exhibit excellent solid particle erosion resistance properties.

OEM Specifications:
Pratt Whitney PWA 36332

AMDRY 5260

Chemistry: Cr_3C_2 25(Ni 20Cr)
Particle Size: -45 +11 µm (-325 mesh +11 µm)
Morphology: Spheroidal, Agglomerated and Densified
Processes: HVOF
Properties & Applications: Good sliding properties. Produces dense erosion and corrosion resistant coatings.

OEM Specifications:
GE B50TF263, Class A

Metco 81NS

Chemistry: Cr_3C_2 25(Ni 20Cr)
Particle Size: -106 +11 µm (-140 mesh +11 µm)
Morphology: Blend
Processes: Air Plasma,
Properties & Applications: Good abrasion, particle erosion, cavitation and fretting resistance up to 815°C (1500°F). Good corrosion resistance. Good hot gas corrosion resistance, particularly in sulphurous gases. Oxidation and erosion resistant up to approximately 900°C (1650°F). Applications: fuel rod mandrels and hot forming dies, hydraulic valves, tooling, machine parts, pump housing and wear protection of aluminum parts.

OEM Specifications:
GE B50TF137, Class B
Honeywell Allied Signal EMS 57753, Type I
Pratt Whitney PWA 1307
Rolls-Royce MSRR 9507/2
SNECMA DMR 33.005
Volvo PM 819-07
Williams WIMS 642

Metco 81VF-NS

Chemistry: Cr_3C_2 25(Ni 20Cr)
Particle Size: -45 +5 µm (-325 mesh +5 µm)
Morphology: Blend
Processes: Air Plasma,
Properties & Applications: Good abrasion, particle erosion, cavitation and fretting resistance up to 815°C (1500°F). Good corrosion resistance. Good hot gas corrosion resistance, particularly in sulphurous gases. Oxidation and erosion resistant up to approximately 900°C (1650°F). Applications: fuel rod mandrels and hot forming dies, hydraulic valves, tooling, machine parts, pump housing and wear protection of aluminum parts.

OEM Specifications:
GE B50A893
GE B50TF137, Class A
Honeywell M3965
Honeywell Allied Signal EMS 52432, Class II
Rolls-Royce MSRR 9507/17
SAE International AMS 7875
SNECMA DMR 33.006
U. S. Military MIL-P-85856/39
Volvo PM 819-05
Williams WIMS 643

Diamalloy 3004

Chemistry: Cr_3C_2 25(Ni 20Cr)
Particle Size: -45+ 5.5 µm (-325 mesh +5.5 µm)
Morphology: Blend
Processes: HVOF
Properties & Applications: Recommended for use with Sulzer Metco Diamond Jet HVOF systems. Good abrasion, particle erosion, cavitation and fretting resistance up to 815°C (1500°F). Good corrosion resistance. Good hot gas corrosion resistance, particularly in sulphurous gases. Oxidation and erosion resistant up to approximately 900°C (1650°F). Applications: fuel rod mandrels and hot forming dies, hydraulic valves, tooling, machine parts, pump housing and wear protection of aluminum parts.

P2SUL003592

Thermal Spray Powders / Carbide Powders / Chrome Carbide (Continued)

New! Sulzer Metco 5546NS

Chemistry: Cr_3C_2 25(NiCrAlY)
Particle Size: -37 +5.5 µm (-400 mesh +5.5 µm)
Morphology: Blend
Processes: Air Plasma
Properties & Applications: Provides high temperature wear resistance and corrosion resistance on turbine components.

Sulzer Metco 5255

Chemistry: Cr_3C_2 50(Ni 20Cr)
Particle Size: -62 +7.8 µm
Morphology: Blend
Processes: Air Plasma, HVOF
Properties & Applications: High temperature erosion and corrosion resistant coatings.

OEM Specifications:
Pratt Whitney PWA 36333

Diamalloy 3006

Chemistry: Cr_3C_2 50(Ni 20Cr)
Particle Size: -88 +5.5 µm
Morphology: Clad
Processes: HVOF
Properties & Applications: High NiChrome content produces coatings that are very tough. Recommended for applications requiring resistance to wear by hard surfaces and abrasive particles at elevated temperatures between 540-815°C (1000-1500°F).

Sulzer Metco 5241

Chemistry: Cr 39Ni 7C
Particle Size: -63 µm (-170 mesh)
Morphology: Proprietary
Processes: HVOF
Properties & Applications: Ideal for hard chrome replacement Higher deposition efficiency compared to other HVOF sprayed chromium carbide powders Lower oxide-containing coatings, lower carbon loss during spraying Excellent erosion and oxidation properties up to 900°C (1650°F). Good wear properties and corrosion resistance. Excellent superfinished surface (0.25 µm, 1 µin.). Applications: ball valves, hydraulic rods, boiler tubes, stationary and flight turbine components, textile rolls, exhaust stacks.

P2SUL003593

Thermal Spray Powders / Ceramic Powders / Aluminum Oxide (Continued)

EU AMDRY 6204

Chemistry: Al_2O_3 $3TiO_2$
Particle Size: -45 +5 µm (-325 mesh +5 µm)
Morphology: Angular / Blocky, Fused and Crushed
Processes: Air Plasma
Properties & Applications: Coatings provide resistance to abrasive wear, sliding wear and oxidation for service temperatures up to approximately 1100 °C (2040 °F). Can be used in acidic or alkaline environments. Recommended for guiding or handling of thread in textile and synthetic fiber production.

EU AMDRY 6208

Chemistry: Al_2O_3 $3TiO_2$
Particle Size: -90 +5 µm (-170 mesh +5 µm)
Morphology: Angular / Blocky, Fused and Crushed
Processes: Air Plasma
Properties & Applications: Coatings provide resistance to abrasive wear, sliding wear and oxidation for service temperatures up to approximately 1100 °C (2040 °F). Can be used in acidic or alkaline environments. Recommended for guiding or handling of thread in textile and synthetic fiber production.

EU Sulzer Metco 6203

Chemistry: Al_2O_3 $3TiO_2$
Particle Size: -38 +16 µm (-400 mesh +16 µm)
Morphology: Angular / Blocky, Fused and Crushed
Processes: Air Plasma
Properties & Applications: Coatings provide resistance to abrasive wear, sliding wear and oxidation for service temperatures up to approximately 1100 °C (2040 °F). Can be used in acidic or alkaline environments. Recommended for guiding or handling of thread in textile and synthetic fiber production. Formerly provided as PEM 10-231.

Metco 130

Chemistry: Al_2O_3 $13TiO_2$
Particle Size: -53 +15 µm (-270 mesh +15 µm)
Morphology: Clad
Processes: Air Plasma, Combustion Powder
Properties & Applications: Can be used for applications similar to Alumina / 3% Titania coatings, but have a lower dielectric strength and are less resistant to chemical attack. 550°C (1020°F) service temperature.

OEM Specifications:
Williams WIMS 649

Metco 130SF

Chemistry: Al_2O_3 $13TiO_2$
Particle Size: -30 +5 µm
Morphology: Clad
Processes: Air Plasma
Properties & Applications: Can be used for applications similar to alumina / 3% Titania coatings, but have a lower dielectric strength and are less resistant to chemical attack. 550°C (1020°F) service temperature.

P2SUL003594

Waste Brokers (Q&A#554)

554. How should a covered facility report a transfer in which it sends wastes containing a toxic chemical off-site to a waste broker who in turn sends the wastes to a recycling facility?

Covered facilities are required to report information on off-site transfers for purposes of recycling in both Sections 6 and 8 of the Form R. In Section 6, the facility should report the final disposition of which it has knowledge of the toxic chemical in the waste. When a facility knows that a toxic chemical in wastes sent to a broker is ultimately being recycled, but does not know the location of the recycler, the waste broker is considered the final destination, and the transfer should be reported as M93 (transfer to waste broker-recycling) along with the location of the waste broker. If the location of the recycler to whom the broker sends wastes containing the toxic chemical is known, the recycler is considered the final destination, and the transfer should be reported as recycling with the appropriate code. The location of the recycler, not the waste broker, should be reported. The facility would also report the amount of the listed toxic chemical sent off-site for recycling in Section 8.5 (Quantity Recycled Off-Site).

Called TRI hotline. Can draw the infuence that M94 can be used for waste to CH facilities.

Section 3.1 The Qualified Alloys: Stainless Steel, Brass, and Bronze Alloys that Contain Lead

Where Am I: Lead and Lead Compounds Guidance Document

An alloy is a solid mixture that contains two or more elements, at least one of which being a metal. Examples of alloys are stainless steel, brass, and bronze, which are three of the most commonly used alloys (9). The major metal in stainless steel is iron. However, depending on the type of stainless steel, there can be substantial amounts of chromium, manganese, and/or nickel, which are added to minimize the corrosion of the stainless steel. The major metal in brass and bronze is copper; however, substantial amounts of nickel and/or zinc may also be present. Brass is an alloy of copper and zinc with other metals in varying lesser amounts. Bronze is an alloy of copper and tin with smaller amounts of other metals. The final lead rule**(8)** lowered the 25,000 pound and 10,000 pound reporting thresholds for lead and lead compounds to 100 pounds, with the exception of lead contained in stainless steel, brass, and bronze alloys. For stainless steel, brass or bronze alloys that contain lead, the quantity of lead contained in these alloys is still applied to the 25,000 pound and 10,000 pound reporting thresholds. These three alloys, when they contain lead, are referred to in this document as the "qualified alloys".

EPA deferred on lowering the 25,000 pound and 10,000 pound reporting thresholds for lead when it is in stainless steel, brass, and bronze alloys because the Agency is currently evaluating a previously submitted petition as well as comments received in response to previous petition denials that requested the Agency to revise the EPCRA section 313 reporting requirements for certain metals contained in stainless steel, brass, and bronze alloys. EPA is reviewing whether there should be any reporting changes regarding the listed constituents (e.g., lead) of stainless steel, brass and bronze alloys. It is important to note that stainless steel, brass and bronze alloys, even when they contain lead, are not listed on the EPCRA section 313 list of toxic chemicals: they are not listed chemicals. Lead, of course, is included on the EPCRA section 313 list of toxic chemicals, and its presence in stainless steel, brass or bronze alloys does not change its status as a listed chemical, or as a PBT chemical.

As mentioned in Chapter 2, there is only one reporting threshold for the manufacturing, processing or otherwise use activities of lead compounds, and that is 100 pounds. Thus, a facility that manufactures, processes or otherwise uses more than 100 pounds of a single lead compound or combination of lead compounds within a calendar year must report their environmental releases and other waste management quantities of the compound(s). For lead metal (Pb0) there are **three** reporting thresholds: 25,000 pounds; 10,000 pounds; and 100 pounds. The 25,000 pound threshold pertains to the manufacture or processing of all lead metal: lead contained in stainless steel, brass or bronze alloys (the qualified alloys)**and** lead that is not contained in one of the qualified alloys. Similarly, the 10,000 pound threshold pertains to the otherwise use of all lead metal. Thus a facility that manufactures or processes within a calendar year more than 25,000 pounds of lead, regardless of whether the lead is in a qualified alloy, is required to report their environmental releases and other waste management quantities of lead. The same is true if the facility otherwise uses more than 10,000 pounds of lead. The 100 pound threshold only pertains to the manufacture, processing, or otherwise use of lead when it is **not** in stainless steel, brass or bronze alloys. Lead that is in stainless steel, brass or bronze alloys should not be included in determinations of whether the 100 pound threshold for lead has been exceeded. Those facilities that manufacture, process or otherwise use within a calendar year more than 100 pounds of lead that is not contained in a qualified alloy must report their environmental releases and other waste management quantities.

The determination of whether a facility has to file a release report for lead must be based on a prior determination of whether that facility has exceeded any of the three reporting thresholds for lead. Ostensibly, those facilities that do not manufacture, process or otherwise use stainless steel, brass or

bronze alloys that contain lead will not have to determine whether they have exceeded the 25,000 pound or 10,000 pound thresholds. Or, in other words, those facilities that manufacture, process, or otherwise use lead only when it is not contained in stainless steel, brass, or bronze alloy will only have to determine whether they have exceeded the 100 pound threshold. Facilities that manufacture, process or otherwise use lead when it is both in stainless steel brass or bronze alloys and when it is not in these alloys must consider all three thresholds. An important point to remember is that when determining whether a facility has exceeded the 25,000 pound or 10,000 pound thresholds, any lead that is **not** in stainless steel, brass or bronze alloys must also be included in the determination. Figure 3-1 summarizes the basic steps that need to be taken when determining whether a facility has exceeded any of the three reporting thresholds for lead. The remainder of this chapter discusses these steps in greater detail, and provides examples to illustrate how such determinations should be made.

This chapter also provides a general discussion on what stainless steel, brass and bronze alloys are. A more detailed discussion on the composition of stainless steel, brass and bronze alloys is provided in Appendix A. A comprehensive discussion on the chemistry, composition, and environmental fate of alloys, including stainless steel, brass and bronze alloys is available in an EPA document entitled *Report on the Corrosion of Certain Alloys* (8).

(8) Lead and Lead Compounds; Lowering of Reporting Thresholds; Community Right-to-Know Toxic Chemical Release Reporting; Final Rule. Federal Register, 66, 4499-4547 (January 17, 2001)

Metals And Metal Compounds (Q&A#419)

419. For Section 313 reporting requirements and threshold determinations, if a covered facility uses lead, lead chromate, and other chromium compounds, can they be considered separately or must they be combined into categories? When reporting releases and other waste management activities, must quantities of categories be determined as well?

Threshold determinations for metal containing compounds are made separately from parent-metal threshold determinations because they are listed separately under Section 313. In the scenario presented in the question, the facility would apply the quantity of the lead metal manufactured, processed, or otherwise used to the appropriate threshold for lead. The facility would apply the quantities of the lead chromate manufactured, processed, or otherwise used to the appropriate threshold for lead compounds and would apply the quantities of the lead chromate and other chromium compounds manufactured, processed, or otherwise used to the appropriate threshold for chromium compounds. However, a facility may, once a threshold has been met individually, combine the parent metal and its metal compounds for reporting. In completing the Form R , only the weight of the parent metal (not the entire compound weight) is to be considered.

Chromium Compounds (Q&A#420)

420. Are chromium compounds (e.g., chromic acid CAS number 11115-74-5 or chromic acetate CAS number 1066-30-4) reportable under Section 313?

All chromium compounds are reportable. They must be aggregated together for purposes of threshold and maximum amount on-site calculations. However, release and other waste management amounts should be for the chromium metal portion only.

Waste Brokers (Q&A#554)

554. How should a covered facility report a transfer in which it sends wastes containing a toxic chemical off-site to a waste broker who in turn sends the wastes to a recycling facility?

Covered facilities are required to report information on off-site transfers for purposes of recycling in both Sections 6 and 8 of the Form R. In Section 6, the facility should report the final disposition of which it has knowledge of the toxic chemical in the waste. When a facility knows that a toxic chemical in wastes sent to a broker is ultimately being recycled, but does not know the location of the recycler, the waste broker is considered the final destination, and the transfer should be reported as M93 (transfer to waste broker-recycling) along with the location of the waste broker. If the location of the recycler to whom the broker sends wastes containing the toxic chemical is known, the recycler is considered the final destination, and the transfer should be reported as recycling with the appropriate code. The location of the recycler, not the waste broker, should be reported. The facility would also report the amount of the listed toxic chemical sent off-site for recycling in Section 8.5 (Quantity Recycled Off-Site).

Compounds With Constituents In Two Listed Categories (Q&A#418)

418. How would a compound that falls into two reporting categories be reported (e.g., PbCrO3) on the Form R?

A compound that has constituents in two listed categories would have to be included under both categories when submitting a Form R. In the example indicated, the total weight of PbCrO3 must be included in determining the threshold for both lead compounds and in determining the threshold for chromium compounds. In reporting the releases and other waste management of lead, only the stoichiometric weight of the lead in PbCrO3 released or otherwise managed as waste would be included. Likewise, only the chromium in PbCrO3 that is released and otherwise managed as a waste would be included on the Form R.

MILLER 2004 → off site

Source	Nickel (lbs)	Chromium (lbs)	CrC (lbs)	Cr2O3 (lbs)	Aluminum (lbs)	Cobalt (lbs)	Copper (lbs)
Usage:	82,849	45,887	31,818	5,427	66,392	26,437	11,953
Dust Collectors	1,656	909	630	107	1,315	523	237
Closure/Scrap of Finished Product and Raw materials	9,994	5,535	3,838	655	8,009	3,189	N/a
To Clean Harbors Cincinnati	**11,650**	**6,444**	**4,468**	**762**	**9,324**	**3,712**	
Closure/Filter Cartridges From Dust Collectors	496	275	191	33	398	158	N/a
To Clean Harbors Baltimore	**496**	**275**	**191**	**33**	**398**	**158**	
Scrap Metal	100 ~~5,000~~	N/a	N/a	N/a	N/a	N/a	N/a
To Arrow Scrap Metal	100 ~~5,000~~						
Settling Tank	400	100	100	100	100	400	N/a
To Clean Harbors Bristol	**400**	**100**	**100**	**100**	**100**	**400**	**N/a**
Closure/Remediation of Drywells	9288	80 ~~160~~	80		51	553	N/a
To RGM							

Notes: Nickel--Scrap metal assumed to be approximately 50% of 2003 shipment. Finished product and raw material sent for disposal is calculated a percent of total production per metal. Bags from baghouse closure is taken as 90% of final weight; 10% is powder and the percent of each metal is calculated as a percent of total production. Settling tank information is based on 6% Co from 2003 data; est'd 0.5% on other metals.

Total Mfg=	834,495
Total from disposal of finished product and raw material	100,667
Total from settling tank	20,000
Baghouse bags	50,000

Constituent	Source	% Mfg	Total Qty Used	% To DC	DC Efficiency	Qty To Air	Qty To Waste Drum
Nickel	Hicksville	50%	165,697	2%	99.00%	16.57	1,640
Chromium	Hicksville	50%	91,774	2%	99.00%	9.18	909
CrC	Hicksville	50%	63,636	2%	99.00%	6.36	630
Cr2O3	Hicksville	50%	10,853	2%	99.00%	1.09	107
Aluminum	Hicksville	50%	132,784	2%	99.00%	13.28	1,315
Cobalt	Hicksville	50%	52,874	2%	99.00%	5.29	523
Copper	Hicksville	50%	23,906	2%	99.00%	2.39	237
Nickel	Westbury	50%	165,697	2%	99.97%	0.50	1,656
Chromium	Westbury	50%	91,774	2%	99.97%	0.28	917
CrC	Westbury	50%	63,636	2%	99.97%	0.19	636
Cr2O3	Westbury	50%	10,853	2%	99.97%	0.03	108
Aluminum	Westbury	50%	132,784	2%	99.97%	0.40	1,327
Cobalt	Westbury	50%	52,874	2%	99.97%	0.16	529
Copper	Westbury	50%	23,906	2%	99.97%	0.07	239
Nickel	Westbury (Cladding)	100%	397,611	2%	99.97%	2.39	7,950
Chromium	Westbury (Cladding)	100%	15,539	2%	99.97%	0.09	311
CrC	Westbury (Cladding)	100%	8,330	2%	99.97%	0.05	167
Cr2O3	Westbury (Cladding)	100%	10,249	2%	99.97%	0.06	205
Aluminum	Westbury (Cladding)	100%	37,415	2%	99.97%	0.22	748
Cobalt	Westbury (Cladding)	100%	783	2%	99.97%	0.00	16
Copper	Westbury (Cladding)	100%	6,304	2%	99.97%	0.04	126

Recv Facility	Item No	Item Desc	Waste Codes	Pounds	Disposal Type	Disposal Site
Modern Landfill (PAD987395803)	31223J1	SPENT FILTERS	NONE	15,750		Modern Landfill
				15,750		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH14936	ACTREL, 105 SOLVENT	D001,D039	300	ENERGY RECOVERY	Essroc Logansport IN
				300		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	NONE	688	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189102	OIL SPILL CLEANUP/FILTERS	NONE	400	LANDFILL	Rumpke Sanitary Landfill, Inc
				1,088		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	NONE	39,062	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	NONE	23,401	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	NONE	29,575	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	NONE	5,875	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	NONE	15,769	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	4,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	1,800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	4,500	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	4,500		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	1,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	3,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	3,000		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189107	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	3,000		Clean Harbors - Cincinnati, OH
				139,282		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	D007	900	STABILIZATION	Clean Harbors London ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189108	RCRA METAL & CERAMIC POWDER	D007	1,200	STABILIZATION	Clean Harbors London ON
				2,100		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189110	GRIT BLAST MATERIAL	NONE	650	LANDFILL	Rumpke Sanitary Landfill, Inc
				650		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189112	MIXED SPENT ACIDS	D002,D006,D007,D008	250	INCINERATION	Clean Harbors-St Catherine, PQ

Recv Facility	Item No	Item Desc	Waste Codes	Pounds	Disposal Type	Disposal Site
				250		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	NONE	17,748	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	NONE	5,438	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	NONE	4,966	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	NONE	1,834	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	CR04,MA99,NONE	4,500	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	CR04,MA99,NONE	1,800	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	CR04,MA99,NONE	2,000	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189134	METAL/CERAMIC POWDER & WATER	CR04,MA99,NONE	2,000		Clean Harbors - Cincinnati, OH
Clean Harbors Bristol, CT (CTD000604488)	CH189134	METAL/CERAMIC POWDER & WATER	CR04,MA99,NONE	20,000	LANDFILL settling tank cleanout	Geological Reclamation
				60,286		
				40,286		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	CR05,MA99,NONE	400	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	CR05,MA99,NONE	400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189138	GRAPHITE AND WATER	CR05,MA99,NONE	400		Clean Harbors - Cincinnati, OH
				1,200		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	NONE	504	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189141	WATER SOLUBLE OIL	NONE	221	ENERGY RECOVERY	Essroc Logansport IN
				725		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH189144	NYLON TURNINGS	NONE	850	LANDFILL	Rumpke Sanitary Landfill, Inc
				850		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	NONE	27,917	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	NONE	1,300	LANDFILL	Rumpke Sanitary Landfill, Inc
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	11,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	150	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	3,200	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	10,800	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,NONE	2,500	LANDFILL	Clean Harbors - Corunna, ON

Recv Facility	Item No	Item Desc	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,N ONE	2,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,N ONE	800	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH59278	METAL OXIDES & CERAMIC POWDERS	CR05,MA99,N ONE	800		Clean Harbors - Cincinnati, OH
				60,467		
Clean Harbors - Baltimore, MD (MDD980555189)	CH64862	SPENT FILTERS	NONE	4,023	LANDFILL	Modern Landfill
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	NONE	4,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	NONE	4,800	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH64862	SPENT FILTERS	NONE	200	LANDFILL	Clean Harbors - Corunna, ON
				13,023		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	CR04,MA99	700	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	CR04,MA99	700		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	CR04,MA99	400	INCINERATION	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH66106	water/organic Binder	CR04,MA99	500	INCINERATION	Clean Harbors - Corunna, ON
				2,300		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74857	Methanol	U154	2,600	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74857	Methanol	U154	400	ENERGY RECOVERY	Essroc Logansport IN
				3,000		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	CR04,MA99	1,500	OTHER RECOVERY	Consolidated Recycling Company
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	CR04,MA99	1,500	OTHER RECOVERY	Consolidated Recycling Company
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74860	Glycol/water	CR04,MA99	400	OTHER RECOVERY	Consolidated Recycling Company
				3,400		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	D001	800	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	D001	800		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74864	Laquer Thinner	D001	400	ENERGY RECOVERY	Essroc Logansport IN
				2,000		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74868	Acetic Acid/water	D002	400	INCINERATION	Clean Harbors Deer Park, TX
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74868	Acetic Acid/water	D002	400	INCINERATION	Clean Harbors Deer Park, TX
				800		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74872	WATER/OIL	CR02,MA01,N ONE	150	AQUEOUS ORGANIC TREATMENT	Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH74872	WATER/OIL	CR02,MA01,N ONE	900	OTHER RECOVERY	Clean Harbors - Cincinnati, OH
				1,050		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	CR04,MA99	800	ENERGY RECOVERY	Essroc Logansport IN
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	CR04,MA99	800		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75098	IGEPAL CO-710	CR04,MA99	800	ENERGY RECOVERY	Essroc Logansport IN
				2,400		
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	10,400	LANDFILL	Clean Harbors - Corunna, ON

Recv Facility	Item No	Item Desc	Waste Codes	Pounds	Disposal Type	Disposal Site
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	10,400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	10,400		Clean Harbors - Cincinnati, OH
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	6,000	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	1,500	LANDFILL	Clean Harbors - Corunna, ON
Clean Harbors - Cincinnati, OH (OHD000816629)	CH75505	METALS & METAL OXIDE POWDERS	NONE	1,500		Clean Harbors - Cincinnati, OH
				40,200		

CH Cincinnati:	CH 189107	139,282 lb.	landfill
	CH 189134	40,286 lb.	landfill
	CH 59278	60,467 lb	landfill
	CH 75505	40,200 lb	landfill
	CH 189108	2,100 lb	stabilization
	CH 189112	250 lb	
CH Bristol, CT:	CH 189134	20,000 lb	landfill
CH Baltimore:	CH 74437B (filters)	50,000 lb	landfill (see Westbury spreadsheet)

(est'd 6% Co)

(Form R chemicals only)

Westbury 2004 → off site

WP #	Qty Shipped	% Ni	Qty Ni	% Cr	Qty Cr	% CrC	Qty CrC	% Cr2O3	Qty Cr2O3	% Al	Qty Al	% Co	Qty Co	% Cu	Qty Cu
Usage:			82,849		45,887		31,818		5,427		66,392		26,437		11,953
CH 189106	1,437	0%	0	5%	72	0.0%	0	0.0%	0	0%	0	0%	0	1%	14
CH 189107	48,331	0%	0	1%	242	1.0%	483	1.0%	483	1%	483	1%	483	0%	0
CH 189108	6,673	20%	1,335	5%	334	0.0%	0	0.0%	0	0%	0	1%	67	0%	0
CH 189109	1,730	5%	87	1%	17	1.0%	17	1.0%	17	2%	35	2%	35	0%	0
CH 189112	573	1%	6	4%	23	0.0%	0	0.0%	0	0%	0	1%	6	1%	6
CH 189134	29,261	1%	293	0%	0	1.0%	293	1.0%	293	1%	293	3%	878	0%	0
CH 189142	3,325	0%	0	5%	166	0.0%	0	0.0%	0	0%	0	0%	0	1%	33
CH 59278	16,841	2%	337	1%	168	1.0%	168	1.0%	168	2%	337	1%	168	0%	0
CH 79100	953	0%	0	5%	48	0.0%	0	0.0%	0	0%	0	0%	0	1%	10
CH 82414	16,786	1%	168	0%	0	1.0%	168	1.0%	168	1%	168	2%	336	0%	0
To Clean Harbors Cincinnati			**2,224**		**1,070**		**1,129**		**1,129**		**1,315**		**1,972**		**63**
								2258							
CH 82414B/83772B	43,368	1%	434	0%	0	1.0%	434	1.0%	434	1%	434	2%	867	0%	0
To Clean Harbors Bristol			**434**		**0**		**434**		**434**		**434**		**867**		**0**
CH 189107	10,895	1%	109	1%	54	1.0%	109	1.0%	109	1%	109	1%	109	0%	0
CH 189134	2,999	1%	30	0%	0	1.0%	30	1.0%	30	1%	30	3%	90	0%	0
CH 189142	958	0%	0	5%	48	0.0%	0	0.0%	0	0%	0	0%	0	1%	10
CH 82414	10,988	1%	110	0%	0	1.0%	110	1.0%	110	1%	110	2%	220	0%	0
To Clean Harbors Baltimore			**249**		**102**		**249**		**249**		**249**		**419**		**10**
								498							
Nickel Scrap			72,254												
PM Recovery			**72,254**												
Copper Turnings															
I. Ganz															**26,000**
Gershow															**30,056**
Brass Turnings															
I. Ganz															**4,884**
Gershow															**5,047**
Stainless Turnings															
I. Ganz				**30**		**580**									
Gershow				**33**		**645**									

Constituent	Source	% Mfg	Total Qty Used	% To DC	DC Efficiency	Qty To Air	Qty To Waste Drum
Nickel	Hicksville	50%	165,697	2%	99.00%	16.57	1,640
Chromium	Hicksville	50%	91,774	2%	99.00%	9.18	909
CrC	Hicksville	50%	63,636	2%	99.00%	6.36	630
Cr2O3	Hicksville	50%	10,853	2%	99.00%	1.09	107
Aluminum	Hicksville	50%	132,784	2%	99.00%	13.28	1,315
Cobalt	Hicksville	50%	52,874	2%	99.00%	5.29	523
Copper	Hicksville	50%	23,906	2%	99.00%	2.39	237
Nickel	Westbury	50%	165,697	2%	99.97%	0.50	1,656
Chromium	Westbury	50%	91,774	2%	99.97%	0.28	917
CrC	Westbury	50%	63,636	2%	99.97%	0.19	636
Cr2O3	Westbury	50%	10,853	2%	99.97%	0.03	108
Aluminum	Westbury	50%	132,784	2%	99.97%	0.40	1,327
Cobalt	Westbury	50%	52,874	2%	99.97%	0.16	529
Copper	Westbury	50%	23,906	2%	99.97%	0.07	239
Nickel	Westbury (Cladding)	100%	397,611	2%	99.97%	2.39	7,950
Chromium	Westbury (Cladding)	100%	15,539	2%	99.97%	0.09	311
CrC	Westbury (Cladding)	100%	8,330	2%	99.97%	0.05	167
Cr2O3	Westbury (Cladding)	100%	10,249	2%	99.97%	0.06	205
Aluminum	Westbury (Cladding)	100%	37,415	2%	99.97%	0.22	748
Cobalt	Westbury (Cladding)	100%	783	2%	99.97%	0.00	16
Copper	Westbury (Cladding)	100%	6,304	2%	99.97%	0.04	126

SULZER
Westbury/Hickville
NI UNITS 2004

PM LOT NO	Material	lbs ni	value
6441	ni clad	16,923	$ 71,923.00
6675	ni clad	6,404	$ 27,216.00
6717	ni bearing	1,553	$ 6,213.00
6783	ni powder	15,009	$ 71,290.00
6783	ni al solid	897	$ 3,590.00
6783	rotex2	696	$ 3,025.00
6783	447-956	999	$ 4,348.00
6783	clad 9560	1,311	$ 5,964.00
6783	ni wire	539	$ 2,423.00
6783	447+960	1,354	$ 5,822.00
6922	ni based	18,012	$ 87,470.00
7043	ni based p\	8,557	$ 40,096.00
totals...		72,254	$329,380.00

DiPietrantonio, Peter

From: Stegemann, Bob
Sent: Friday, 24. June 2005 5:45 PM
To: DiPietrantonio, Peter
Subject: RE: Scrap Metal

Peter,

The information below details all shipment to date to Gerchow Recycling. The change-over was in June - earlier than I recounted when we spoke this morning. Prior to that date (below) scrap went to I Ganz.

Thanks.

Bob-

From: DiPietrantonio, Peter
Sent: Fri 6/24/2005 4:37 PM
To: Stegemann, Bob
Subject: RE: Scrap Metal

Thanks again Bob. Just to confirm, the scrap was sent to I. Ganz for all or most of 2004 before you took over, correct? If you switched processors during 2004, could you tell me who that was, their address, and approximately when that happened?

I appreciate the help!

Regards,
Peter

From: Stegemann, Bob
Sent: Friday, 24. June 2005 2:35 PM
To: DiPietrantonio, Peter
Subject: Scrap Metal

Peter,

Below is the list of scrap as we discussed spanning from June of 2004 to this week. All vales are pounds. I do not have records prior to June.

Please let me know if you need anything additional.

Thanks.

Bob-

Date	Copper	Aluminum	Brass	Steel
6/29/2004	2747	2151	482	884
7/15/2004	1340	498	770	747

Miller Remediation

#9 Ni	75,000 ×	22	=	1,650,000 ppm ft
#17 Ni	5,000 ×	22	=	110,000
#27 Ni	7,500 ×	22	=	165,000
all others Ni	932 ×	168	=	156,576
		234		2,081,576

8,895

$$\frac{2,081,576 \text{ ppm ft}}{234 \text{ ft}} = 8,895 \text{ ppm}$$

8,895 ppm Ni × 516 tons = 9,288 #

$$\frac{2,081,575 \text{ ppm } \cancel{\text{ft}}}{\text{total wells}} \times \frac{\text{total wells}}{234 \cancel{\text{ft}}} = 8,895 \text{ ppm}$$

P2SUL003612

Miller Remediation

#9	Cr	370 x 22' =	8140 ppm·ft
#17	Cr	235 x 22' =	5170
#27	Cr	230 x 22' =	5060
others	Cr	108 x 168' =	18,144
		234 ft	36,544 ppm·ft

$$\frac{36,544 \text{ ppm·ft}}{234 \text{ ft}} = 156 \text{ ppm}$$

156 ppm x 516 tons = 160 lb. Cr

#9	Co	600 x 22'	13,200 ppm·ft
#17	Co	1000 x 22'	22,000 ppm·ft
#27	Co	3600 x 22'	79,200 ppm·ft
others	Co	65 x 168'	10,920 ppm·ft
		234 ft	125,320 ppm·ft

$$\frac{125,320 \text{ ppm·ft}}{234 \text{ ft}} = 536 \text{ ppm}$$

536 ppm x 516 tons = 553 lb Co

Estimated 50 ppm Al:

50 ppm x 516 tons = 51 lb

P2SUL003613

9 0-2 = 130,000 75,000 x 20 1,500,000
20-22 = 7

17 0-2 = 19,000 5,000 x 20 100,000
20-22 = 49

27 0-2 = 30,000 15,000 x 20 300,000
12-15 = 15,000
20-22 = 220

1,900,000 / 60 cuft
= 31,666

28
others @ 4 ft = 112 cuft

60/172 = 35%

516 tons / 84 11 65%

35% x 516 x 31% = 11,192

65% x 516 = 320 tons x .1 = 640

P2SUL003614

~~28 at 4ft³ = 112 ft³ (approx)~~

			20-22	
#9: 0-2' =	130,000 ppm	Ni	7	75K x 20'
	740 ppm	Cr	14	370 x 20'
	1,200 ppm	Co	5	600 x 20'

#17 0-2' =	10,000 ppm	Ni	49	5K x 20'
	470 ppm	Cr	20	235 x 20'
	2,000 ppm	Co	15	1K x 20'

#27	15,000 ppm	Ni	220	7500 x 20'
	460 ppm	Cr	29	230 x 20'
	7,200 ppm	Co	270	3600 x 20'

#9 Ni = ~~1,500,000~~ 1,650,000
Cr = ~~2400~~ 8140
Co = ~~12,000~~ 13,200

~~Ni = 1,750,000~~
~~Cr = 16,700~~
~~Co = 104,000~~

~~66 ft³~~

#17 Ni = ~~100,000~~ 110,000
Cr = ~~4700~~ 5170
Co = ~~20,000~~ 22,000

Ni = 1,925,000/3
Cr = 18,370
Co = 114,400

66 ft³

#27 Ni = ~~150,000~~ 165,000
Cr = ~~4600~~ 5060
Co = ~~72,000~~ 79,200

P2SUL003615

$28 \times 6\,ft^3 = 168\,ft^3$

Remaining 28 wells.

est'd 6' removal:

average:	0 - 2'	4 - 6'	~~4 - 6'~~ 6'
Ni =	1863 ppm	932 × 6' × 28 wells	
Cr =	215 ppm	108 × 6' × 28 wells	
Co =	130 ppm	65 × 6' × 28 "	

Ni =	156,576 ppm	168 ft³
Cr =	18,144	
Co =	10,920	

$168\,ft^3$ (28 wells) + $66\,ft^3$ (3 wells) = $234\,ft^3$

72% from 28 wells at 516 tons = 372 tons
28% from 3 wells at 516 tons = 145 tons

Ni
Cr
Co

P2SUL003616

TABLE 3
SOIL ANALYTICAL RESULTS: PRIORITY POLLUTANT METALS PLUS COBALT
220 MILLER PLACE
HICKSVILLE, NEW YORK

		Sample ID & Sample Depth	B-2 (2-4 ft)	B-5 (0-2 ft)	B-9 (0-2 ft)	B-12 (0-2 ft)	B-17 (0-2 ft)	B-18 (0-2 ft)	B-20 (0-2 ft)	B-23 (18-20 ft)	B-26 (17-20 ft)	B-27 (12-15 ft)	B-28 (14-16 ft)	SB-5 (0-4 ft)	SB-6 (0-4 ft)	B-30 (0-2 ft)	B-31 (0-2 ft)
		Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		Sampling Date	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/11/2004	2/11/2004	2/11/2004	2/11/2004	2/12/2004	2/12/2004	2/12/2004	2/12/2004
PRIORITY POLLUTANT METALS	NYSDEC Soil Cleanup Objectives (TAGM) (mg/Kg)	Eastern USA Background (mg/Kg)	US EPA METHOD 6010/7470A/7740														
Antimony	SB	NE	< 6	< 2.9	2.3	< 3.3	< 6.8	< 9.4	< 8.2	< 1.1	< 1.3	< 15	< 2.7	< 1.1	< 1.1	< 1.3	< 2.1
Arsenic	7.5 or SB	3 to 12	4	< 0.72	< 7.1	< 0.82	< 3.4	6.2	< 4.1	0.71	< 0.63	< 3.8	0.79	4.6	3.4	2.4	8.2
Beryllium	0.16 (HEAST) or SB	0 to 1.75	< 0.6	< 0.14	< 0.71	< 0.16	< 0.68	< 0.94	< 0.82	< 0.11	< 0.13	< 0.77	< 0.13	0.28	0.19	0.18	0.2
Cadmium	1 or SB	0.1 to 1	< 3	1.8	130	1	12	< 4.7	18	0.81	< 0.63	17	6.9	< 0.53	< 0.53	0.97	< 0.53
Chromium	10 or SB	1.5 to 40	100	290	740	110	470	280	1,000	34	12	460	660	13	7.6	33	15
Cobalt	30 or SB	2.5 to 60**	48	110	1,200	200	2,000	750	140	36	5.6	5,300	170	15	2.8	5.4	4.7
Copper	25 or SB	1 to 50	920	540	23,000	200	560	1,800	3,000	36	41	950	2,000	18	14	370	29
Lead	SB	200 to 500	500	14	46	39	51	130	380	4.2	4.4	85	36	22	15	99	20
Mercury	0.1	0.001 to 0.2	0.17	0.022	0.047	0.074	0.03	0.21	5.1	0.033	0.045	0.2	0.033	0.05	0.17	7	0.21
Nickel	13 or SB	0.5 to 25	2,100	2,500	130,000	1,300	10,000	5,500	700	1,100	96	15,000	8,800	31	4	120	110
Selenium	2 or SB	0.1 to 3.9	0.62	< 0.58	5.1	< 0.66	< 0.54	< 0.75	1.4	< 0.45	< 0.5	< 0.62	< 0.53	< 0.43	< 0.42	1.5	< 0.42
Silver	SB	NE	< 3	< 0.72	< 3.6	1	< 3.4	< 4.7	23	< 0.56	< 0.63	< 3.8	< 0.67	< 0.53	< 0.53	2.5	< 0.53
Thallium	SB	NE	< 6	< 1.4	< 14	< 3.3	< 6.8	< 9.4	< 8.2	< 1.1	< 1.3	< 7.7	< 1.3	< 1.1	< 2.1	< 1.3	< 1.1
Zinc	20 or SB	9 to 50	130	100	1,400	140	420	530	1,200	36	43	520	170	29	21	150	18

Notes:
< = Analyte not detected above the Laboratory Reporting Limit (detection limit noted)
NYSDEC = New York State Department of Environmental Conservation
TAGM = Technical and Administrative Guidance Memorandum
NE = Guidelines Not Established
SB = Site Background Levels
** = New York Site Background
HEAST = USEPA Health Effects Assessment Summary Tables
Bold — indicates analytes detected above the Laboratory Reporting Limit
Shade — indicated analytes detected above the TAGM guidelines
Shade — indicated analytes detected above the Eastern USA Background Levels; TAGM criteria is Site Background Levels.
all samples were collected from between 0 to 4 feet depth interval (based on the actual depth of the soil)

Cr = 4245 ppm/15 = 283 ppm each
Co = 11,957/15 = 797 ppm each
Ni = 177,361/15 = 11,824 ppm each

w/o # B9, B17, B27:
Cr = 215 ppm
Co = 130 ppm
Ni = 1863 ppm

TABLE 3
SOIL ANALYTICAL RESULTS: PRIORITY POLLUTANT METALS PLUS COBALT
220 MILLER PLACE
HICKSVILLE, NEW YORK

		Sample ID & Sample Depth	B-2 (2-4 ft)	B-5 (0-2 ft)	B-9 (0-2 ft)	B-12 (0-2 ft)	B-17 (0-2 ft)	B-18 (0-2 ft)	B-20 (0-2 ft)	B-23 (18-20 ft)	B-26 (17-20 ft)	B-27 (12-15 ft)	B-28 (14-16 ft)	SB-5 (0-4 ft)	SB-6 (0-4 ft)	B-30 (0-2 ft)	B-31 (0-2 ft)
		Matrix	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
		Sampling Date	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/9/2004	2/11/2004	2/11/2004	2/11/2004	2/11/2004	2/12/2004	2/12/2004	2/12/2004	2/12/2004
PRIORITY POLLUTANT METALS	NYSDEC Soil Cleanup Objectives (TAGM) (mg/Kg)	Eastern USA Background (mg/Kg)	US EPA METHOD 6010/7470A/7740														
Antimony	SB	NE	< 6	< 2.9	2.3	< 3.3	< 6.8	< 9.4	< 8.2	< 1.1	< 1.3	< 15	< 2.7	< 1.1	< 1.1	< 1.3	< 2.1
Arsenic	7.5 or SB	3 to 12	4	< 0.72	< 7.1	< 0.82	< 3.4	6.2	< 4.1	0.71	< 0.63	< 3.8	0.79	4.6	3.4	2.4	6.2
Beryllium	0.16 (HEAST) or SB	0 to 1.75	< 0.6	< 0.14	< 0.71	< 0.16	< 0.68	< 0.94	< 0.82	< 0.11	< 0.13	< 0.77	< 0.13	0.28	0.19	0.18	0.2
Cadmium	1 or SB	0.1 to 1	< 3	1.7	130	1	12	< 4.7	18	0.81	< 0.63	13	6.9	< 0.53	< 0.53	0.97	< 0.53
Chromium	10 or SB	1.5 to 40	100	295	740	110	450	280	1,000	34	13	460	600	13	7.6	33	15
Cobalt	30 or SB	2.5 to 60***	48	140	1,200	200	2,000	750	140	36	22	7,220	170	15	2.8	5.4	4.7
Copper	25 or SB	1 to 50	920	540	23,000	200	500	1,800	5,300	96	41	870	2,000	18	14	370	29
Lead	SB	200 to 500	200	14	46	39	51	130	800	4.2	4.4	85	36	22	15	99	20
Mercury	0.1	0.001 to 0.2	0.13	0.022	0.047	0.074	0.03	0.21	5.3	0.033	0.045	0.2	0.033	0.05	0.17	7	0.21
Nickel	13 or SB	0.5 to 25	2,100	2,550	130,000	1,300	10,000	5,500	500	1,100	96	25,000	6,800	31	4	120	110
Selenium	2 or SB	0.1 to 3.9	0.62	< 0.58	2.1	< 0.66	< 0.54	< 0.75	1.4	< 0.45	< 0.5	< 0.62	< 0.53	< 0.43	< 0.42	1.5	< 0.42
Silver	SB	NE	< 3	< 0.72	< 3.6	1	< 3.4	< 4.7	23	< 0.56	< 0.63	< 3.8	< 0.67	< 0.53	< 0.53	7.5	< 0.53
Thallium	SB	NE	< 6	< 1.4	< 14	< 3.3	< 6.8	< 9.4	< 8.2	< 1.1	< 1.3	< 7.7	< 1.3	< 1.1	< 2.1	< 1.3	< 1.1
Zinc	20 or SB	9 to 50	130	100	1,100	140	420	530	1,200	36	43	820	170	29	24	150	18

Notes:
< = Analyte not detected above the Laboratory Reporting Limit (detection limit noted)
NYSDEC = New York State Department of Environmental Conservation
TAGM = Technical and Administrative Guidance Memorandum
NE = Guidelines Not Established
SB = Site Background Levels
*** = New York Site Background
HEAST = USEPA Health Effects Assessment Summary Tables
Bold indicates analytes detected above the Laboratory Reporting Limit
Shade indicated analytes detected above the TAGM guidelines
Shade indicated analytes detected above the Eastern USA Background Levels; TAGM criteria is Site Background Levels.
all samples were collected from between 0 to 4 feet depth interval (based on the actual depth of the soil)

TABLE 4
SOIL ANALYTICAL RESULTS: PRIORITY POLLUTANT METALS PLUS COBALT
220 MILLER PLACE
HICKSVILLE, NEW YORK

Sample ID & Sample Depth	B-9 (10-12 ft)	B-9 (20-22 ft)	B-17 (10-12 ft)	B-17 (20-22 ft)	B-27 (10-12 ft)	B-27 (20-22 ft)
Matrix	Soil	Soil	Soil	Soil	Soil	Soil
Sampling Date	3/5/2004	3/5/2004	3/5/2004	3/5/2004	3/5/2004	3/5/2004
PRIORITY POLLUTANT METALS / **NYSDEC Soil Cleanup Objectives (TAGM) (mg/Kg)** / **Eastern USA Background (mg/Kg)**	**USEPA METHOD 6010**					
Cadmium / 1 or SB / 0.1 to 1	< 0.52	< 0.52	**0.56**	< 0.60	< 0.52	< 0.53
Chromium / 10 or SB / 1.5 to 40	**14**	**4.0**	**64**	**20**	**17**	**19**
Cobalt / 30 or SB / 2.5 to 60**	**4.7**	**4.3**	**11**	**12**	**150**	**270**
Copper / 25 or SB / 1 to 50	**2.3**	**2.1**	**33**	**15**	**4.4**	**8.2**
Lead / SB / 200 to 500	**1.1**	**0.70**	**4.5**	**2.9**	**2.5**	**2.5**
Nickel / 13 or SB / 0.5 to 25	**7.0**	**6.5**	**340**	**49**	**98**	**220**
Zinc / 20 or SB / 9 to 50	**8.6**	**6.0**	**14**	**14**	**4.4**	**5.8**

Notes:
< = Analyte not detected above the Laboratory Reporting Limit (detection limit noted)
NYSDEC = New York State Department of Environmental Conservation
TAGM = Technical and Administrative Guidance Memorandum
NE = Guidelines Not Established
SB = Site Background Levels
** = New York Site Background
HEAST = USEPA Health Effects Assessment Summary Tables
Bold indicates analytes detected above the Laboratory Reporting Limit
Shade indicated analytes detected above the TAGM guidelines

Miller Place Closure

1 Tons of Material Removed:

EES Invoice #	Tons
04/483	31.01
04/494	92.96
04/511	90.10
04/523	147.42
04/525	144.89
04/548	10.00
Total:	516.38

2 Analytical for 15 samples (see Table 3 Tab):

Metal	Average of 15 ~~LPs/2 (ppm)~~	Qty of Metal for Disposal at RGM (lbs)
Cr	141.50	146
Co	398.50	412
Ni	5,912.00	6,106

3 Assume the analytical data for 15 LPs is the average for all 31 pools that were cleaned. Also assume that the metal content at the endpoint was ~ 0 ppm. Calculation for total disposed was calculated by taking the analytical information and dividing by 2.

Ni = start val = 500ppm down to 4ft.
depth x 1/2 start pt / total depth

75 - 80% from 3' walls

Signature Certification for State Diskette Submission

DISK

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11590PRKNL1101P

June 30, 2005

Susanne Wither
NY State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-8010
(518) 402-9553; Fax: (518) 402-9020

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 6 chemical report(s) for our facility.
These 6 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2004	7429-90-5	Form R
Chromium	2004	7440-47-3	Form R
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2004	N090	Form R
Cobalt	2004	7440-48-4	Form R
Copper	2004	7440-50-8	Form R
Nickel	2004	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETER.DIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Sincerely,

W. GREGORY WUEST
MGR, GLOBAL QUAL, ENVIRONMENT, HEALTH, SAFETY

Enclosure: Diskette

Signature Certification for U.S. EPA Diskette Submission

DISK

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11590PRKNL1101P

June 30, 2005

TRI Data Processing Center
c/o Computer Sciences Corportation
Suite 300
8400 Corporate Drive
Landover, MD 20785

(301) 429-5005

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 6 chemical report(s) for our facility.

These 6 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2004	7429-90-5	Form R
Chromium	2004	7440-47-3	Form R
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2004	N090	Form R
Cobalt	2004	7440-48-4	Form R
Copper	2004	7440-50-8	Form R
Nickel	2004	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETER.DIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Sincerely,

W. GREGORY WUEST
MGR, GLOBAL QUAL, ENVIRONMENT, HEALTH, SAFETY

Enclosure: Diskette

Signature Certification for State Diskette Submission

DISK

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11801PRKNL220MI

June 30, 2005

Susanne Wither
NY State Department of Environmental Conservation
Division of Environmental Remediation
625 Broadway, 11th Floor
Albany, NY 12233-8010
(518) 402-9553; Fax: (518) 402-9020

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 5 chemical report(s) for our facility.

These 5 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2004	7429-90-5	Form R
Chromium	2004	7440-47-3	Form R
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2004	N090	Form R
Cobalt	2004	7440-48-4	Form R
Nickel	2004	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETER.DIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Sincerely,

W. GREGORY WUEST
MGR, GLOBAL QUAL, ENVIRONMENT, SAFETY, HEALTH

Enclosure: Diskette

Signature Certification for U.S. EPA Diskette Submission

DISK

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11801PRKNL220MI

June 30, 2005

TRI Data Processing Center
c/o Computer Sciences Corportation
Suite 300
8400 Corporate Drive
Landover, MD 20785

(301) 429-5005

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 5 chemical report(s) for our facility.

These 5 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2004	7429-90-5	Form R
Chromium	2004	7440-47-3	Form R
Chromium Compounds (except for chromite ore mined in the Transvaal Reg	2004	N090	Form R
Cobalt	2004	7440-48-4	Form R
Nickel	2004	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETER.DIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

Sincerely,

W. GREGORY WUEST
MGR, GLOBAL QUAL, ENVIRONMENT, SAFETY, HEALTH

Enclosure: Diskette

Form R Calculations 2004.xls

Constituent	Source	% Mfg	Total Qty Used	% To DC	DC Efficiency	Qty To Air	Qty To Waste Drum
Nickel	Hicksville	50%	165,697	2%	99.00%	16.57	1,640
Chromium	Hicksville	50%	91,774	2%	99.00%	9.18	909
CrC	Hicksville	50%	63,636	2%	99.00%	6.36	630
Cr2O3	Hicksville	50%	10,853	2%	99.00%	1.09	107
Aluminum	Hicksville	50%	132,784	2%	99.00%	13.28	1,315
Cobalt	Hicksville	50%	52,874	2%	99.00%	5.29	523
Copper	Hicksville	50%	23,906	2%	99.00%	2.39	237
Nickel	Westbury	50%	165,697	2%	99.97%	0.50	1,656
Chromium	Westbury	50%	91,774	2%	99.97%	0.28	917
CrC	Westbury	50%	63,636	2%	99.97%	0.19	636
Cr2O3	Westbury	50%	10,853	2%	99.97%	0.03	108
Aluminum	Westbury	50%	132,784	2%	99.97%	0.40	1,327
Cobalt	Westbury	50%	52,874	2%	99.97%	0.16	529
Copper	Westbury	50%	23,906	2%	99.97%	0.07	239
Nickel	Westbury (Cladding)	100%	397,611	2%	99.97%	2.39	7,950
Chromium	Westbury (Cladding)	100%	15,539	2%	99.97%	0.09	311
CrC	Westbury (Cladding)	100%	8,330	2%	99.97%	0.05	167
Cr2O3	Westbury (Cladding)	100%	10,249	2%	99.97%	0.06	205
Aluminum	Westbury (Cladding)	100%	37,415	2%	99.97%	0.22	748
Cobalt	Westbury (Cladding)	100%	783	2%	99.97%	0.00	16
Copper	Westbury (Cladding)	100%	6,304	2%	99.97%	0.04	126

note: Waste material collected from cladding dust collectn & "general" dust collectn was not sent off for disposal in 2004 from Westbury. Looking to recover Ni / Al / W content.

Brass	Aluminum	Stainless Steel	Copper Blank	Copper	Bronze/Copper	Leaded Bronze/Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu	Tungsten Copper Alloy	Chromium Copper
105	12	2	2,086	26		602	144	21,049	967	2	136	148	418
479	22	31	798	98		169		455		4.5	2,503	19	
58	343	305	518	2,786		480		65		72	545		
348	35	103	1,477	9,712		289		2,331		32	852		
1,393	21	90	802	36,071		366		15,254		9.5	136		
2,026	102	123	3,709	6,013		452		1,933		23	2,503		
265	51	1,535		1,584		547		2,307		69	545		
1,624	86	154		1,998		650		3,457		143	852		
295	119	179				763		5,348		4			
31	129	10				5,533				10			
2	477	12				1,734				8			
16	407	150				451				257			
16	2,443	1				1,809				10			
37	29	520				602				9			
254	27	8				169				96			
106	88	3				480				20			
520	3	25				289							
76	4	15				366							
1,585	65	32				452							
20	18	20				547							
13	72	15				650							
158	86	257				763							
345	194	290				5,533							
5,891	141	21				1,734							
163	229	13				451							
2,050	159	26				1,809							
2,153	54	24											
868	22	15											
4,570	77	401											
5,043	68	290											
5,696	678	1,483											
6,761	242												
312	35												
1,742													
2,658													
3,173													
5,786													
1,254													
1,302													
2,031													
243													
11													
48													

183
239
271
254
307
3,589
16,900
19,629
25,523
1,079
339
1,350
1,809
3,761
11,725
8,973
1,556
104
184
2,196
1,963
1,022
105
479
58
348
1,393
2,026
265
1,624
295
31
18
16
37
254
106
520
76
1,585
33
2,007

Brass	Aluminum	Stainless Steel	Copper Blank	Copper	Bronze/Copper	Leaded Bronze/Copper	Bronze	Tellurium Copper	Lead/Copper Anaconda	Steel	Duronze 90Cu	Tungsten Copper Alloy	Chromium Copper
175,759.00	**6,538.00**	**6,153.00**	**9,390.00**	**58,288.00**	**0.00**	**27,690.00**	**144.00**	**52,199.00**	**967.00**	**769.00**	**8,072.00**	**167.00**	**418.00**
Pb=3.7%					Pb=1.7%	Pb=1.6%			Pb=0.9%		Pb=0.05%		Pb=0.05%
Pb=6,503						**Pb=443**			**Pb=9**		**Pb=4**		
Cu=63%	Cu=4.3%		Cu=100%	Cu=100%	Cu=89%	Cu=89%	Cu=89%	Cu=99%	Cu=99%		Cu=90%		
Cu=110,728	**Cu=281**		**Cu=9,390**	**Cu=58,288**		**Cu=24,644**	**Cu=128**	**Cu=51,677**	**Cu=958**		**Cu=7,265**		
	Cr=0.1%	Cr=14.5%								Cr=0			Cr=1.0
	Cr=7	**Cr=892**											**Cr=4**
	Ni=2.0%	Ni=0.75%								Ni=0			
	Ni=131	**Ni=46**											

Total Pb = 6959 lbs.
Total Cu = 263,359 lbs.
Total Cr = 903 lbs.
Total Ni = 177 lbs.

Notes: Took average of Cu and Ni ranges for aluminum. Al is not counted toward reporting since it is not fume or dust. Stainless steel is 400 Series. Took average of 12-17% range for Cr content. Steel is C1018. Info from QA, Tony Napoli.

2004 Form R - All Materials Production, Cladding Isolated

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
METCO 16C POWDER 5#	655	0.5%	3	69.0%	452	0.0%	0	16.0%	105	0.0%	0	0.0%	0	2.0%	13
METCO 41C POWDER 5#	2,465.00	0.0%	0	12.0%	296	0.0%	0	17.0%	419	0.0%	0	0.0%	0	0.0%	0
METCO 42C POWDER 5#	9,865.00	0.0%	0	2.0%	197	0.0%	0	16.0%	1,578	0.0%	0	0.0%	0	0.0%	0
METCO 32C POWDER 5#	4,840.00	10.0%	484	14.0%	678	0.0%	0	3.5%	169	0.0%	0	0.0%	0	0.0%	0
METCO 18C POWDER 5#	815	40.0%	326	27.0%	220	0.0%	0	18.0%	147	0.0%	0	0.0%	0	0.0%	0
METCO 43C-NS POWDER 5#	6,695.00	0.0%	0	78.0%	5,222	0.0%	0	19.0%	1,272	0.0%	0	0.0%	0	0.0%	0
METCO 201NS POWDER 12.5#	1,640.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 55 POWDER 5#	7,595.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 34FP POWDER 5#	1,880.00	6.0%	113	36.0%	677	0.0%	0	8.5%	160	0.0%	0	0.0%	0	0.0%	0
METCO 63NS POWDER 5#	6,320.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS POWDER 5#	2,025.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS POWDER 5#	3,030.00	12.5%	379	27.0%	818	2.0%	61	48.0%	1,454	0.0%	0	0.0%	0	0.0%	0
METCO 101NS POWDER 5#	18,800.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POWDER 5#	14,080.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 201B-NS POWDER 12.5#	200	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 81NS POWDER 5#	16,760.00	0.0%	0	20.0%	3,352	0.0%	0	4.0%	670	76.0%	12,738	0.0%	0	0.0%	0
METCO 44 POWDER 5#	1,475.00	0.0%	0	74.0%	1,092	0.0%	0	16.0%	236	0.0%	0	0.0%	0	0.0%	0
METCO 56F-NS POWDER 5#	16,485.00	0.0%	0	99.5%	16,403	0.0%	0		0	0.0%	0	0.0%	0	0.0%	0
METCO 43F-NS POWDER 5#	8,810.00	0.0%	0	78.0%	6,872	0.0%	0	19.0%	1,674	0.0%	0	0.0%	0	0.0%	0
METCO 430NS POWDER 5#	2,175.00	12.5%	272	27.0%	587	2.0%	44	0.0%	0	55.0%	1,196	0.0%	0	0.0%	0
AMDRY 100C POWDER 5#	25	0.0%	0	70.0%	18	0.1%	0	19.0%	5	0.0%	0	0.0%	0	0.0%	0
METCO 71NS POWDER 5#	8,400.00	11.5%	966	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
Amdry 103 powder 5#	105	0.0%	0	70.0%	74	0.1%	0	19.0%	20	0.0%	0	0.0%	0	0.0%	0
METCO 210 POWDER 5#	2,065.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 451 POWDER 5#	985	0.0%	0	81.0%	798	1.0%	10	9.0%	89	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDER 5#	9,275.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 45C-NS POWDER 5#	8,725.00	55.0%	4,799	10.0%	873	0.0%	0	24.0%	2,094	0.0%	0	0.0%	0	0.0%	0
METCO 45VF-NS POWDER 5#	8,535.00	55.0%	4,694	10.0%	854	0.0%	0	24.0%	2,048	0.0%	0	0.0%	0	0.0%	0
METCO 71VF-NS POWDER 5#	6,920.00	11.5%	796	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 81VF-NS POWDER 5#	52,120.00	0.0%	0	20.0%	10,424	0.0%	0	0.0%	0	76.0%	39,611	0.0%	0	0.0%	0
METCO 34F POWDER 5#	5,965.00	6.0%	358	36.0%	2,147	0.0%	0	8.5%	507	0.0%	0	0.0%	0	0.0%	0
METCO 101B-NS POWDER 12.5#	32,100.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 72F-NS POWDER 5#	14,985.00	12.0%	1,798	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 439NS-2 POWDER 5#	4,225.00	12.5%	528	27.0%	1,141	2.0%	85	48.0%	2,028	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POWDER 5#	15,695.00	0.0%	0	0.0%	0	10.0%	1,570	0.0%	0	0.0%	0	0.0%	0	89.0%	13,969
METCO 58NS POWDER 5#	10	0.0%	0	38.0%	4	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	6
METCO 52C-NS POWDER 5#	19,015.00	0.0%	0	0.0%	0	88.0%	16,733	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 131VF POWDER 5#	630	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51F-NS POWDER 25#	775	0.0%	0	0.0%	0	10.0%	78	0.0%	0	0.0%	0	0.0%	0	89.0%	690
METCO 601NS POWDER 5#	138,860.00	0.0%	0	0.0%	0	53.0%	73,596	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 410NS POWDER 5#	6,490.00	0.0%	0	6.0%	389	24.0%	1,558	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-1 POWDER 5#	20,780.00	17.0%	3,533	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 36C POWDER 5#	15,155.00	0.0%	0	45.0%	6,820	0.0%	0	12.0%	1,819	0.0%	0	0.0%	0	0.0%	0

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
METCO 106 POWDER 5#	4,730.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	4,588	0.0%	0
METCO 106F POWDER 5#	3,615.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	97.0%	3,507	0.0%	0
METCO 73SF-NS POWDER 5#	765	17.0%	130	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 102 POWDER 12.5#	13,050.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 101SF POWDER 5#	6,250.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 51NS POWDER 5#	2,660.00	0.0%	0	0.0%	0	10.0%	266	0.0%	0	0.0%	0	0.0%	0	89.0%	2,367
METCO 605NS POWDER 5#	780	0.0%	0	0.0%	0	9.0%	70	0.0%	0	0.0%	0	0.0%	0	80.0%	624
METCO 64 POWDER 5#	295	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 202NS POWDER 5#	9,655.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 56C-NS POWDER 5#	875	0.0%	0	99.5%	871	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 54NS POWDER 5#	6,525.00	0.0%	0	0.0%	0	99.0%	6,460	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 71VF-NS-1 POWDER 5#	1,770.00	11.5%	204	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 54NS-1 POWDER 5#	14,485.00	0.0%	0	0.0%	0	99.0%	14,340	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 43VF-NS POWDER 5#	2,175.00	0.0%	0	78.0%	1,697	0.0%	0	19.0%	413	0.0%	0	0.0%	0	0.0%	0
METCO 105SFP POWDER 5#	14,195.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 66F-NS POWDER 5#	3,280.00	59.5%	1,952	1.0%	33	0.0%	0	8.5%	279	0.0%	0	0.0%	0	0.0%	0
METCO 31C-NS POWDER 5#	20,690.00	4.0%	828	55.0%	11,380	0.0%	0	4.5%	931	0.0%	0	0.0%	0	0.0%	0
METCO 73F-NS-2 POWDER 5#	5,150.00	17.0%	876	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 68F-NS-1 POWDER 5#	10,765.00	49.0%	5,275	1.0%	108	0.0%	0	17.5%	1,884	0.0%	0	0.0%	0	0.0%	0
METCO 600NS POWDER 5#	665	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 1123 POWDER 5#	325	9.0%	29	18.0%	59	0.0%	0	4.0%	13	0.0%	0	0.0%	0	0.0%	0
METCO 82VF-NS POWDER 5#	1,655.00	0.0%	0	12.0%	199	0.0%	0	0.0%	0	88.0%	1,456	0.0%	0	0.0%	0
METCO 210NS-1 POWDER 5#	12,775.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 480NS POWDER 5#	27,505.00	0.0%	0	95.5%	26,267	4.5%	1,238	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POWDER 5#	72,555.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1 POWDER 12.5#	7,237.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 143 POWDER 5#	3,270.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 303NS-1 POWDER 5#	165	0.0%	0	27.0%	45	0.0%	0	7.0%	12	0.0%	0	0.0%	0	0.0%	0
METCO 202NS POWDER 12.5#	3,700.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 70C-NS POWDER 12.5#	3,587.50	0.0%	0	0.0%	0	0.0%	0	100.0%	3,588	0.0%	0	0.0%	0	0.0%	0
METCO 204B-NS POWDER 5#	38,200.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS POWDER 12.5#	93,275.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POWDER 25#	1,125.00	0.0%	0	73.0%	821	5.0%	56	18.0%	203	0.0%	0	0.0%	0	0.0%	0
METCO 205NS POWDER 12.5#	1,750.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 210NS-1G POWDER 12.5#	1,412.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 105NS POWDER 12.5#	1,087.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 441NS-1 POWDER 5#	245	0.0%	0	26.0%	64	2.0%	5	6.0%	15	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1003 POWDER 5#	15,310.00	0.0%	0	12.0%	1,837	0.0%	0	17.0%	2,603	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1004 POWDER 5#	740	0.0%	0	0.0%	0	10.0%	74	0.0%	0	0.0%	0	0.0%	0	89.0%	659
DIAMALLOY 1005 POWDER 5#	7,260.00	0.5%	36	63.0%	4,574	0.0%	0	21.5%	1,561	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1006 POWDER 5#	3,015.00	1.0%	30	53.0%	1,598	0.0%	0	19.0%	573	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1007 POWDER 5#	4,135.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	4,135
DIAMALLOY 2001 POWDER 5#	13,365.00	1.0%	134	70.0%	9,356	0.0%	0	17.0%	2,272	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2002 POWDER 5#	1,165.00	6.0%	70	36.0%	419	0.0%	0	8.5%	99	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2003 POWDER 5#	595	11.5%	68	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
DIAMALLOY 2004 POWDER 5#	13,465.00	12.0%	1,616	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2006 POWDER 5#	850	17.0%	145	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3001 POWDER 5#	6,155.00	49.0%	3,016	1.0%	62	0.0%	0	17.5%	1,077	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3004 POWDER 5#	10,535.00	0.0%	0	20.0%	2,107	0.0%	0	0.0%	0	80.0%	8,428	0.0%	0	0.0%	0
DIAMALLOY 3005 POWDER 5#	185	0.0%	0	10.0%	19	0.0%	0	0.0%	0	90.0%	167	0.0%	0	0.0%	0
DIAMALLOY 4006 POWDER 5#	2,960.00	0.0%	0	55.0%	1,628	0.0%	0	20.5%	607	0.0%	0	0.0%	0	4.0%	118
METCO 76F-NS POWDER 5#	1,845.00	21.0%	387	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-G POWDER 12.5#	178,862.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4008NS POWDER 5#	1,675.00	0.0%	0	95.5%	1,600	4.5%	75	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 1008 POWDER 5#	775	0.0%	0	4.0%	31	0.0%	0	18.0%	140	0.0%	0	0.0%	0	2.0%	16
DIAMALLOY 3002NS POWDER 5#	985	59.5%	586	1.0%	10	0.0%	0	8.5%	84	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 2005NS POWDER 5#	21,610.00	17.0%	3,674	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 301 POWDER (3010) 5#	1,040.00	11.0%	114	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 313X POWDER 5#	3,705.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 333 POWDER (3330) 5#	980	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 962 POWDER (9620) 5#	4,340.00	0.0%	0	67.0%	2,908	10.0%	434	22.0%	955	0.0%	0	0.0%	0	0.0%	0
AMDRY 9830 POWDER 5#	1,470.00	17.0%	250	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 9831 POWDER 5#	7,990.00	17.0%	1,358	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 993 POWDER (9930) 50#	7,450.00	0.0%	0	1.0%	75	35.0%	2,608	1.0%	75	0.0%	0	0.0%	0	0.0%	0
AMDRY 995C POWDER 5#	20	35.0%	7	30.0%	6	8.0%	2	26.0%	5	0.0%	0	0.0%	0	0.0%	0
AMDRY 2010 POWDER 5#	17,980.00	0.0%	0	0.0%	0	53.0%	9,529	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5260 POWDER 5#	485	20.0%	97	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5670 POWDER 5#	3,790.00	20.0%	758	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 5843 POWDER 10#	15,255.00	10.0%	1,526	0.0%	0	0.0%	0	4.0%	610	0.0%	0	0.0%	0	0.0%	0
AMDRY 6420 POWDER 10#	15,391.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY CHROME POWDER 5#	5,245.00	0.0%	0	0.0%	0	0.0%	0	100.0%	5,245	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDER 5#	325	0.1%	0	80.0%	260	0.0%	0	20.0%	65	0.0%	0	0.0%	0	0.0%	0
AMDRY 770 POWDER (7701) 5#	615	0.1%	1	80.0%	492	0.0%	0	20.0%	123	0.0%	0	0.0%	0	0.0%	0
AMDRY 780 POWDER 5#	500	0.1%	1	92.0%	460	0.0%	0	15.0%	75	0.0%	0	0.0%	0	0.0%	0
Amdry 790.0 powder 5#	400	0.1%	0	92.0%	368	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 204NS-1 POWDER 12.5#	79,375.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 5803 POWDER 5#	9,625.00	8.0%	770	11.5%	1,107	0.0%	0	11.0%	1,059	0.0%	0	0.0%	0	1.0%	96
SULZER METCO 5810 POWDER 5#	2,855.00	12.0%	343	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 70F-NS POWDER 10#	40	0.0%	0	0.0%	0	0.0%	0	0.0%	0	100.0%	40	0.0%	0	0.0%	0
METCO 204C-NS POWDER 12.5#	36,237.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 2043 POWDER 5#	3,990.00	26.0%	1,037	25.0%	998	6.0%	239	16.5%	658	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 5812 POWDER 5#	590	12.0%	71	0.0%	0	0.0%	0		0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 5847 POWDER 5#	9,460.00	10.0%	946	0.0%	0	0.0%	0	4.0%	378	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 5241 POWDER 1(	12,790.00	0.0%	0	31.0%	3,965	0.0%	0	60.0%	7,674	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 4700 POWDER 10#	1,050.00	38.0%	399	32.0%	336	8.0%	84	21.0%	221	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 2042 POWDER 5#	3,740.00	26.0%	972	26.0%	972	6.0%	224	16.5%	617	0.0%	0	0.0%	0	0.0%	0
AMDRY BRB POWDER 5#	5	9.5%	0	68.5%	3	6.0%	0	13.5%	1	0.0%	0	0.0%	0	0.0%	0
AMDRY MM509 POWDER 5#	345	54.0%	186	10.0%	35	0.0%	0	23.0%	79	0.0%	0	0.0%	0	0.0%	0
SP 86/70NS POWDER NIC ALUM 5	390	0.1%	0	84.0%	328	16.0%	62	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 4-2231 POWDER 10#	8,350.00	2.5%	209	67.0%	5,595	5.5%	459	17.5%	1,461	0.0%	0	0.0%	0	0.0%	0

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
SPM 6-2255 POWDER 5#	1,095.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM 6-2309 AE7443 SPINEL POWI	500	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY ALUM SIL / XPT 268/SPM2	195	21.0%	41	38.0%	74	11.5%	22	23.0%	45	0.0%	0	0.0%	0	0.0%	0
AMDRY 8670 / PWA 36117-2 / 5#	5	10.0%	1	14.0%	1	5.5%	0	8.0%	0	0.0%	0	0.0%	0	0.1%	0
SULZER METCO 5546NS (PER XP	940	0.0%	0	17.0%	160	2.5%	24	70.5%	663	0.0%	0	0.0%	0	0.0%	0
METCO 443NS SPECIAL / XPT 585	10,190.00	0.0%	0	70.0%	7,133	5.0%	510	18.5%	1,885	0.0%	0	0.0%	0	0.0%	0
SXH-70 / 10 LBS	17,700.00	10.0%	1,770	0.0%	0	0.0%	0	4.0%	708	0.0%	0	0.0%	0	0.0%	0
AMDRY RENE 80 / 5 LBS	25	9.5%	2	54.0%	14	3.0%	1	14.0%	4	0.0%	0	0.0%	0	0.0%	0
SP8847 Metco 604NS 5#	375	0.0%	0	0.0%	0	9.0%	34	0.0%	0	0.0%	0	0.0%	0	85.0%	319
SPM 4-2443 POWDER 51F-NS-1 5 I	465	0.0%	0	0.0%	0	10.0%	47	0.0%	0	0.0%	0	0.0%	0	89.0%	414
DIAMALLOY 5872 NS 5# POWDER	490	12.0%	59	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POWDER 25#	750	0.5%	4	83.0%	623	0.0%	0	10.0%	75	0.0%	0	0.0%	0	0.0%	0
SPECIAL SIZE METCO 307NS / 5#	980	0.5%	5	74.5%	730	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SPM2000 POWDER 12.5#	11,962.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5849 POWDER 5#	10,655.00	10.0%	1,066	0.0%	0	0.0%	0	4.0%	426	0.0%	0	0.0%	0	0.0%	0
METCO 15E (US) POWDER 5# -10	2,420.00	1.0%	24	70.5%	1,706	0.0%	0	17.0%	411	0.0%	0	0.0%	0	0.0%	0
AMDRY XPT 395 POWDER 5#	980	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY S-57B	25.2	54.0%	14	10.0%	3	0.0%	0	23.5%	6	0.0%	0	0.0%	0	0.0%	0
GT-50 GE Proprietary Material	2,440.00	26.0%	634	25.0%	610	6.0%	146	16.5%	403	0.0%	0	0.0%	0	0.0%	0
SULZER METCO SPM2000-1 12.5#	9,662.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR 50# PAILS	12,200.00	0.0%	0	2.0%	244	0.0%	0	16.0%	1,952	0.0%	0	0.0%	0	0.0%	0
34FP/15F BLEND	1,295		0		0		0		0		0		0		0
METCO 41C PWDR 50# PAILS	6,600.00	0.0%	0	12.0%	792	0.0%	0	17.0%	1,122	0.0%	0	0.0%	0	0.0%	0
SPM5-2219 (AE7609) 18.7#	11,414.70	0.0%	0	0.0%	0	0.0%	0	85.5%	9,760	0.0%	0	0.0%	0	0.0%	0
SPEC METCO 52C (DJ CUT) 5#	240	0.0%	0	0.0%	0	87.0%	209	0.0%	0	0.0%	0	0.0%	0	0.0%	0
RAW MATERIAL FOR XPT 395 / XF	50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 951 (Ni-50 Gr)	490	0.5%	2	60.0%	294	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
BORON NITRIDE POWDER/0157	1,100.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 15E POWDER / 25#	2,750.00	1.0%	28	70.5%	1,939	0.0%	0	17.0%	468	0.0%	0	0.0%	0	0.0%	0
METCO 15F PWDR 5#	1,155.00	1.0%	12	70.5%	814	0.0%	0	17.0%	196	0.0%	0	0.0%	0	0.0%	0
METCO 54NS PWDR 10#	1,660.00	0.0%	0	0.0%	0	99.0%	1,643	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS1 PWDR 25#	50	0.5%	0	84.5%	42	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 303	95	0.0%	0	0.0%	0	99.0%	94	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 42C PWDR 20#	4,320.00	0.0%	0	2.0%	86	0.0%	0	16.0%	691	0.0%	0	0.0%	0	0.0%	0
AMDRY 485 PWA 1185-1	30	33.0%	10	40.0%	12	0.0%	0	24.0%	7	0.0%	0	0.0%	0	0.0%	0
METCO 600NS-1 PWDR 5#	4,940.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 367 POWDER / 5#	680	0.0%	0	10.5%	71	0.0%	0	78.5%	534	0.0%	0	0.0%	0	0.0%	0
AMDRY 949 POWDER	1,285.00		0		0		0		0		0		0		0
AMDRY 6417 POWDER / 10#	2,786.00	0.0%	0	0.0%	0	0.2%	6	0.1%	3	0.0%	0	99.0%	2,758	0.0%	0
AMDRY 356 ALUM OXIDE PWA 13	1,970.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 - 12.5#	500	0.0%	0	16.0%	80	0.0%	0	73.0%	365	0.0%	0	0.0%	0	0.0%	0
METCO 312NS PWDR 10#	110	0.0%	0	71.0%	78	4.0%	4	4.0%	4	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5815 PWDR 5#	5,500.00	12.0%	660	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5826 PWDR 5#	880	17.0%	150	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5848 PWDR 5#	5,895.00	10.0%	590	0.0%	0	0.0%	0	4.0%	236	0.0%	0	0.0%	0	0.0%	0

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
AMDRY 942-3 POWDER	775	0.0%	0	38.0%	295	0.0%	0	0.0%	0	0.0%	0	0.0%	0	62.0%	481
AMDRY CHROME POWDER 30#	1,680.00	0.0%	0	0.0%	0	0.0%	0	99.5%	1,672	0.0%	0	0.0%	0	0.0%	0
SPM2-2638 / GT56 (B50A978) #5	2,445.00	0.0%	0	63.0%	1,540	3.5%	86	13.5%	330	0.0%	0	0.0%	0	0.0%	0
METCO 204NS-AP POWDER 12.5#	24,037.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 204BNS POWDER 12.5#	28,437.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 131PAB / 10#	980	0.0%	0	20.0%	196	0.0%	0	67.0%	657	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY W914 - 10lb	25,250.00	0.0%	0	20.0%	5,050	0.0%	0	67.0%	16,918	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 7371 POWDER #	570		0		0		0		0		0		0	0.0%	0
SPM4-2506 Ti 6Al 4Vanadium Metal	5	0.0%	0	0.0%	0	6.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
SULZER METCO 7372 POWDER #	6,765.00		0		0		0		0		0		0	0.0%	0
SPM5-2657 POWDER 5#	4,160.00	12.0%	499	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 5847-1 5#	1,565.00	10.0%	157	0.0%	0	0.0%	0	4.0%	63	0.0%	0	0.0%	0	0.0%	0
METCO 204F 12.5#	412.5	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
UCP Riken -SPM-5-2702 10#	50	0.0%	0	40.0%	20	0.0%	0	53.0%	27	0.0%	0	0.0%	0	0.0%	0
2004	1,668,989		52,874		165,697		132,784		91,774		63,636		10,853		23,906
2003	1,602,272		28,656		227,443		113,928		94,436				12,474		N/a
2002			51,212		283,370		107,078		128,089				7,056		N/a
2001			49,912		277,273		113,981		136,044				N/a		N/a

Material Description	Quantity	% Co	Co (lb)	% Ni	Ni (lb)	% Al	Al (lb)	% Cr	Cr (lb)	% CrC	CrC (lb)	% Cr2O3	Cr2O3 (	% Cu	Cu (lb)
Cladding Products:															
METCO 320NS POWDER 5#	22,690.00	0.0%	0	0.0%	0	62.0%	14,068	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 310NS POWDER 5#	95	0.0%	0	0.0%	0	61.0%	58	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 610NS POWDER 12.5#	3,725.00	0.0%	0	0.0%	0	7.5%	279	0.0%	0	0.0%	0	0.0%	0	72.0%	2,682
METCO 308NS POWDER 25#	9,425.00	5.0%	471	84.5%	7,964	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-3 POWDER 5#	9,315.00	0.5%	47	84.5%	7,871	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 308NS-1 POWDER 5#	1,805.00	0.5%	9	84.5%	1,525	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 309NS-3 POWDER 5#	1,485.00	0.5%	7	79.5%	1,181	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS POWDER 5#	17,655.00	0.5%	88	74.5%	13,153	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS-3 POWDER 5#	10,310.00	0.5%	52	74.5%	7,681	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 307NS-2 POWDER 5#	14,220.00	0.5%	71	74.5%	10,594	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 312NS POWDER 12.5#	9,312.50	0.0%	0	71.0%	6,612	4.0%	373	4.0%	373	0.0%	0	0.0%	0	0.0%	0
METCO 314NS POWDER 12.5#	27,312.50	0.0%	0	71.0%	19,392	4.0%	1,093	4.0%	1,093	0.0%	0	0.0%	0	0.0%	0
METCO 301NS POWDER 5#	7,830.00	0.0%	0	65.0%	5,090	3.5%	274	14.0%	1,096	0.0%	0	0.0%	0	0.0%	0
METCO 301C-NS POWDER 5#	3,885.00	0.0%	0	65.0%	2,525	3.5%	136	14.0%	544	0.0%	0	0.0%	0	0.0%	0
METCO 445 POWDER 5#	4,070.00	0.0%	0	0.0%	0	10.0%	407	0.0%	0	0.0%	0	0.0%	0	89.0%	3,622
METCO 350NS POWDER 25#	18,499.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 959 POWDER 5#	3,680.00	0.0%	0	38.0%	1,398	7.0%	258	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 453 POWDER 5#	11,115.00	0.0%	0	31.0%	3,446	6.0%	667	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 452 POWDER 5#	13,365.00	0.0%	0	38.0%	5,079	7.0%	936	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POWDER 5#	167,805.00	0.0%	0	94.0%	157,737	5.0%	8,390	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 450NS POWDER 25#	3,575.00	0.0%	0	94.0%	3,361	5.0%	179	0.0%	0	0.0%	0	0.0%	0	0.0%	0
AMDRY 956 POWDER (9560) 5#	34,610.00	0.0%	0	93.5%	32,360	5.0%	1,731	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 404NS POWDER 5#	13,185.00	0.0%	0	80.0%	10,548	20.0%	2,637	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 444 POWDER 5#	13,570.00	0.0%	0	72.0%	9,770	7.0%	950	9.0%	1,221	0.0%	0	0.0%	0	0.0%	0
AMDRY 960 POWDER (9600) 5#	12,365.00	0.0%	0	73.0%	9,026	5.0%	618	18.0%	2,226	0.0%	0	0.0%	0	0.0%	0
METCO 443NS POWDER 5#	47,550.00	0.0%	0	73.0%	34,712	5.0%	2,378	18.0%	8,559	0.0%	0	0.0%	0	0.0%	0
METCO 461NS POWDER 5#	1,520.00	2.5%	38	67.0%	1,018	5.5%	84	17.5%	266	0.0%	0	0.0%	0	0.0%	0
METCO 442 POWDER 5#	1,910.00	0.0%	0	68.0%	1,299	7.0%	134	8.5%	162	0.0%	0	0.0%	0	0.0%	0
METCO 447NS POWDER 5#	29,470.00	0.0%	0	86.0%	25,344	6.0%	1,768	0.0%	0	0.0%	0	0.0%	0	0.0%	0
DIAMALLOY 3007 POWDER 5#	9,255.00	0.0%	0	10.0%	926	0.0%	0	0.0%	0	90.0%	8,330	0.0%	0	0.0%	0
METCO 130 POWDER 5#	9,690.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130 POWDER 12.5#	3,600.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 130SF POWDER 5#	3,875.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0
METCO 136F POWDER 5#	6,500.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	5,915	0.0%	0
METCO 136F POWDER 12.5#	1,612.50	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	1,467	0.0%	0
METCO 136CP / 5 LBS	3,150.00	0.0%	0	0.0%	0	0.0%	0	0.0%	0	0.0%	0	91.0%	2,867	0.0%	0
	553,037		783		379,611		37,415		15,539		8,330		10,249		6,304

Form R materials Jan.- Dec. 2004

Material SLoc	Material Description Item	Batch	Quantity	BUn	
1000023	**METCO 16C POWDER 5#** Ni 69 Cr 16 Co 2 Co 0.5		**4,190.00**	LB	Ni 2,891 Cr 670 Co 84 Co 21
1000024	**METCO 41C POWDER 5#** Ni 12 Cr 17		**3,115.00**	LB	Ni 347 Cr 529
1000025	**METCO 42C POWDER 5#** Cr 16 Ni 2		**9,865.00**	LB	Cr 1,578 Ni 197
1000050	**METCO 32C POWDER 5#** Ni 14 Cr 3.5 Co 10		**4,840.00**	LB	Ni 678 Cr 169 Co 484
1000053	**METCO 18C POWDER 5#** Co 40 Ni 21 Cr 18		**815**	LB	Co 326 Ni 171 Cr 147
1000054	**METCO 43C-NS POWDER 5#** Ni 78 Cr 19		**6,695.00**	LB	Ni 5,222 Cr 1,272
1000055	**METCO 201NS POWDER 12.5#**		**1,690.00**	LB	
1000056	**METCO 55 POWDER 5#**		**6,600.00**	LB	Ni 693 Cr 594 Co 132
1000057	**METCO 34FP POWDER 5#** Ni 36 Cr 8.5 Co 6		**1,870.00**	LB	
1000058	**METCO 63NS POWDER 5#**				

		6,125.00 LB	
1000059	METCO 201B-NS POWDER 5#		
		~~1,445.00~~ LB	
1000060	METCO 404NS POWDER 5# Ni 80 Al 20		Ni 10,268 Al 2,567
		12,835.00 LB	
1000061	METCO 439NS POWDER 5# Cr 48 Ni 27 Al 2 Co 12.5		Cr 1409 Ni 792 Al 59 Co 366
		2,935.00 LB	
1000062	METCO 101NS POWDER 5#		
		16,765.00 LB	
1000063	METCO 105NS POWDER 5#		
		~~14,075.00~~ LB	
1000064	~~METCO 201B-NS POWDER 12.5#~~		
		200 LB	
1000065	METCO 81NS POWDER 5# Cr 76 Ni 20 Cr 4		Cr Ni
		16,810.00 LB	
1000066	METCO 44 POWDER 5# Ni 74 Cr 16		Ni 1,136 Cr 246
		1,535.00 LB	
1000067	METCO 56F-NS POWDER 5# Ni 99.5		Ni [illegible]
		14,765.00 LB	
1000068	METCO 43F-NS POWDER 5# Ni 78 Cr 19		Ni [illegible] Cr 1,674

		8,810.00	LB
1000069	**METCO 430NS POWDER 5#** CrC 55 Ni 27 Al 2 Co 12.5	2,195.00	LB
1000071	**AMDRY 100 POWDER 5#** Ni 70 Cr 19 Al 0.05	200	LB
1000072	**AMDRY 100C POWDER 5#** Ni 70 Cr 19 Al 0.05	5,515.00	LB
1000075	**METCO 71NS POWDER 5#** Co 11.5	8,460.00	LB
1000076	**Amdry 103 powder 5#** Ni 70 Cr 19 Al 0.05	3,475.00	LB
1000077	**METCO ~~210~~ POWDER 5#**	~~2,065.00~~	~~LB~~
1000078	**METCO 451 POWDER 5#** Ni 81 Cr 9 Al 1	985	LB
1000079	**METCO ~~102~~ POWDER 5#**	~~9,125.00~~	~~LB~~
1000081	**METCO 45C-NS POWDER 5#** Co 55 Cr 24 Ni 10	8,725.00	LB
1000083	**METCO 45VF-NS POWDER 5#** Co 55 Ni 10 Cr 24		

Ni [illegible]
Cr 38
Al 10

Ni [illegible]
Cr 1,049
Al 5

Co [illegible]

Ni 2432
Cr 660
Al 2

Ni [illegible]
Cr 89
Al 10

Co [illegible]
Cr [illegible]
Ni [illegible]

Co [illegible]
Cr [illegible]
Ni 850

		8,505.00 LB	
1000084	**METCO 71VF-NS POWDER 5#** Co 11.5		Co 1,670
		14,525.00 LB	
1000085	**METCO 81VF-NS POWDER 5#** Cr 76 Ni 20		Cr 41,496 Ni 11,050
		59,280.00 LB	
1000086	**METCO 34F POWDER 5#** Ni 36 Cr 8.5 Co 6		Ni 2,160 Cr 510 Co 360
		6,005.00 LB	
1000087	~~**METCO 101B-NS POWDER 12.5#**~~		
		~~32,100.00 LB~~	
1000088	**METCO 72F-NS POWDER 5#** Co 12		Co [illegible]
		14,695.00 LB	
1000089	**METCO 450NS POWDER 5#** Ni 94 Al 5		Ni 156,181 Al [illegible]
		166,150.00 LB	
1000125	~~**METCO 130 POWDER 5#**~~		
		~~8,965.00 LB~~	
1000126	**METCO 130 POWDER 12.5#**		
		3,475.00 LB	
1000128	**METCO 439NS-2 POWDER 5#** Cr 48 Ni 27 Al 2 Co 12.5		Cr 1,848 Ni 1,039 Al [illegible] Co 481
		3,850.00 LB	
1000129	**METCO 51F-NS POWDER 5#** Al 10 Cu 89		Al 1,532 Cu 13,628
		15,320.00 LB	

1000130	**METCO 450NS POWDER 25#** Ni 94 Al 5	**3,725.00** LB	Ni [illegible] Al 186
1000131	**METCO 57NS POWDER 5#** Ni 38 Cu 62	**4,425.00** LB	Ni 1681 Cu [illegible]
1000132	**METCO 58NS POWDER 5#** Cu 59 Ni 36	**25,565.00** LB	Cu [illegible] Ni [illegible]
1000133	**METCO 301NS POWDER 5#** Ni 65 Cr 14 Al 3.5	**8,265.00** LB	Ni [illegible] Cr [illegible] Al 289
1000239	**METCO 52C-NS POWDER 5#** Al 88	**19,115.00** LB	Al [illegible]
1000241	~~**METCO 131VF POWDER 5#**~~ Al O 60	~~**630 LB**~~	
1000243	**METCO 51F-NS POWDER 25#** Al 10 Cu 89	**775** LB	Al 77 Cu [illegible]
1000298	**METCO 601NS POWDER 5#** Al 53	**158,385.00** LB	Al [illegible]
1000299	**METCO 307NS POWDER 5#** Ni 74.5 Co .5	**19,745.00** LB	Ni 14710 Co 92
1000300	**METCO 443NS POWDER 5#** Ni 73 Cr 18 Al 5	**50,745.00** LB	Ni [illegible] Cr 9,534 Al [illegible]
1000302	**METCO 308NS POWDER 25#**		

	Ni 84.5 Co 5	9,400.00 LB	Ni 7943 Co 470
1000303	**METCO 410NS POWDER 5#** Al 24 Ni 6	6,560.00 LB	Ni [illegible] [illegible] 394
1000304	**METCO 73F-NS-1 POWDER 5#** Co 17	19,625.00 LB	Co [illegible]
1000305	**METCO 36C POWDER 5#** Ni 45 Cr 12	18,000.00 LB	Ni [illegible] Cr [illegible]
1000306	**METCO 106 POWDER 5#** CrO 97	4,720.00 LB	CrO [illegible]
1000307	**METCO 106F POWDER 5#** CrO 97	3,615.00 LB	CrO 3,506
1000308	**METCO 73SF-NS POWDER 5#** Co 17	1,120.00 LB	Co 190
1000325	**METCO 301C-NS POWDER 5#** Ni 65 Cr 14 Al 3.5	3,170.00 LB	Ni 3,060 Cr 443 Al 110
1000326	**METCO 444 POWDER 5#** Ni 72 Cr 9 Al 7	13,970.00 LB	Ni [illegible] Cr 1,257 Al 978
1000328	**METCO 102 POWDER 12.5#**	13,025.00 LB	
1000329	**METCO 101SF POWDER 5#**	6,135.00 LB	

1000330	**METCO 51NS POWDER 5#** Al 10 Cu 89	**2,655.00** LB	Al 265 Cu 2,36[illegible]
1000331	**METCO 605NS POWDER 5#** Al 9 Cu 80	**1,120.00** LB	Al 100 Cu 896
1000352	~~**METCO 64 POWDER 5#**~~	~~**295**~~ LB	
1000353	**METCO 310NS POWDER 5#** Al 61	**6,650.00** LB	Al 4[illegible]
1000354	~~**METCO 202NS POWDER 5#**~~	~~**12,300.00**~~ ~~LB~~	
1000355	**METCO 19E POWDER 5#** Ni 64.3 Cr 16 Cu 2.41	**330** LB	Ni 212 Cr 53 Cu 8
1000356	**METCO 307NS-3 POWDER 5#** Ni 74.5 Co .5	**10,310.00** LB	Ni 7,681 Co 51
1000357	**METCO 308NS-3 POWDER 5#** Ni 84.5 Co .5	**9,390.00** LB	Ni [illegible] Cr 46
1000364	**METCO 56C-NS POWDER 5#** Ni 99.5	**855** LB	Ni [illegible]
1000368	~~**METCO 130SF POWDER 5#**~~	~~**3,950.00**~~ ~~LB~~	

1000369	**METCO 136F POWDER 5#** CrO 91	**6,795.00** LB	CrO 6183
1000370	**METCO 307NS-2 POWDER 5#** Ni 74.5 Co .5	**14,220.00** LB	Ni 10,594 Co 71
1000397	**METCO 447NS POWDER 5#** Ni 86 Al 6	**31,605.00** LB	Ni [illegible] Al 1,896
1000417	**METCO 136F POWDER 12.5#** CrO 91	**1,612.50** LB	CrO 1467
1000422	**METCO 54NS POWDER 5#** Al 99	**6,575.00** LB	Al 6,509
1000434	**METCO 71VF-NS-1 POWDER 5#** Co 11.5	**2,330.00** LB	Co 268
1000435	**METCO 54NS-1 POWDER 5#** Al 99	**12,685.00** LB	Al 12,558
1000437	**METCO 445 POWDER 5#** Al 10 Cu 89	**4,315.00** LB	Al 431 Cu 3,840
1000438	**METCO 43VF-NS POWDER 5#** Ni 78 Cr 19	**2,175.00** LB	Ni 1,696 Cr 413
1000441	**METCO 105SFP POWDER 5#** AlO 99	**14,985.00** LB	
1000442	**METCO 66F-NS POWDER 5#**		

	Co 59.5 Ni 1 Cr 8.5	3,445.00 LB	Co 2049 Ni 34 Cr 292
1000443	**METCO 31C-NS POWDER 5#** Ni 56 Cr 4.5 Co 4	19,220.00 LB	Ni 10,571 Cr 864 Co 769
1000444	**METCO 309NS-3 POWDER 5#** Co 0.5 Ni 79.5	1,230.00 LB	Co 6 Ni 978
1000445	**METCO 442 POWDER 5#** Ni 68 Cr 8.5 Al 7	1,935.00 LB	Ni 1316 Cr 164 Al 135
1000447	**METCO 312NS POWDER 12.5#** Ni 71 Al 4 Cr 4	9,287.50 LB	Ni 6592 Al 371 Cr 371
1000448	**METCO 308NS-1 POWDER 5#** Ni 84.5 Co .5	1,805.00 LB	Ni 1525 Co 9
1000449	**METCO 73F-NS-2 POWDER 5#** Co 71	5,150.00 LB	Co 875
1000568	**METCO 68F-NS-1 POWDER 5#** Co 49 Cr 17.5 Ni 1	10,635.00 LB	Co 5211 Cr 1861 Ni 106
1000569	**METCO 313NS POWDER 5#** Al 40	35,795.00 LB	Al 14318
1000571	~~**METCO 600NS POWDER 5#**~~	~~665 LB~~	
1000572	**METCO 1123 POWDER 5#** Ni 18 Co 9 Cr 4	325 LB	Ni 58 Co 29 Cr 13

1000573	**METCO 82VF-NS POWDER 5#** CrC 88 Ni 12	**1,980.00** LB	Cr 1[illegible]4 Ni 23[illegible]
1000574	**METCO 311NS POWDER 5#** Al 64	**6,555.00** LB	Al 4,195
1000575	~~**METCO 210NS-1 POWDER 5#**~~	~~**12,150.00** LB~~	
1000576	**METCO 480NS POWDER 5#** Al 4.5 Ni 95.5	**29,395.00** LB	Al 1[illegible] Ni 2[illegible]
1000577	~~**METCO 204NS POWDER 5#**~~	~~**70,140.00** LB~~	
1000578	~~**METCO 210NS-1 POWDER 12.5#**~~	**7,237.50** LB	
1000579	~~**METCO 143 POWDER 5#**~~	~~**3,230.00** LB~~	
1000583	**METCO 303NS-1 POWDER 5#** Ni 27 Cr 7	**150** LB	Ni 40 Cr 10
1000584	**METCO 452 POWDER 5#** Ni 38 Al 7	**13,735.00** LB	Ni 3219 Al 961
1000585	**AMDRY 355 POWDER 5#** Al 86	**495** LB	Al 426
1000586	**METCO 610NS POWDER 12.5#**		

	Cu 72 Al 7.5	3,775.00 LB	Cu 2,718 Al 283
1000587	~~METCO 202NS POWDER 12.5#~~	~~3,887.50 LB~~	
1000588	METCO 70C-NS POWDER 12.5# Cr 100	3,587.50 LB	Cr 3,1[illegible]
1000589	~~METCO 350NS POWDER 25#~~	~~21,225.00 LB~~	
1000590	~~METCO 204B-NS POWDER 5#~~	~~40,920.00 LB~~	
1000591	~~METCO 204NS POWDER 12.5#~~	~~88,500.00 LB~~	
1000592	METCO 314NS POWDER 12.5# Ni 71 Al 4 Cr 4	29,500.00 LB	Ni 20,945 Al 1,180 Cr 1,180
1000594	METCO 453 POWDER 5# Ni 31 Al 6	11,340.00 LB	Ni 3,515 Al 680
1000596	METCO 443NS POWDER 25# Ni 73 Cr 18 Al 5	1,125.00 LB	Ni 821 Cr 202 Al 56
1000599	~~METCO 205NS POWDER 12.5#~~	~~1,575.00 LB~~	
1000600	~~METCO 210NS-1G POWDER 12.5#~~		

		~~1,137.50~~	~~LB~~
1000601	**METCO 461NS POWDER 5#** Ni 67 Cr 17.5 Al 5.5 Co 2.5	**1,670.00**	LB
1000603	~~**METCO 105NS POWDER 12.5#**~~	~~**1,225.00**~~	~~**LB**~~
1000604	**METCO 441NS-1 POWDER 5#** Ni 26 Cr 6 Al 2	**245**	LB
1000781	**AMDRY 400 POWDER 5#** Co 52.5 Cr 23 Ni 14	**4,080.00**	LB
1000782	**DIAMALLOY 1003 POWDER 5#** Cr 17 Ni 12	**13,340.00**	LB
1000783	**DIAMALLOY 1004 POWDER 5#** Cu 89 Al 10	**740**	LB
1000784	**DIAMALLOY 1005 POWDER 5#** Ni 63 Cr 21.5 Co 0.5	**7,250.00**	LB
1000785	**DIAMALLOY 1006 POWDER 5#** Ni 53 Cr 19 Co 1	**2,675.00**	LB
1000786	**DIAMALLOY 1007 POWDER 5#** Cu 100	**3,010.00**	LB
1000787	**DIAMALLOY 2001 POWDER 5#** Ni 70 Cr 17 Co 1	**13,320.00**	LB

Ni [illegible]
Cr 292
Al 42
Co 42

Ni 64
Cr 15
Al 5

Co 2,142
Cr [illegible]
Ni 571

Cr 2,668
Ni 1,601

Cu 658
Al [illegible]

Ni [illegible]
Cr [illegible]
Co [illegible]

Ni 1,418
Cr 508
Co [illegible]

Cu 3,010

Ni 9,324
Cr 3,264
Co [illegible]

1000788	**DIAMALLOY 2002 POWDER 5#** Ni 36 Cr 3.5 Co 6	**1,770.00** LB	Ni 637 Cr 150 Co 106
1000789	**DIAMALLOY 2003 POWDER 5#** Co 11.5	**690** LB	Co 79
1000790	**DIAMALLOY 2004 POWDER 5#** Co 12	**12,155.00** LB	Co 1,458
1000791	**DIAMALLOY 2006 POWDER 5#** Co 17	**1,200.00** LB	Co 204
1000792	**DIAMALLOY 3001 POWDER 5#** Co 49 Cr 17.5 Ni 1	**6,155.00** LB	Co 3,016 Cr 1,077 Ni 61
1000793	**DIAMALLOY 3004 POWDER 5#** CrC 80 Ni 20	**10,535.00** LB	CrC 7,574 Ni 2,107
1000794	**DIAMALLOY 3005 POWDER 5#** CrC 90 Ni 10	**185** LB	Cr 148 Ni 18
1000796	**DIAMALLOY 3007 POWDER 5#** CrC 90 Ni 10	**19,330.00** LB	Cr 15,464 Ni 1,933
1000797	**DIAMALLOY 4006 POWDER 5#** Ni 55 Cr 20.5 Co 9	**3,555.00** LB	Ni 1,955 Cr 728 Co 319
1000799	**METCO 76F-NS POWDER 5#** Co 21	**1,970.00** LB	Co 414
1000800	**METCO 204NS-G POWDER 12.5#**		

		184,625.00 LB	Ni [illegible]
1000801	**DIAMALLOY 4008NS POWDER 5#** Ni 95.5 Al 4.5		Al 4.5
		1,675.00 LB	
1000802	**DIAMALLOY 1008 POWDER 5#** Cr 18 Ni 4 Cu 2	970 LB	Cr 1114 Ni 29 Cu 19
1000805	**DIAMALLOY 4010 POWDER 5#**		*
		310 LB	
1000806	**DIAMALLOY 3002NS POWDER 5#** Cr 8.5 Ni 1 Co 89.5	1,280.00 LB	Cr 109 Ni 12 Co 762
1000807	**DIAMALLOY 2005NS POWDER 5#** Co 17		Co 3,244
		19,670.00 LB	
1001034	**AMDRY 1371 POWDER 10#** Ni 19 Cr 3.6 Co .25	13,020.00 LB	Ni 2,419 Cr 469 Co 32
1001035	**AMDRY 301 POWDER (3010) 5#** Co 11		
		1,040.00 LB	
1001037	~~**AMDRY 313X POWDER 5#**~~		
		~~3,660.00 LB~~	
1001038	~~**AMDRY 333 POWDER (3330) 5#**~~		
		1,095.00 LB	Co 1,086
1001039	**AMDRY 353 POWDER (3530) 5#** Co 46.5 Al 52.5 Ni 0.5 Cr 1		Ni 1,367 Cr 12 Al 25

		2,555.00	LB
1001040	**AMDRY 365-2 POWDER (3652)(PROPRIETARY) 5** Ni 47 Co 24 Cr 17 Al 12	11,570.00	LB
1001041	**AMDRY 386 POWDER (3860)(PROPRIETARY) 5#** Ni 48 Co 22 Cr 17 Al 13	880	LB
1001042	**AMDRY 387 POWDER (3870) 5#** Ni 86 Al 6	1,125.00	LB
1001043	**Amdry 500C powder 5#** Cu 59 Ni 36	7,675.00	LB
1001044	**AMDRY 500F POWDER 5#** Cu 59 Ni 36	3,015.00	LB
1001045	**AMDRY 625 POWDER 5#** Ni 63 Cr 21.5 Co .5	2,105.00	LB
1001047	**AMDRY 718 POWDER (7180) 5#** Ni 53 Cr 19 Co 1	2,190.00	LB
1001048	**AMDRY 718 CLASS B POWDER 5#** Ni 53 Cr 19 Co 1	7,885.00	LB
1001049	**AMDRY 956 POWDER (9560) 5#** Ni 93.5 Al 5	34,895.00	LB
1001050	**AMDRY 959 POWDER 5#** Ni 38 Al 7	3,730.00	LB

Ni [illegible]
Co 2,171
Cr 1961
Al 1389

Ni 429
Co 194
Cr 1530
Al 114

Ni 967
Al 67

Cu [illegible]
Ni 2,763

Cu 1,778
Ni 1,085

Ni 1,320
Cr 452
Co 10

Ni 1,160
Cr 416
Co 22

Ni 1,160
Cr 1,498
Co 79

Ni 32,627
Al 1,744

Ni 1,417
Al 261

1001051	**AMDRY 960 POWDER (9600) 5#** Cr 12 Co 18 Al 5	**12,360.00** LB	Ni [illegible] Cr 2,205 Al 619
1001052	**AMDRY 962 POWDER (9620) 5#** Al [illegible] Ni 67 Cr 22	**80,265.00** LB	[illegible] Ni 53,777 Cr 17,658
1001053	**AMDRY 962 POWDER (9625) 5#** Ni 67 Cr 22 Al 10	**2,185.00** LB	Ni 1,463 Cr 481 Al 218
1001054	**AMDRY 963 POWDER (9630) 5#** Ni 68 Cr [illegible] Al [illegible]	**2,810.00** LB	Ni 1,911 Cr 730 Al 168
1001055	**AMDRY 964 POWDER (9640) 5#** Ni 57 Cr 31 Al 11	**7,560.00** LB	Ni 4,309 Cr 2,344 Al [illegible]
1001056	**AMDRY 9830 POWDER 5#** Co 17	**1,470.00** LB	Co 249
1001057	**AMDRY 9831 POWDER 5#** Co 17	**5,520.00** LB	Co 938
1001058	**AMDRY 993 POWDER (9930) 50#** Cr 1 Ni 1 Al 35	**7,550.00** LB	Cr 75 Ni 75 Al 2,642
1001059	**AMDRY 9951 POWDER 5#** Co 35 Ni 30 Cr 26 Al 2	**10,305.00** LB	Co 3,607 Ni 3,091 Cr [illegible] Al 824
1001060	**AMDRY 9954 POWDER 5#** Co 35 Ni 30 Cr 26 Al 8	**8,535.00** LB	Co [illegible] Ni [illegible] Cr [illegible] Al 2,219
1001061	**AMDRY 995C POWDER 5#**		683

		29,025.00	LB
1001062	**AMDRY 997 POWDER (9970) 5#** Ni 44 Co 23 Cr 20 Al 8.5	4,335.00	LB
1001063	**AMDRY 1718 POWDER 5#** Ni 53 Cr 19 Co 1	1,235.00	LB
1001064	**AMDRY 2000 POWDER 5#** Al 42	160	LB
1001065	**AMDRY 2010 POWDER 5#** Al 53	18,590.00	LB
1001066	**AMDRY 4535 POWDER 10#** Ni 80 Cr 20	3,480.00	LB
1001067	**AMDRY 5260 POWDER 5#** Co 20	755	LB
1001068	**AMDRY 5670 POWDER 5#** Co 20	3,820.00	LB
1001069	**AMDRY 5843 POWDER 10#** Co 10 Cr 4	15,250.00	LB
1001070	~~**AMDRY 6420 POWDER 10#**~~	~~15,441.00~~	~~LB~~
1001071	**AMDRY CHROME POWDER 5#** Cr 100	5,225.00	LB

Ni
Co 99.1
Cr
Al 38.6

Ni 63.4
Cr
Co 1.2

Al

Al

Ni
Cr 69.6

Co 10.1

Co 7.24

Co 15.25
Cr 4.1

1001073	**AMDRY 365-1 POWDER (3651)(PROPRIETARY) 5** Ni 46 Co 20 Cr 15 Al 12	**1,445.00** LB	Ni Co 347 Cr 260 Al 1[illegible]
1001074	**AMDRY 187 POWDER (187GR) 12.5#** Al 91	**2,000.00** LB	1,820
1001415	**AMDRY 718B POWDER 5#** Ni 53 Cr 19 Co 1	**295** LB	Ni 156 Co Al 5
1001419	**AMDRY 770 POWDER 5#** Ni 80 Cr 0-20 Co 0.1	**4,070.00** LB	Ni [illegible] Cr [illegible] Co 1.1
1001420	**AMDRY 770 POWDER (7701) 5#** Ni 80 Cr 0-20 Co 0.1	**10,825.00** LB	Ni 89[illegible] Cr 1,116 Co 11
1001421	**AMDRY 770 POWDER -325 MESH 5# (7703)** Ni 80 Cr 0-20 Co 0.1	**340** LB	11/05
1001423	**AMDRY 775 POWDER 5#** Ni 80 Cr 15 Co 0.1	**745** LB	Ni [illegible] Cr 112 Co 7
1001425	**AMDRY 780 POWDER 5#** Ni 92 Co 0.1 Al 0.05	**4,290.00** LB	Ni [illegible] Co 8 Al 5
1001426	**AMDRY 780 POWDER (7801) 5#** Ni 92 Co 0.1 Al 0.05	**2,725.00** LB	
1001429	**Amdry 790.0 powder 5#** Ni 92 Co 0.1	**2,775.00** LB	
1001430	**AMDRY 790.1 POWDER 5#**		*

		550 LB	
1001585	~~AMDRY 204NS-1 POWDER 12.5#~~		
		~~92,162.50 LB~~	
1001586	SULZER METCO 5803 POWDER 5# Ni 11.5 Cr 11 Co 8 Cu 1	9,875.00 LB	Ni 1,[illegible] Cr 1,[illegible] Co 790 Cu [illegible]
1001587	METCO 320NS POWDER 5# Al 6	22,180.00 LB	Al [illegible]
1001588	SULZER METCO 5810 POWDER 5# Co 12	2,960.00 LB	Co 3,[illegible]
1001592	METCO 70F-NS POWDER 10# Cr 86	40 LB	Cr 34
1001593	METCO 204C-NS POWDER 12.5#	39,962.50 LB	Ni [illegible] Co 4142 Cr 2,8[illegible] Al 102
1001595	SULZER METCO 2043 POWDER 5# Ni 25 Co 26 Cr 16.5 Al 6	1,700.00 LB	Ni 3,99[illegible] Cr [illegible]
1001596	SULZER METCO 4538 POWDER 10# Ni 60.5 Cr 16	660 LB	Co 12
1001598	METCO 73F POWDER 5# Co 12	100 LB	
1001600	SULZER METCO 5812 POWDER 5# Co 12		

Co 10

		855	LB
1001601	**SULZER METCO 5847 POWDER 5#** Co 10 Cr 4	9,105.00	LB
1001603	**SULZER METCO 5241 POWDER 10#** Cr 60 Ni 31	13,360.00	LB
1001609	**DIAMALLOY 4700 POWDER 10#** Co 38 Ni 32 Cr 21 Al 3	17,440.00	LB
1001610	**SULZER METCO 2042 POWDER 5#** Ni 26 Co 26 Cr 16.5 Al 6	3,740.00	LB
1001611	**DIAMALLOY 4004 POWDER 10#** Cr 14 Al 3 Co 9.5	50	LB
1001614	**AMDRY 930 (HAMILTON STD PROPRIETARY)/5#** Ni 63 Co 5 Cr 0.1	4,227.00	LB
1001763	**AMDRY BRB POWDER 5#** Ni 68.5 Al 6 Cr 13.5 Co 9.5	1,080.00	LB
1001764	**AMDRY BRB POWDER (-325) 5#** Ni 68.5 Al 6 Cr 13.5 Co 9.5	705	LB
1001791	**AMDRY D-15 POWDER 5#** Ni 22.5 Cr 15 Co 10.2 Al 3.5	310	LB
1001792	**AMDRY DF-3 -325 POWDER(PROPRIETARY)** Ni 54 Co 20 Cr 20 Al 0-3	3,405.00	LB

1002099	**AMDRY MM509 POWDER 5#** Co 54 Cr 23 Ni 10	**300**	LB
1002375	**SP 86/70NS POWDER NIC ALUM 5#** Ni 84 Co 0.05 Al 16	**95**	LB
1002379	**SPM 4-2231 POWDER 10#** Ni 67 Cr 17.5 Al 5.5 Co 2.5	**10,620.00**	LB
1002383	**SPM 6-2255 POWDER 5#**	**1,095.00**	LB
1002384	**SPM 6-2309 AE7443 SPINEL POWDER 12.5#** Al2O 72	**500**	LB
1002385	**SULZER METCO 2460NS POWDER 5#**	**900**	LB
1002391	**AMDRY X-40 POWDER 5#** Cr 25.5 Ni 10 Co 56	**1,090.00**	LB
1002392	**AMDRY ALUM SIL / XPT 268/SPM2-2637/ 5#** Ni 38 Co 21 Al 11.5 Cr 23	**16,575.00**	LB
1002393	**AMDRY 8670 / PWA 36117-2 / 5#** Cr 8 Ni 34 Co 10 Al 5.5 Cu 0.1	**20**	LB
1002395	**1824 RZR BRAZE POWDER (PROP. TO SIFCO) 1** Co 45 Cr 18 Ni 39	**95**	LB
1002397	**SULZER METCO 4052 (PER XPT 512) 10#** Cr 1.4		

		900	LB
1002400	**SULZER METCO 5546NS (PER XPT 546)/10#** Cr 70.5 Ni 17 Al 2.5	1,180.00	LB
1002401	**NIMONIC 90 POWDER 10#** Cr 18.5 Cu 0.2 Co 18 Al 1.5 Ni 60	200	LB
1002402	**METCO 443NS SPECIAL / XPT 585 / 5#** Al 5 Ni 70 Cr 12.5	9,185.00	LB
1002433	**SXH-70 / 10 LBS** Co 10 Cr 4	17,700.00	LB
1002829	**AMDRY 6250 / 10KG**	50	KG
1004631	**METCO 136CP / 5 LBS** CrO 99	3,010.00	LB
1004647	**SM 4201 / 10 LBS / SXPT 90 / Sicoat 2231** Ni 31 Cr 27 Al 7.5 Co 33	7,640.00	LB
1005560	**AMDRY 6417 / 5KG** CrO 99 Al 0.2	25	KG
1005578	**AMDRY RENE 80 / 5 LBS** Cr 14 Co 9.5 Al 3 Ni 54	435	LB
1006131	**SP8847 Metco 604NS 5#** Cu 55 Al 9	375	LB

1006155	**XPT 459 (450P) / 10 LBS.** Ni 95 Al 4	**50**	LB
1006157	**XPT 470 / SPM7-2622 / 10#** Cr 15 Co 1 Ni 70	**11,980.00**	LB
1006158	**DIAMALLOY 4454 (PER XPT 550) 10#** Ni 32 Cr 21 Co 35 Al 2	**4,840.00**	LB
1006159	**SULZER METCO 4451 (PER XPT 594) 10#** Ni 32 Cr 21 Co 32 Al 2	**2,150.00**	LB
1006238	**AMDRY 4531 (XPT 605) / SPM4-2595 / 10#** Ni 78 Cr 19	**700**	LB
1006319	**SPM 4-2443 POWDER 51F-NS-1 5 LBS** Co 89 Al 10	**465**	LB
1006376	**XPT 651 / SPM4-2589 / 10#** Cr 19 Co 4 Ni 54	**1,130.00**	LB
1006377	**DIAMALLOY 5872 NS 5# POWDER** Co 10	**490**	LB
1006416	**AMDRY 9150 POWDER 5 LBS (AMS & MSRR)** Ni 79.5 Cr 15 Co 0.7	**1,485.00**	LB
1015307	**SULZER METCO 4197 10#** Cr 29 Co 64.4 Al 6 Ni 0.3	**270**	LB
1015309	**SULZER METCO 4198 10#** Co 36 Ni 32 Cr 22 Al 10		

		20,064.00	LB
1015393	**METCO 12C POWDER 5 #** Ni 83 Cr 10 Co 0.5	665	LB
1015614	**METCO 404NS POWDER 25#** Ni 80 Al 20	750	LB
1016142	**AMDRY 482 POWDER (PWA 36117-1)/5#** Ni 75 Cu 0.05 Cr 9 Co 8 Al 2	435	LB
1018627	**AMDRY DF-6A POWDER 10#** Ni 75 Cr 20	270	LB
1018876	**SULZER METCO 6606 5#**	25	LB
1019034	**SPECIAL SIZE METCO 307NS / 5#** Ni 74.5 Co 0.5	990	LB
1019245	**SPM2000 POWDER 12.5#**	11,962.50	LB
1019247	**AMDRY 9621 POWDER 5#** Ni 67 Cr 22 Al 10	3,240.00	LB
1019811	**AMDRY 920 POWDER 5#** Co 64.5 Cr 29 Al 6 Ni 0+0.5	1,730.00	LB
1020141	**DIAMALLOY 5849 POWDER 5#** Co 10 Cr 4	11,762.50	LB

1020426	**XPT 448 AMDRY DF4B POWDER (-325 MESH)** Ni 67 Cr 14 Co 10 Al 3.5	**300**	LB
1020489	**AMDRY 915 PWA996(EXCEPT SIZE) POWDER 5#** Ni 72 Cr 13.5 Co 0.1 Al 0.05	**1,910.00**	LB
1020495	**AMDRY SM4485 /SICOAT 2453/XPT 485/10#** Ni 54 Co 12 Cr 21 Al 11	**2,280.00**	LB
1020497	**AMDRY XPT 449 / SPM4-2591 / 10#** Ni 41 Co 23 Cr 17 Al 12.5	**6,620.00**	LB
1020646	**METCO 15E (US) POWDER 5# -106+45= / 5#** Ni 40.5 Cr 19 Co 0-1	**2,420.00**	LB
1020659	**AMDRY XPT 395 POWDER 5#**	**990**	LB
1021534	**AMDRY AlCo(Walbar Proprietary) 50#** Al 69 Co 30 Ni 0-0.75	**6,700.00**	LB
1021561	**AMDRY B-93 BRAZE ALLOY / 5#** Ni 55 Co 14 Cr 14 Al 3	**1,250.00**	LB
1022163	**AMDRY DF-5 / 5#** Ni 79 Cr 18 Al 2	**260**	LB
1029003	**AMDRY S-57B** Ni 10 Cr 23.5 Co 51	**230**	LB
1029021	**GT-33 LPPS / SM4200**		

Co 35
Ni 30
Cr 25
Al 8

		970	LB
1029026	GT-50 GE Proprietary Material Ni 25 Co 26 Cr 16.5 Al 6	1,325.00	LB
1029027	SULZER METCO SPM2000-1 12.5#	11,400.00	LB
1029031	METCO 42C PWDR 50# PAILS Ni 2 Cr 16	12,200.00	LB
1029035	34FP/15F BLEND	1,295	PC
1029036	METCO 41C PWDR 50# PAILS Cr 17 Ni 12	6,600.00	LB
1029039	SPM5-2219 (AE7609) 18.7# Cr 84.5	11,414.70	LB
1029056	AE7039 ALUM PWDR 10 #	370	LB
1029066	SPEC METCO 52C (DJ CUT) 5# Al 87	295	LB
1029071	METCO 16CNS PWDR 5# Ni 69 Cr 16 Co 0.5	4,360.00	LB
1029922	AMDRY TD-55 B50TF62 NiCo 38 Co 3.5 Cr 21		

		150	LB
1029964	FVA-5-B / XPT 271/ SPM4-2623 / 10# Ni 18.25 Cr 3.5 Co 0.05	820	LB
1029976	RAW MATERIAL FOR XPT 395 / XPT 394	13	LB
1030016	AMDRY 788 / XPT 503 / SPM4-2617 / 10# Co 33 Cr 22 Ni 22	720	LB
1030018	EMS 54752T TYPE XV -140+325 / XPT 507 Ni 80 Cr 8 Al 5.5	370	LB
1030030	AMDRY 962 except 02 Ni 64 Cr 22 Al 10	740	LB
1030066	ELECTROLYTIC CHROMIUM PELLETS Cr 99.7	660	LB
1030072	XPT 595 / 10# Ni 85 Cr 10 Co 0.5	1,710.00	LB
1030085	NiCoCrAlY / SPM4-2592 / XPT 615 / 10# Ni 32 Co 22 Cr 18 Al 13	1,070.00	LB
1030090	AMDRY 951 (Ni-50 Gr) Ni 60 Co 0.5 Co 0.01	490	LB
1030091	MCrAlY + Re (PWA36119-1) / XPT 625/10# Ni 63 Cr 21.5 Co 0.5	260	LB

1030430	**BORON NITRIDE POWDER/0157**	**25**	LB
1030515	**METCO 16C PWDR 25#** Ni 69 Cr 16 Co 2 Fe 0.5	**675**	LB
1030516	**METCO 15E POWDER / 25#** Ni 80.5 Cr 17 Co 1	**1,925.00**	LB
1030519	**METCO 15F PWDR 5#** Ni 80.5 Cr 17 Co 1	**1,160.00**	LB
1030592	**METCO 54NS PWDR 10#** Al 98-100	**1,620.00**	LB
1031609	**METCO 308NS1 PWDR 25#** Ni 89.5 Co 0.5	**50**	LB
1031715	**AMDRY 303** Al 99	**95**	LB
1031723	**AMDRY 350f POWDER Ni50Cr / 10#** Cr 50 Ni 50	**200**	LB

1031731	**METCO 42C PWDR 20#** Ni 3 Cr 16	**4,540.00**	LB
1031862	**AMDRY 485 PWA 1185-1** Co 33 Cr 24 Ni 40	**30**	LB
1031864	**METCO 600NS-1 PWDR 5#**	**5,860.00**	LB
1031929	**AMDRY 367 POWDER / 5#** Cr 78.5 Ni 10.5	**680**	LB
1031936	**AMDRY 949 POWDER**	**1,285.00**	LB
1031939	**AMDRY 961 POWDER / 5#** Ni 77 Cr 17 Al 6	**2,430.00**	LB
1031953	**AMDRY 6417 POWDER / 10#** ZrO 99 Al 0.2 Si 0.1		
* 1031953		**1,080.00**	LB
1031967	**AMDRY 356 ALUM OXIDE PWA 1356 / 5#** Al2O3 99		

* 1031967		1,965.00 LB	
1032370	Amdry 713C Ni 75 Cr 13.5 Al 5 Co 3		Ni 297.5 Cr 41.55 Al 26.5 Co 15.9
* 1032370		530 LB	
1032372	**AMDRY 738 B50AG3 (-325 MESH) / 5#** Cr 16 Co 8.5 Al 3.5 Ni 80	290 LB	Cr 46.4 Co 24.65 Al 10.15 Ni 194
1032401	**AMDRY 788 5#** Co 39 Cr 22 Ni 21	620 LB	Co 241.8 Cr 136.4 Ni 130.2
1032557	**DIAMALLOY 3007 - 12.5#** Ni 15 Cr 73	500 LB	Ni 90 Cr 365
1032560	**SM 4195 (XPT 523) PROPRIETARY / 10#** Co 35 Ni 32 Cr 23 Al 5	1,810.00 LB	Co 634.8 Ni 579.2 Cr 350.1 Al 144.8
1032564	**SM 5255 / 10#** Cr 53.5 Ni 39	1,320.00 LB	Cr 306.2 Ni 514.8
1032567	**METCO 312NS PWDR 10#** Ni 76 Cr 9 Al 9		Ni 83.6 Cr 9.9 Al 9.9

110 lb

		110 LB	
1032569	**DIAMALLOY 5815 PWDR 5#**		
	Co 12		Co 6.6
		5,500.00 LB	
1032570	**DIAMALLOY 5826 PWDR 5#**		
	Co 17		Co 319.05
		1,865.00 LB	
1032571	**DIAMALLOY 5848 PWDR 5#**		
	Co 10		Co 589.5
	Cr 4		Cr 236.8
		5,895.00 LB	
1032572	**GT-33 COARSE POWDER (SM 4199) / 10#**		
	Co 34		Co 1064
	Ni 32		Ni [illegible]
	Cr 22		Cr [illegible]
	Al 12		Al [illegible]
		3,040.00 LB	
1032574	**SULZER METCO 4516 / 10#**		
	Ni 77		Ni [illegible]
	Cr 22		Cr 290.6
* 1032574			
		1,230.00 LB	
1032576	**AMDRY 914 / NICOSI -325 (9143)**		
	Ni 72		Ni 72
	Cr 20		Co [illegible]
		100 LB	
1032586	**AMDRY 917F B50TF17-S6 CL B/5#**		
	Ni 99		Ni [illegible]
		345 LB	
1032588	**AMDRY 9300B POWDER / 5#**		
	Ni 63		Ni 1941.9
	Co 5		Co 156.5
	Cr 0.1		Cr 31.3

		3,130.00	LB
1032589	**AMDRY 930 BNi-8/9301 / 5#** Ni [illegible] Co 9.5		Ni [illegible] Co [illegible]
		6,790.00	LB
1032593	**AMDRY 936 POWDER 5#** Ni 68 Co 1		Ni [illegible] Co 94.75
		1,895.00	LB
1032595	**AMDRY 942-3 POWDER** Co 62 Ni 38		Co 1190.5 Ni 299.5
		775	LB
1034411	**AMDRY 386 POWDER (3860)/ 10#** Ni [illegible] Co [illegible] Cr 17 Al [illegible]	1,500.00	LB
1034596	**XPT 687:CoNiCrAlY_Ce_Si POWDER (HVOF)10#** Co 33 Ni [illegible] Cr [illegible] Al [illegible]	260	LB
1035520	**METCO 15E (P) / XPT 708 (10#)** Ni [illegible] Cr 17 Si 1	60	LB
1035553	**XPT-DH-1038 / 5KG**	990	KG

1035941	**SPM5-2599 POWDER 5#** Co 15	**125** LB	Co 15
1036200	**SULZER METCO 4198 (WALBAR) 10#** Co 36 Ni 32 Cr 22 Al 10	**2,910.00** LB	Co 1097.6 Ni 931.2 Cr 640.2 Al 291
1036262	**AMDRY 2464/SICOAT 2464 / 10#** Ni 46 Co 25 Cr 17 Al 10	**280** LB	Ni 128.8 Co 70 Cr 47.6 Al 28
1036276	**SICOAT 2231 / ROUGH CUT / XPT 691 / 10#** Co 36 Ni 32 Cr 22 Al 10	**250** LB	Co 90 Ni 80 Cr 55 Al 25
1036279	**AMDRY 386-2 POWDER / 10#** Ni 48 Co 22 Cr 17 Al 13	**700** LB	Ni [illegible] Co 154 Cr 119 Al [illegible]
1036969	**SULZER METCO 7360 POWDER #15**	**1,845.00** LB	* [illegible] 459
1037003	**DIAMALLOY 4060NS / 10#**	**1,070.00** LB	* 60-605
1037111	**AMDRY CHROME POWDER 30#** Cr 99.5		Cr [illegible]

1680.00 lbs

		1,680.00 LB	
1037474	SPM2-2638 / GT56 (B50A978) #5 Al 3.5 Cr 13.5 Ni 63		Al [illegible] Cr [illegible] Ni 982.[illegible]
		1,560.00 LB	
1037601	METCO 204NS-AP POWDER 12.5#		
		24,037.50 LB	
1037908	AE SOFT MATRIX PTA POWDER / 10#		?
		130 LB	
1038359	AMDRY 964 POWDER (9640) 25# Ni 57 Cr 31 Al 11		Ni 111.5 Cr 604.5 Al 214.5
		1,950.00 LB	
1038360	METCO 204BNS POWDER 12.5#		
		29,258.75 LB	
1038394	DIAMALLOY 131PAB / 10# Cr 67 Ni 20		Cr 656.6 Ni 196
		980 LB	
1038396	DIAMALLOY W914 - 10lb Cr 67 Ni 20		Cr [illegible] Ni 5050
		25,250.00 LB	

1038647	**SPM4-2667/AMDRY 386 (-200 +325) 10#** Ni 48 Co 22 Cr 17 Al 13	**930** LB	Ni 446.4 Co [illegible] 6 Cr [illegible] 4 Al [illegible] 9
1038864	**SULZER METCO 7371 POWDER #15**	**570** LB	7
1039022	**SPM4-2506 Ti 6Al 4Vanadium Metal Powder** Al 6	**20** LB	Al 1.2
1039320	**SULZER METCO 7372 POWDER #15**	**6,765.00** LB	7
1040627	**SPM5-2657 POWDER 5#** Co 12	**2,690.00** LB	Co 322.8
1041049	**WOKA - 3101 POWDER 10# WC12%CO** Co 12	**7,530.00** LB	Co 903.6
1041050	**WOKA - 3102 POWDER 10# WC12%CO** Co 12	**1,500.00** LB	Co 180
1041051	**WOKA - 3103 POWDER 10# WC12%CO** Co 12		Co 34.2

290 CL

1030097	**AMDRY 963 (-400 MESH) / XPT 632** Ni 68 Cr 26 Al 6	**60**	LB
1030107	**SULZER METCO 5640NS (PER XPT 647) 5#** Ni 76 Cr 20	**2,015.00**	LB
1030111	**SM 4485 SPEC / XPT 653 / SPM4-2613 / 10#** Ni 48 Co 12 Cr 21 Al 11	**4,330.00**	LB
1030112	**AMDRY 9911 / XPT 654 / 10#** Co 43 Cr 18 Al [illegible]	**100**	LB
1030117	**AMDRY 9951 (XPT 661) / SPM4-2587 / 10#** Co 38 Ni 32 Cr 21 Al 8	**3,280.00**	LB
1030118	**SULZER METCO 7837 (PER XPT 662) 10#** Ni 50 Al 2.4 Cr 1.8 Co 0.1	**17,240.00**	LB
1030119	**SM4485 (REDUCED FINES) / XPT 664 / 10#** Ni 48 Co 12 Cr 21 Al 11	**4,580.00**	LB
1030120	**SXPT 90 (XPT 665) / SPM4-2594 / 10#** Co 33 Ni 30 Cr 28 Al 7.5		
~~*1030120~~		**2,340.00**	LB
1030121	Amdry 9954 Spec (XPT 669)/SPM4-2586) Co 39 Ni 32 Cr 21 Al 8		
* 1030121		**940**	LB

		290 LB	
1041052	**WOKA - 3105 POWDER 10# WC12%CO** Co 12		Co 290
		2,000.00 LB	
1041053	**WOKA - 3106 POWDER 10# WC12%CO** Co 12		Co 152
		1,100.00 LB	
1041054	**WOKA - 3107 POWDER 10# WC12%CO** Co 12		Co 34
		200 LB	
1041057	**WOKA - 3115 POWDER 10# WC12%CO** Co 12	~~10 LB~~	Co 30
		250 LB	
1041058	**WOKA - 3116 POWDER 10# WC12%CO** Co 12		Co [illegible]
		240 LB	
1041060	**WOKA - 3201 POWDER 10# WC17%CO** Co 17		Co [illegible]
		400 LB	
1041061	**WOKA - 3203 POWDER 10# WC17%CO** Co 17		Co [illegible]

3006

		310	LB
1041062	**WOKA - 3206 POWDER 10# WC17%CO** Co 17		
		3,140.00	LB
1041064	**WOKA - 3301 POWDER 10# WC10%NI** Ni 10		
		520	LB
1041065	**WOKA - 3302 POWDER 10# WC10%NI** Ni 10		
		410	LB
1041066	**WOKA - 3602 POWDER 10# WC9%CO5%CR1%NI** Co 9 Cr 5 Ni 1		
		770	LB
1041067	**WOKA - 3604 POWDER 10# WC9%CO5%CR1%NI** Co 9 Cr 5 *1041067 Ni 1		
		200	LB
1041068	**WOKA - 3607 POWDER 10# WC9%CO5%CR1%NI** Co 9 Cr 5 Ni 1		
		3,900.00	LB

1041071	**WOKA - 3702 POWDER 10# WC20%CRC7%NI** CrC 20 Ni 7	**440** LB	[illegible]
1041074	**WOKA - 7201 POWDER 10# CRC-25%NICR** Cr 80 Ni 20	**510** LB	Cr [illegible] Ni [illegible]
1041075	**WOKA - 7202 POWDER 10# CRC-25%NICR** Cr 80 Ni 20		Cr [illegible] Ni 328
* 1041075		**1,640.00** LB	
1041076	**WOKA - 7205 POWDER 10# CRC-25%NICR** Cr 80 Ni 20	**580** LB	Cr 400 Ni 116
1041077	**WOKA - 7207 POWDER 10# CRC-25%NICR** Cr 80 Ni 20	**2,310.00** LB	Cr [illegible] Ni 462
1041079	**WOKA - 7301 POWDER 10# CRC-25%NICR-HIP** Cr 80 Ni 20	**240** LB	Cr [illegible] Ni 48
1041155	**WOKA - 3202 POWDER 10# WC17%CO** Co 17	**250** LB	Co 43
1041157	**WOKA - 3601 POWDER 10# WC9%CO5%CR1%NI**		

Co 9
Cr 5
Ni 1

Co 194
Cr 441
Ni 98

882065

		8,820.00 LB	
1041158	**WOKA - 3701 POWDER 10# WC20%CRC7%NI** Cr 22 Ni 7	240 LB	Cr 195 Ni 19
1041159	**WOKA - 7102 POWDER 10# CRC-20%NICR** Cr 74 Ni 16	240 LB	Cr 148 Ni [illegible]
1041160	**WOKA - 7302 POWDER 10# CRC-25%NICR-HIP** Cr 70 Ni 20	250 LB	Cr 145 Ni 60
1041161	**WOKA - 7502 POWDER 10# CRC-37%WC18%M** Cr 41 Ni 11 Co 4	240 LB	98. Ni [illegible] [illegible]
1041183	**WOKA - 3303 POWDER 10# WC10%NI** Ni 11	200 LB	Ni 22
1041184	**WOKA - 3603 POWDER 10# WC9%CO5%CR1%NI** Cr 5 Ni 0-2	3,380.00 LB	Cr 169 Ni 68
1041185	**WOKA - 3703 POWDER 10# WC20%CRC7%NI** Cr 22 Ni 7		Cr 97 Ni 245

350

		350 LB	
1041188	**WOKA - 7505 POWDER 10# CRC-37%WC18%M** Cr 41 Ni 11 Co 4	50 LB	Cr 21 Ni 6 Co 2
1041194	**WOKA - 7504 POWDER 10# CRC-37%WC18%M** Cr 41 Ni 11 Co 4	100 LB	Cr 41 Ni 11 Co 4
1041253	**WOKA - 3651 POWDER 10# WC10%CO4%CR** Co 10 Cr 4	250 LB	Co 25 Cr 10
1041254	**WOKA - 3652 POWDER 10# WC10%CO4%CR** Co 10 Cr 4	240 LB	Co [illegible] Cr 10
1041255	**WOKA - 3653 POWDER 10# WC10%CO4%CR** Co 10 Cr 4	600 LB	Co 60 Cr 24
1041257	**WOKA - 3657 POWDER 10# WC10%CO4%CR** Co 10 Cr 4	10 LB	Co 1 Cr 0.4
1041322	**AMDRY 2464 -4/SICOAT 2464 -90+45 MIC/10#** Ni 46 Co 25 Cr 17 Al 10	130 LB	Ni 50 Co 33 Cr 22 Al 13
1041327	**WOKA - 3207 POWDER 10# WC17%CO** Co 17	10 LB	Co 2

1041388	**SPM4-2675 / METCO 58NS SPEC SIZE (5#)** Co 59 Ni 36	**430**	LB
1041586	**WOKA - 3501 POWDER 10# WC17%NI** Ni 17	**2,050.00**	LB
1041744	**DIAMALLOY 5847-1 5#** Co 10 Cr 4	**1,565.00**	LB
1042617	**AMDRY 995M POWDER 10#** Co 35 Ni 30 Cr 25 Al 8	**960**	LB
1042701	**WOKA - 3110 POWDER 10# WC12%CO** Co 12	**100**	LB
1042908	**WOKA - 7218 POWDER 10# CRC-25%NICR** Cr 70 Ni 20	**140**	LB
1042909	**WOKA - 3534 POWDER 10# WC17%NI** Ni 17		

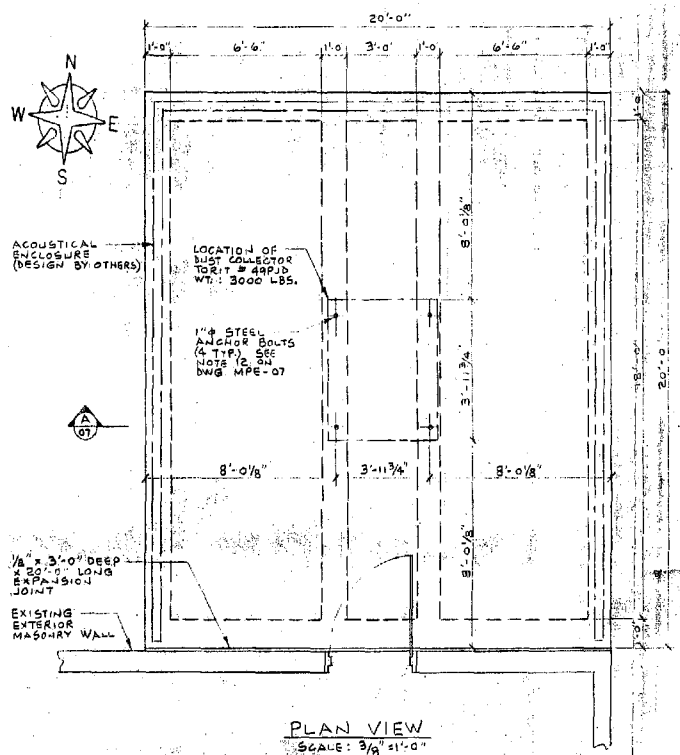
?

		560	LB
1042911	WOKA - 3118 POWDER 10# WC12%CO Co 12		
		240	LB
1042982	WOKA - 3632 POWDER 10# WC9Co5cr1Ni Co 9 Cr 5 Ni 1		
		800	LB
1043045	WOKA-SP8020-5 POWDER 5KG CATERPILLAR ONL		
1043070	WOKA-SP8020-6 POWDER 5KG CATERPILLAR ONL		
		50	KG
1043071	WOKA-SP8020-7 POWDER 5KG CATERPILLAR ONL		
		1,900.00	KG
1043121	METCO 204F 12.5#		
		87.5	LB
1043148	WOKA - 50063 WELDING POWDER 10# W4%C		
		50	LB
1043149	AMDRY 930 (HAMILTON STD PROPRIETARY)/25# Ni 65.5 Co 7.5		

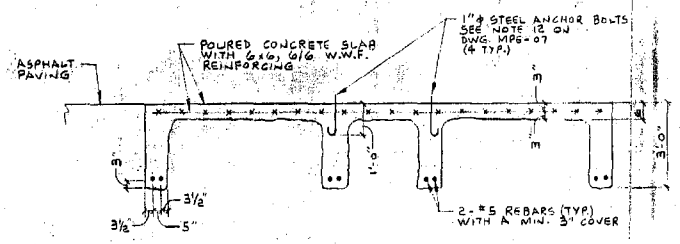
		2,335.00	LB
1049659	**WOKA - 3606 POWDER 10# WC9%CO5%CR1%NI** Co 9 Cr 5 Ni 1	50	LB
1049664	**WOKA - 7203 POWDER 10# CRC-25%NICR**	660	LB
1049784	**WOKA - 3807 POWDER 10# WC15%NI** Ni 15	150	LB
1049881	**UCP Riken SPM-5-2702 10#** Ni 40 Cr 53	50	LB
~~1050056~~	~~**AMDRY 500 FAN DISK / 10#**~~	200	LB
1050288	**WOKA - 3503 POWDER 10# WC17%NI** Ni 17	10	LB

SOURCE CODES

Code	Waste source
CLEANING AND DEGREASING	
A01	Stripping
A02	Acid cleaning
A03	Caustic (Alkali) cleaning
A04	Flush rinsing
A05	Dip rinsing
A06	Spray rinsing
A07	Vapor degreasing
A08	Physical scraping and removal
A09	Clean out process equipment
A19	Other cleaning and degreasing
SURFACE PREPARATION AND FINISHING	
A21	Painting
A22	Electroplating
A23	Electroless plating
A24	Phosphating
A25	Heat treating
A26	Pickling
A27	Etching
A29	Other surface coating/preparation (Specify in Comments)
PROCESSES OTHER THAN SURFACE PREPARATION	
A31	Product rinsing
A32	Product filtering
A33	Product distillation
A34	Product solvent extraction
A35	By-product processing
A36	Spent catalyst removal
A37	Spent process liquids removal
A38	Tank sludge removal
A39	Slag removal
A40	Metal forming
A41	Plastics forming
A49	Other processes other than surface preparation (Specify in Comments)
PRODUCTION OR SERVICE DERIVED ONE-TIME AND INTERMITTENT PROCESSES	
A51	Leak collection
A53	Cleanup of spill residues
A54	Oil changes
A55	Filter/Battery replacement
A56	Discontinue use of process equipment
A57	Discarding off-spec material
A58	Discarding out-of-date products or chemicals
A59	Other production-derived one-time and intermittent processes
A60	Sludge removal
REMEDIATION DERIVED WASTE	
A61	Superfund Remedial Action
A62	Superfund Emergency Response
A63	RCRA Corrective Action at solid waste management unit
A64	RCRA closure of hazardous waste management unit
A65	Underground storage tank cleanup
A69	Other remediation
POLLUTION CONTROL OR WASTE TREATMENT PROCESSES	
A71	Filtering/screening
A72	Metals recovery
A73	Solvents recovery
A74	Incineration/Thermal treatment
A75	Wastewater treatment
A76	Sludge dewatering
A77	Stabilization
A78	Air pollution control devices
A79	Leachate collection
A89	Other pollution control or waste treatment
OTHER PROCESSES	
A91	Clothing and personal protective equipment
A92	Routine cleanup wastes (e.g., floor sweepings)
A93	Closure of management unit(s) or equipment other than by remediation specified in codes A61 - A69
A94	Laboratory wastes
A99	Other



PLAN VIEW
SCALE: 3/8" = 1'-0"



SECTION "A-A" (DWG MPE-07)
SCALE: 3/8" = 1'-0"

GENERAL NOTES

1) Written dimensions shall take precedence over scaled dimensions and detailed drawings over small scale drawings.

2) Contractor shall verify and be responsible for all dimensions and conditions on the job and the Engineer's office must be notified of any variations of the dimensions and condition shown on these drawings.

3) Construction shall comply with all Federal, State and local codes, ordinances, rules and regulations pertaining to labor and materials.

4) Contractor shall be responsible for adequately bracing and protecting all work during construction against damage, breakage, collapse, distortions, mis-alignment, according to applicable codes, standards and good practice.

5) All concrete to be 3000 psi @ 28 days (or better).

6) Soil bearing value estimate to be 2000 LB/SF.

7) Soil under footings and slab shall be undisturbed. Excessive excavation shall not be backfilled with soil (use concrete fill).

8) W.W.F. to be continuous. Overlap ends a minimum of 8".

9) All construction shall be in compliance with A.C.I. specs. (latest edition).

10) All rebars to be deformed, grade 60 steel.

11) Poured concrete to be compacted by vibration.

12) Prior to installation, contractor to verify anchor bolt locations upon receipt of certified dust collector drawing from Torit.

13) Utility companies shall be requested to mark all utility locations before excavation is commenced. Care should be exercised during excavation if any evidence of these utilities is present.

MAR 09 1992

PRELIMINARY

The contents of this drawing is the exclusive property of the Donnelly Engineering Company. The contents of this print constitutes an instrument that it should be treated as a strictly confidential document to be used for an purpose other than to aid in the execution of work furnished by the Donnelly Engineering Company or as otherwise expressly authorized in writing by the Donnelly Engineering Company and that it is not to be copied, reproduced, or disclosed or copied report to persons authorized in writing by the Donnelly Engineering Company.

NO.	REVISION TITLE	BY	DATE

TITLE: DUST COLLECTOR & ACOUSTICAL ENCLOSURE FOUNDATION

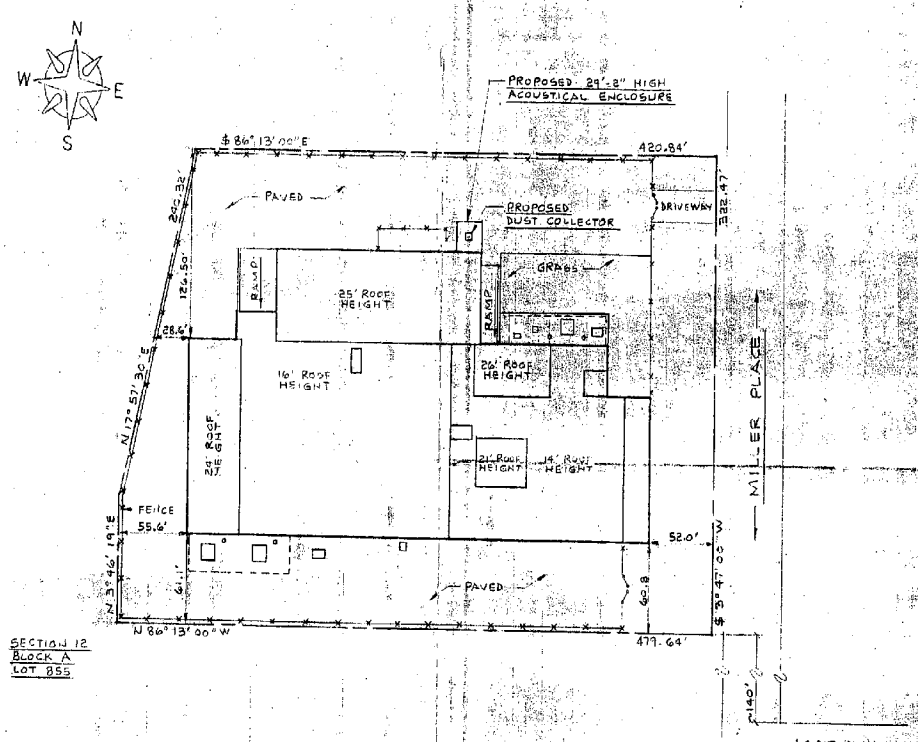
FOR: METCO DIVISION PERKIN ELMER
220 MILLER PLACE HICKSVILLE, N.Y.

BY: DONNELLY ENGINEERING COMPANY
NESCONSET NEW YORK

DATE MAR 6, 1992 | SCALE 3/8" = 1'-0" | SH. 1 OF 1

DR BY: M. CAPOTOSTO | DWG. NO. MPE-07 | REV. 0

APPVD:



SECTION 12
BLOCK A
LOT 855

NOTE:
PROPERTY LINE & SETBACK DIMENSIONS TAKEN FROM G.O. SURVEY DATED 12-22-77 BY BOHN & BONACCI, P.C.

MAR 0 6 1992

NO.	REVISION TITLE	BY	DATE
2	ADDED PROPOSED DUST COLLECTOR AND ACOUSTICAL ENCLOSURE	MC	3/6/92
1	ADDED PROPOSED STACKS	MC	9/17/91

TITLE: PLOT PLAN

FOR: MSTCO. DIVISION PERKIN ELMER
220 MILLER PLACE HICKSVILLE, N.Y.

BY: DONNELLY ENGINEERING COMPANY
NESSONSET NEW YORK

DATE SEPT 10, 1991 | SCALE 1" = 50' | SH. 1 OF 1
DR. BY I.M. CAPOTOSTO | DWG. NO. MPE-04 | REV. 2
APPVD.

The original of this drawing is the exclusive property of the Donnelly Engineering Company. The acceptance of this print constitutes an agreement that it should be treated as a strictly confidential document to be used for no purpose other than to aid in the assembly or operation of units furnished by the Donnelly Engineering Company or as otherwise expressly authorized in writing by the Donnelly Engineering Company and that it is not to be communicated, or disclosed or copied except as expressly authorized in writing by the Donnelly Engineering Company.

NY DOT 7615 ICC MC 121454

WALSH MESSENGER SERVICE INC

ACCT. NO.

BONDED & INSURED

PRO. NO. M 458797

4 THIRD STREET · GARDEN CITY PARK, N.Y. 11040
(516) 746-4348 · FAX (516) 746-4012 · (212) 291-2220

DATE 3/9/92

SHIPPED FROM	SHIPPED TO
Donnelly Engrm	Metro
55 Southern Blvd.	1101 Prospect Ave.
Nesconset ZIP 11767	Westbury ZIP 11590
BILL AUTHORIZED BY Mike C.O.D.	BILL AUTHORIZED BY C.O.D.

RECEIVED, SUBJECT TO THE CLASSIFICATIONS AND TARIFFS IN EFFECT ON THE DATE OF THE ISSUE OF THIS BILL OF LADING.

☐ PRIORITY	☒ IMMEDIATE	☐ SCHEDULED	☐ OVERNIGHT EXPRESS	☐ MULTIPLE
☐ PACKAGE	☒ ENVELOPE	☐ CARTON	OTHER	WEIGHT

N.Y.D.O.T.

UNLESS A DIFFERENT VALUE IS DECLARED, THE SHIPPER HEREBY RELEASES THE PROPERTY TO A VALUE NOT EXCEEDING ONE HUNDRED DOLLARS ($100.00) PER SHIPMENT. CHARGES FOR ADDITIONAL VALUE DECLARED SHALL BE AT A RATE OF FIFTY CENTS (50c) PER ONE HUNDRED DOLLARS ($100.00).

VALUE

SIGNED

PICKUP DRIVER	DELIVERING DRIVER	TIME OF DELIVERY
755	755	A.M. — P.M.

THIS IS YOUR FREIGHT BILL

THIS BILL MUST BE PAID WITHIN 7 DAYS ACCORDING TO THE DEPARTMENT OF TRANSPORTATION AND INTERSTATE COMMERCE COMMISSION REGULATIONS.

CONSIGNEE SIGN AND PRINT LAST NAME X [signature] PRINT LAST NAME E. DeRudder

THE ABOVE MENTIONED GOODS RECEIVED IN GOOD ORDER AT TIME STATED

CHARGES			
WAITING TIME		C.O.D.	
PICK-UP CHARGE		OTHER	
RE-DELIVERY		SERVICE	
ADD'L WEIGHT		TOTAL	

DELIVERY RECEIPT

U.S. ENVIRONMENTAL PROTECTION AGENCY
TRI PROGRAM DIVISION
WASHINGTON, DC 20460

11590PRKNL1101P
MICHAEL LYDON
OR CURRENT ENVIRONMENTAL MANAGER
SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

TOXICS RELEASE INVENTORY
FACILITY DATA PROFILE

This notice is in regards to information submitted in your facility's most recent Form R or Form A submission(s), or corrections included in a response to a previous Facility Data Profile (FDP) that we have entered into the Toxics Release Inventory database. FDPs are sent in response to any new information that you send us. Hence, if you returned a marked-up FDP with corrections, you will receive a new FDP reflecting those changes for your review.

EPA wishes to accurately represent the data reported by your facility. We believe our data capture process is of high quality. However, as a final quality measure, please verify the data presented in the enclosed FDP. This FDP serves two primary purposes. First, we want to give you the opportunity to confirm that we have entered your data correctly into our national computer system. If we have not, please advise us so we can make corrections. Second, if we identify potential errors in the submission(s) you have submitted, we indicate what these errors are and request that you provide us with corrections.

Within this FDP notice there may be up to three different types of errors identified:

(1) A Non-Technical Data Change (NDC) notifies you of simple, clerical errors that EPA has corrected for you. It is not necessary to respond to a NDC.

(2) A Notice of Technical Error (NOTE) highlights to you inconsistencies or miscalculations that may distort your facility's information in EPA's public data products or skew analyses. You should respond to NOTE level errors as soon as possible. Depending upon when your changes are received, there may or may not be sufficient time to incorporate them into our database in time for public data release.

(3) A Notice of Significant Error (NOSE) identifies errors that prevent your submission from being entered into our database or identify missing critical information such as a chemical identifier or submission certification. You will find NOSE-level errors on a separate page to highlight their importance. **Please respond within 21 days of receipt of this notice. Failure to correct NOSE level errors will result in the issuance of a formal Notice of Noncompliance (NON) by EPA.**

INSTRUCTIONS FOR RESPONDING TO TRI FACILITY DATA PROFILE

1. This Facility Data Profile (FDP) presents the information you have submitted on the Form R and/or Form A submissions that EPA has entered into the Toxics Release Inventory database. The specific chemicals covered by this FDP are shown in the Chemical Summary section.

2. Please review this FDP to make sure that EPA has accurately entered your submitted information. If any of the data are incorrect, or you have discovered an error in your submitted data, please circle the incorrect information and indicate the correct information next to it. If you believe that an error we have identified is really not an error, please provide a brief explanation where we have identified the error. Please print clearly and use blue ink.

3. If you are making any corrections pursuant to the instruction in step 2 above, you must sign the certification statement below. Mail this signed page plus all pages on which you have marked corrections. Please do not return pages on which you have neither marked changes nor provided explanations.

4. For NOSE level errors, **please mail your response within 21 days of receipt of this FDP.** For NOTE level errors, please respond as soon as possible so any necessary changes may be incorporated into the database.

5. All corrections should be mailed to the address indicated at the bottom of this page. Also, send a duplicate copy to the same State organization to which you sent a copy of your original submission. EPA recommends that Government-Owned-Contractor-Operated (GOCO) facilities also send copies of their responses to their associated Federal facilities.

6. If you identify no errors in the data presented here and we have identified no errors, no response is necessary.

7. The FDP does not serve as a means to withdraw a Form R and/or Form A. Withdrawal requests should be mailed to the EPCRA Reporting Center. For additional information regarding withdrawal procedures, go to www.epa.gov/tri.

CERTIFICATION STATEMENT
I hereby certify that I have reviewed the attached pages from the Facility Data Profile, and to the best of my knowledge and belief, the submitted information and any corrections I have made to it are true and complete and that the amounts and values presented are accurate based on reasonable estimates using data available to the preparers of this response.

_____
Name and official Title of Owner/Operator or Senior Management Official (Print)

_____ _____
Signature Date

RESPONSE ADDRESSES	
Regular Mail: The EPCRA Reporting Center Attn: Facility Data Profile Response P.O. Box 3348 Merrifield, VA 22116-3348	**Certified Mail, Overnight Delivery, Hand Delivery:** EPCRA Reporting Center (Tel: 703-816-4445*) Attn: Facility Data Profile Response C/O Computer Based Systems Inc. 4600 North Fairfax Drive Suite 300 Arlington, VA 22203 * for delivery purposes only
Remember: Send a copy to your State.	

SUMMARY OF NOTICES OF SIGNIFICANT ERRORS (NOSEs)

There are no NOSE level errors contained in this FDP. However, there may be other potential errors identified (i.e., a Notice of Technical Errors (NOTE) or a Notice of Data Change (NDC)) at the end of each chemical report.

FACILITY INFORMATION:

TRI Facility Identification No: 11590PRKNL1101P

Facility No: 28882

Primary Facility Name and Address:

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY (COUNTY: NASSAU) NY 11590

Mailing Address:

SULZER METCO (US) INC.
1101 PROSPECT AVE.
WESTBURY, NY 11590

Technical Contact Name: MICHAEL LYDON

Telephone No: 516-338-2337

Public Contact Name: JOSEPH REARDON

Telephone No: 516-338-2316

Latitude: 040-45-50

Longitude: 073-33-10

Facility Type (Federal/GOCO/Commercial): COMMERCIAL

Name of Parent Company: SULZER INC.

Parent Company Dun & Bradstreet No: 001826957

SIC Code	Facility Dun & Bradstreet No.	EPA ID No. (RCRA No.)	Facility NPDES No.	Underground Injection Well Code(ID No.)
3542	011272254	NYD131318651	NA	NA
NA	NA	NA		

Reporting Year: 2000
Chemical Name: COPPER
Document Control Number: 13-00-140-68449-1
File Number: DD-01-00017219-3

Postmark Date: 08-14-2001
Received Date:08-16-2001

CHEMICAL REPORT FOR THIS FACILITY OR ESTABLISHMENT:

PART I:

1.0 Reporting Year: 2000

2.0 Trade Secret Information: **2.1 Trade Secret:** NO **2.2 Sanitized:** NO

3.0 Certification: **Official Name:** JOSEPH REARDON **Title:** EH & S MANAGER

Date Signed: 11-06-2001

4.2 This Report Contains Information for: **4.5 SIC Code(s):** 3542 - Primary SIC

a. An entire facility: YES
b. Part of a facility: NO
c. A Federal Facility: NO **GOCO:** NO

PART II:

1.0. Toxic Chemical Identity:

1.1 CAS Number or Chemical Category Code: 7440508

1.2. Toxic Chemical or Chemical Category Name: COPPER

1.3 Generic Chemical Name: NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category: NA
1: 2: 3: 4: 5: 6: 7: 8: 9: 10:
11: 12: 13: 14: 15: 16: 17:

2.0 Mixture Component Identity:

2.1 Generic Chemical Name Provided By Supplier: NA

3.0 Activities and Uses of the Toxic Chemical at the Facility:

3.1 Manufacture the toxic chemical:

A. Produce: NO

B. Import: NO

If Produce or Import:

C. For on-site use/processing: NO
D. For sale/distribution: NO
E. As a byproduct: NO
F. As an impurity: NO

3.2 Process the toxic chemical:

A. As a reactant: NO
B. As a formulation component: YES
C. As an article component: NO
D. Repackaging: NO
E. As an impurity: NO

3.3 Otherwise use the toxic chemical:

A. As a chemical processing aid: NO
B. As a manufacture aid: NO
C. Ancillary or other use: NO

4.1 Maximum Amount of the Toxic Chemical On-Site at any Time During the Year: 03 Range from 1,000 To 9,999 (lb)

5.0 Quantity of the Toxic Chemical Entering Each Environmental Medium On-site

Air Emissions	A. Total Release	B. Basis of Estimate
5.1 Fugitive Or Non-Point Air Emissions	NA	
5.2 Stack Or Point Air Emissions	NA	

Reporting Year: 2000
Chemical Name: COPPER
Document Control Number: 13-00-140-68449-1
File Number: DD-01-00017219-3

Postmark Date: 08-14-2001
Received Date: 08-16-2001

8.0 Source Reduction & Recycling Activities * *Note: All values are in Pounds	Col. A Prior Year	Col. B Current Year	Col. C Following Year	Col. D Second Following Year
8.1 Quantity Released	24000	27395	27395	27395
8.2 Quantity Used For Energy Recovery On-Site	NA	NA	NA	NA
8.3 Quantity Used For Energy Recovery Off-Site	NA	NA	NA	NA
8.4 Quantity Recycled On-Site	NA	NA	NA	NA
8.5 Quantity Recycled Off-Site	24000	27395	24000	24000
8.6 Quantity Treated On-Site	NA	NA	NA	NA
8.7 Quantity Treated Off-Site	NA	NA	NA	NA

8.8 Quantity Released as a Result of Remedial, Catastrophic, or One Time Events: 0

8.9 Production Ratio or Activity Index: 1.15

8.10 Source Reduction Activities: Method A Method B Method C

8.10.1 NA

8.11 Additional Information Included: NO

Reporting Year: 1999
Chemical Name: COPPER
Document Control Number: 13-99-130-68412-1
File Number: DD-01-00017613-9

Postmark Date: 09-12-2001
Received Date: 09-17-2001

CHEMICAL REPORT FOR THIS FACILITY OR ESTABLISHMENT:

PART I:

1.0 Reporting Year: 1999

2.0 Trade Secret Information: **2.1 Trade Secret:** NO **2.2 Sanitized:** NO

3.0 Certification: **Official Name:** JOSEPH REARDON **Title:** EH & S MANAGER

Date Signed: 11-06-2001

4.2 This Report Contains Information for: **4.5 SIC Code(s):** 3542 - Primary SIC

a. An entire facility: YES
b. Part of a facility: NO
c. A Federal Facility: NO **GOCO:** NO

PART II:

1.0. Toxic Chemical Identity:

1.1 CAS Number or Chemical Category Code: 7440508

1.2. Toxic Chemical or Chemical Category Name: COPPER

1.3 Generic Chemical Name: NA

1.4 Distribution of Each Member of the Dioxin and Dioxin-like Compounds Category: NA

1: 2: 3: 4: 5: 6: 7: 8: 9: 10:

11: 12: 13: 14: 15: 16: 17:

2.0 Mixture Component Identity:

2.1 Generic Chemical Name Provided By Supplier: NA

3.0 Activities and Uses of the Toxic Chemical at the Facility:

3.1 Manufacture the toxic chemical:

A. Produce: NO

B. Import: NO

If Produce or Import:

C. For on-site use/processing: NO
D. For sale/distribution: NO
E. As a byproduct: NO
F. As an impurity: NO

3.2 Process the toxic chemical:

A. As a reactant: NO
B. As a formulation component: YES
C. As an article component: NO
D. Repackaging: NO
E. As an impurity: NO

3.3 Otherwise use the toxic chemical:

A. As a chemical processing aid: NO
B. As a manufacture aid: NO
C. Ancillary or other use: NO

4.1 Maximum Amount of the Toxic Chemical On-Site at any Time During the Year: 03 Range from 1,000 To 9,999 (lb)

5.0 Quantity of the Toxic Chemical Entering Each Environmental Medium On-site

Air Emissions	A. Total Release	B. Basis of Estimate
5.1 Fugitive Or Non-Point Air Emissions	NA	
5.2 Stack Or Point Air Emissions	NA	

Reporting Year: 1999
Chemical Name: COPPER
Document Control Number: 13-99-130-68412-1
File Number: DD-01-00017613-9

Postmark Date: 09-12-2001
Received Date: 09-17-2001

8.0 Source Reduction & Recycling Activities * *Note: All values are in Pounds	Col. A Prior Year	Col. B Current Year	Col. C Following Year	Col. D Second Following Year
8.1 Quantity Released	24000	25125	27395	27395
8.2 Quantity Used For Energy Recovery On-Site	NA	NA	NA	NA
8.3 Quantity Used For Energy Recovery Off-Site	NA	NA	NA	NA
8.4 Quantity Recycled On-Site	NA	NA	NA	NA
8.5 Quantity Recycled Off-Site	24000	25125	27395	27395
8.6 Quantity Treated On-Site	NA	NA	NA	NA
8.7 Quantity Treated Off-Site	NA	NA	NA	NA

8.8 Quantity Released as a Result of Remedial, Catastrophic, or One Time Events: 0

8.9 Production Ratio or Activity Index: 1.17

8.10 Source Reduction Activities: Method A Method B Method C

8.10.1 NA

8.11 Additional Information Included: NO

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — PO Box 1006
Westbury New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

February 28, 1994

New York Emergency Response Commission
New York State Department of Environmental
Conservation
Bureau of Spill Prevention & Response
50 Wolf Road
Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Tier II Reports

Dear Sir/Madam:

Enclosed please find the SARA TITLE III - Tier II Reports for our three facilities.

If we could be of further assistance, please contact me.

Sincerely,

Joseph Macri

Joseph Macri
Manager Facilities

JM:amm
Enclosures
cc: A.B. Mazzone
C.L. Conroy

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

New York Emergency Response Commission
New York State Department of
Environmental Conservation
Bureau of Spill Prevention &
Response
50 Wolf Road Room 326
Albany, NY 12233-3510

4a Article Number

P 617 298 549

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery MAR - 2 1994

5. Signature (Addressee)

6 Signature (Agent) E. Chay

8. Addressee's Address (Only if requested and fee is paid)

PS Form 3811, December 1991 ☆U S GPO: 1992—323-402 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S.MAIL

Print your name, address and ZIP Code here

Joseph Macri
Perkin-Elmer Metco Division
1101 Prospect Avenue
Westbury, NY 11590

New York Emergency Response Commission
New York State Department of Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road
Room 326
Albany, NY 12233-3510

P 617 298 549

Certified Mail Receipt
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to N.Y.S.E.R.C. N.Y. State
Dept. of Environmental Conserv.
Street & Bureau of Spill Prevention & Resp.
50 Wolf Road Room 326
P.O., State & ZIP Code
Albany, NY 12233-3510

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Address of Delivery	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form **3800**, June 1990

Fold at line over top of envelope to the right of the return address.

CERTIFIED MAIL

P 617 298 549

Is your RETURN ADDRESS completed on the reverse side?

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
New York Emergency Response Commission
New York State Department of Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road Room 326
Albany, NY 12233-3510

4a. Article Number
P 617 298 549

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

8 Addressee's Address (Only if requested and fee is paid)

Thank you for using Return Receipt Service.

PS Form **3811**, December 1991 ☆U.S. GPO: 1992—323-402 **DOMESTIC RETURN RECEIPT**

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #:
Date Received:

Owner/Operator Name
Name: JOSEPH MACRI Phone: 516 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: 516 334-1300 EXT. 2374 24 Hr Phone: 800 424-9300
CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 7429 90 5 Trade Secret [ ] Chem Name: ALUMINUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [X] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 Storage Locations: STOCK WAREHOUSE	[ ]
CAS 1344 28 1 Trade Secret [ ] Chem Name: ALUMINUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 Storage Locations: STOCK WAREHOUSE	[ ]
CAS 7439 89 6 Trade Secret [ ] Chem Name: IRON Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N; Pressure: 1; Temperature: 4 Storage Locations: STOCK WAREHOUSE	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri

Date signed: 02-28-94

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: JOSEPH MACRI Phone: 516 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact
Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: 516 334-1300 EXT. 2374 24 Hr Phone: 800 424-9300 CHEMTREC
Name: Title:
Phone: 24 Hr Phone:

Important Read all instructions before completing form

Reporting Period From January 1 to December 31 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440020 Trade Secret [ ] Chem Name NICKEL Check all that apply: Pure [X] Mix [X] Solid [X] Liquid [ ] Gas [ ] EHS [ ] EHS Name	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	Container Type: N Pressure: 1 Temperature: 4 STOCK WAREHOUSE	[ ]
CAS Trade Secret [ ] Chem Name Check all that apply: Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS [ ] EHS Name	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)		[ ]
CAS Trade Secret [ ] Chem Name Check all that apply: Pure [ ] Mix [ ] Solid [ ] Liquid [ ] Gas [ ] EHS [ ] EHS Name	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [ ] Immediate (acute) [ ] Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)		[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true accurate and complete

JOSEPH MACRI MANAGER FACILITIES Joseph Macri 02-28-94
Name and official title of owner operator OR owner operator s authorized representative Signature Date signed

Optional Attachments
[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY — ID #: ; Date Received:

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: Title:
Phone: ( ) 24 Hr Phone: ( )

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	
CAS 7440-02-0; Trade Secret [ ] Chem Name: NICKEL Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 7440-47-3; Trade Secret [ ] Chem Name: CHROMIUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 7440-48-4; Trade Secret [ ] Chem Name: COBALT Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 WAREHOUSE, PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — MANAGER FACILITIES — Joseph Macri — 02-28-94

Name and official title of owner/operator OR owner/operator's authorized representative — Signature — Date signed

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION METCO DIVISION
Street: 220 MILLER PLACE
City: HICKSVILLE County: NASSAU State: NY Zip: 11801
SIC Code: 3399 Dun & Bradstreet Number: 05-773-1663

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE, WESTBURY, NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr Phone: (800) 424-9300 CHEMTREC
Name: ____ Title: ____
Phone: ( ) ____ 24 Hr Phone: ( ) ____

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 93

[X] Check if information below is identical to the information submitted last year

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 7429-90-5; Trade Secret [ ] Chem Name: ALUMINUM Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[X] Fire [ ] Sudden Release of Pressure [X] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 1344-25-1; Trade Secret [ ] Chem Name: ALUMINUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [X] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]
CAS 1314-23-4; Trade Secret [ ] Chem Name: ZIRCONIUM OXIDE Check all that apply: [X] Pure [X] Mix [X] Solid [ ] Liquid [ ] Gas [ ] EHS EHS Name:	[ ] Fire [ ] Sudden Release of Pressure [ ] Reactivity [X] Immediate (acute) [ ] Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 WAREHOUSE, PRODUCTION FLOOR N 1 4 PRODUCTION FLOOR R 1 4 PRODUCTION FLOOR - HARDENED STEEL HOPPERS E 1 4 PRODUCTION FLOOR I 1 4 PRODUCTION FLOOR	[ ]

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 2 and that based on my inquiry of those individuals responsible for obtaining the information I believe that the submitted information is true, accurate and complete.

JOSEPH MACRI — MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: Joseph Macri

Date signed: 02-28-94

Optional Attachments

[ ] I have attached a site plan
[ ] I have attached a list of site coordinate abbreviations
[ ] I have attached a description of dikes and other safeguard measures

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER

1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 463

MSDS No.: METCO / 50-185
Revision No.: 2
Revision Date: July 30, 1993
Original Date of Issue: August 1, 1992

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 463

Description: Metal Powder

Other Designation: HIGH CHROMIUM IRON BASE STAINLESS STEEL COMPOSITE POWDER

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Chromium *	15	7440-47-3	1 mg/m³ TWA	0.5 mg/m³ TWA	
Aluminum *	5	7429-90-5	15 mg/m³ TWA total dust 5 mg/m³ TWA respirable 5 mg/m³ TWA fume	10 mg/m³ TWA metal dust 5 mg/m³ TWA fume	
Molybdenum	2	7439-98-7	10 mg/m³ TWA total dust Insoluble as Mo	10 mg/m³ TWA Insoluble as Mo	
Manganese *	1	7439-96-5	5 mg/m³ CEIL compounds 1 mg/m³ TWA fume 3 mg/m³ STEL fume as Mn	5 mg/m³ TWA compounds 1 mg/m³ TWA fumes 3 mg/m³ STEL fume as Mn	
Organic Binder	3	N/A	N/A	N/A	
Iron	74	7439-89-6	10 mg/m³ TWA total particulate Fe_2O_3 fume, as Fe	5 mg/m³ TWA Fe_2O_3 fume, as Fe	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) & supplier notification requirements (40CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION VII — SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with Aluminum metallic dusts should be utilized. Wet wipe area clean. Do not use water for clean up operations. Do not dry sweep. Avoid generating airborne dust.

Waste Management and Disposal: Empty product containers, product waste and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION VIII — SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10 and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

Gloves: Aluminized gloves are to be worn during the plasma spray process. Rubber or other appropriate gloves may be worn as necessary during other phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) An aluminized apron is to be worn during the plasma spray process. Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX — HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: Avoid ingestion, inhalation and excessive skin contact. Avoid contact of powder with water and oxidizers.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. METCO PERKIN-ELMER shall in no event be liable for special, incidental or consequential damages in connection with this information, or for any damage or injury caused by this material if used for any other purpose than the Thermal Spray Process, or if proper safety and health practices are not followed.

FILING OF 1990
TIER II

hardened steel hoppers

Super Gasoline

PROSPECT AVENUE

COPPER POWDER
1,1,1-TRICHLOROETHANE
PHENOL
NICKEL POWDER
COBALT POWDER
CHROMIUM POWDER
ALUMINUM POWDER
ALUMINUM OXIDE POWDER

1 Liter = 1.057 quarts

28g = 1 ounce
16 ounces = 1#

HILLER PLACE

NICKEL POWDER
CHROMIUM POWDER
COBALT POWDER
1,1,1-TRICHLOROETHANE
ALUMINUM POWDER
ALUMINUM OXIDE

Yearly 10 volume 13
Daily 8K
131,000#
10K - 99,999
10K

ZIRCONIUM
POLYESTER GLOW POWDER
MAGNESIUM

DUFFY AVENUE

1,1,1-TRICHLOROETHANE DOES NOT QUALIFY
SEE NOTES DA FAMILY

— hardened steel hoppers

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: PERKIN-ELMER CORPORATION HETCO DIVISION
Street: 1101 PROSPECT AVENUE
City: WESTBURY County: NASSAU State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name

Name: JOSEPH MACRI Phone: (516) 334-1300
Mail Address: 1101 PROSPECT AVENUE WESTBURY NY 11590

Emergency Contact

Name: JOSEPH MACRI Title: MANAGER FACILITIES
Phone: (516) 334-1300 EXT. 2374 24 Hr. Phone: (800) 424-9300 CHEMTREC

Name: _____ Title: _____
Phone: ( ) _____ 24 Hr Phone: ( ) _____

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS ☐☐☐☐☐☐-☐☐-☐ Trade Secret ☐ Chem. Name _____ Check all that apply: ☐ Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS EHS Name _____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	☐☐ Max. Daily Amount (code) ☐☐ Avg. Daily Amount (code) ☐☐☐ No. of Days On-site (days)	Container Type ☐☐ PRESSURE ☐ Temperature ☐ TEMPERATURE ☐ Pressure	☐
CAS ☐☐☐☐☐☐-☐☐-☐ Trade Secret ☐ Chem. Name _____ Check all that apply: ☐ Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS EHS Name _____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	☐☐ Max. Daily Amount (code) ☐☐ Avg. Daily Amount (code) ☐☐☐ No. of Days On-site (days)		☐
CAS ☐☐☐☐☐☐-☐☐-☐ Trade Secret ☐ Chem. Name _____ Check all that apply: ☐ Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS EHS Name _____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	☐☐ Max. Daily Amount (code) ☐☐ Avg. Daily Amount (code) ☐☐☐ No. of Days On-site (days)		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through _____ and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

FEBRUARY 28, 1992
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other saleguard measures

2 cabinets located in powder lab

		HEALTH	FLAMMABILITY	REACTIVITY	CONTAINER	
N/A	2 – CALCIUM OXIDE POWDER			1305-78-8	2.5Kg	1/2
	J.T. BAKER CHEMICAL CO	1	0	1	2	
N/A	1 – SODIUM HYDROSULFIDE HYDRATE			16721-80-5	1K	1/2
	J.T BAKER					
N/A	1 – SODIUM HYDROXIDE PELLETS			1310-73-2	2.5Kg	1/2
	ALDRICH CHEMICAL COMPANY INC	3	0	2	4	
N/A	2 – SODIUM SULFIDE			1 POUND	3/4	
	KODAK					
N/A	1 – SODIUM SULFIDE		2 X 100g			
	ALFA PRODUCTS					
	1 – HYDROFLUORIC ACID SOLUTION				7* EST	
	VWR SCIENTIFIC					
EHS	1 – HYDROCHLORIC ACID		6 POUNDS	7647-01-0		
gas only	EM Hydrogen Chloride					
N/A	1 – SODIUM SULPHIDE		200G			
	ALFA PRODUCTS					
EHS	1 – NITRIC ACID		7697-37-2	7 POUNDS		
1000P	EM					
N/A	2 – ~~1~~ – ACETIC ACID		64-19-7	2.5L (5.8#)		
	J.T. BAKER					

execution

N/a gas only
EHS 1- HYDROCHLORIC ACID 7647-01-0 6#
EM

Need cas# 1- ACETONE CAY
Check name but will be N/a 1000# CORCO CHEMICAL CORP.
EHS 1- SULFURIC ACID 7664-93-9 9#
1000# EM

N/a 2 - SODIUM HYDROXIDE PELLETS 2.5KG 1310-73-2
1/2 EACH

N/a 1- HYDROCHLORIC ACID
gas only 7647-01-0 KURTS & WOLFE CHEMICAL CO.
EHS 1- NITRIC ACID M# 7697-37-2
1000# EM

EHS 4- PHOSPHORIC ACID 4 X 2.5L 7664-38-2
500# JT BAKER

executive

A (1) 2 3 4 5 % | # | 11

√LAB BY LYLE
GO W/ CHS LIST

B 1 5 % | # |

1 %

HYDROLON PONDS
CHS 100#

.9 LITERS = .23 GAL QA 1.91#

LYLE 10# EST

4 gall max. QA 33.38#

45.29#

C 1 % | # |

D 6 % | # |

Hydrochloric Acid - sgr only

Nitric Acid 1000#

8.3453 #

Phosphorer 100#

gal

2.5 kg X 2.205 = 5.51#

8.30 LITERS NITRIC ACID

8.30 LITERS = 2.19 gallons
X .2642

Chromium Chloride 1#

.01 L = .02 G = .16 #
X .2642 X 8.3453

QA 18.27#
7#
Lyle 7#
Lyle

32.27#

MATERIAL SAFETY DATA SHEET INDEX

LB-1	Leco Corporation	N/a	Anhydrone/Magnesium Perchlorate MAGNESIUM PERCHLORATE 10034-81-8 96%
LB-2	Leco Corporation	N/a	Lecosorb SODIUM HYDROXIDE 1310-73-2 100%
LB-3	Leco Corporation	N/a	Lithium Metaborate 13453-69-5 99%
LB-4	Leco Corporation	N/a	Sodium Iodide SODIUM OXIDE N/A >99%
LB-5	Leco Corporation	N/a	Lithium Tetraborate 12007-60-2 99%
LB-6	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Lithium Tetraborate 10027-60-2 100%
LB-7	Johnson Matthey/Catalog Chemicals Aesar Group/Alfa Products	N/a	Sodium Iodide Puratronic SODIUM IODIDE N/A 100%
✓ LB-8	SPEX Industries Inc. (5) 2 GRAMS EACH VIAL	EHS mass quantity value	#1010 Common Element Kit SPEX Catalog Number: 1010
LB-9	SPEX Industries Inc.	N/a	Hafnium Oxide 12055-23-1 100% SPEX Catalog Number HF20, HF30
LB-10	SPEX Industries Inc.	N/a	Yttrium Oxide 1314-36-9 100% SPEX Catalog Number Y66, Y70, Y73
LB-11	Leco Corporation	N/a	Copper Oxide 1317-39-1 80% CERIUM OXIDE 1306-38-3 20%
✓ LB-12	Fisher Scientific (5) 2 1/2 LITER CONTAINER / 6 ON HAND	EHS 1000#	Nitric Acid 7697-37-2 70% WATER N/A 30%
LB-13	Fisher Scientific	EHS gal only	Hydrochloric Acid, Concentrated 7647-01-0
LB-14	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Yttrium Oxide 1314-36-9 100%
LB-15	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Cerium (IV) Oxide, Specpure 1306-38-3 100%
LB-16	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Zirconium Oxide 1314-23-4 100%
LB-17	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Silicon (IV) Oxide 7631-86-9 100%
✓ LB-18	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products 100 grams / 1 CONT (5)	N/a	Aluminum Oxide 1344-28-1 100%
LB-19	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Titanium (IV) Oxide 13463-67-7 100%
LB-20	Johnson Matthey Catalog Chemicals Aesar Group/Alfa Products	N/a	Iron (III) Oxide 1309-37-1 100%

LB-21 Johnson Matthey Catalog Chemicals N/a Uranium (VI) Oxide 1344-58-7 100%
Aesar Group/Alfa Products

√ LB-22 Johnson Matthey Catalog Chemicals N/a Thorium Dioxide 1314-20-1 100%
Aesar Group/Alfa Products 10 grams | 1 container
(5)

LB-23 Johnson Matthey Catalog Chemicals N/a Calcium Oxide 1305-78-8 100%
Aesar Group/Alfa Products

LB-24 Johnson Matthey Catalog Chemicals N/a Lithium Bromide 23303-71-1 100%
Aesar Group/Alfa Products

LB-25 Johnson Matthey Catalog Chemicals N/a Iodine Crystalline
Aesar Group/Alfa Products IODINE 7553-56-2 100%

√ LB-26 PE Pure Atomic Spectroscopy Standard
(5) 1/2 LITER | 1 CONTAINER EHS 1000# 1,000ppm SCANDIUM IN 2% NITRIC ACID
12060-08-1 7697-37-2

√ LB-27 SPEX Industries, Inc. Instrument Check Standard
(5) 1/2 LITER | 2 CONTAINER EHS EHS ONLY VARIOUS METALS IN A 2% HYDROCHLORIC ACID SOLUTION
7647-01-0

LB-28 Johnson Matthey Catalog Chemicals N/a Lithium Iodide
Aesar/Alfa 10377-51-2 100%

√ LB-29 Johnson Matthey Catalog Chemicals EHS Uranium Specpure ICP Standard
Aesar/Alfa .1 LITER NITRIC ACID Solution 10,000ppm URANIUM DINITRATE OXIDE 13250-83-7 1.2%
(5) NITRIC ACID 100 MILLILITERS | 1 CONTAINER NITRIC ACID 7697-37-2
WATER 7732-18-5 BALANCE 5%

√ LB-30 Johnson Matthey Catalog Chemicals Thorium Specpure
Aesar/Alfa THORIUM NITRATE 13823-29-5 2.1%
(5) NITRIC ACID .1 LITER | 1 CONTAINER EHS NITRIC ACID NITRIC ACID 7697-37-2 5%
WATER 7732-18-5 BALANCE

√ LB-31 Johnson Matthey Catalog Chemicals EHS Sodium Specpure
Aesar/Alfa 1000# SODIUM CARBONATE 497-19-8 2.3%
(5) NITRIC ACID .1 LITER | 2 CONTAINERS NITRIC ACID NITRIC ACID 7697-37-2 5%
WATER 7732-18-5 BALANCE

√ LB-32 Johnson Matthey Catalog Chemicals Nickel Specpure
Aesar/Alfa
(5) .1 LITER | 1 CONTAINER NO LONGER ON SITE TIME TO DEL

√ LB-33 Johnson Matthey Catalog Chemicals Chrpmium Specpure SOLID IN SOLUTION
Aesar/Alfa EHS 1# CHROMIUM CHLORIDE
(5) .1 LITER | 1 CONT HYDROGEN CHLORIDE EHS ONLY 500# 1# USES INTO
WATER

√ LB-34 Johnson Matthey Catalog Chemicals Cobalt Specpure
Aesar/Alfa EHS 1000# COBALT NITRATE
(5) .1 LITER | 1 CONT NITRIC ACID
WATER

√ LB-35 Johnson Matthey Catalog Chemicals Tungsten Specpure
Aesar/Alfa
(5) 1/2 LITER | 1 CONT EHS HYDROGEN CHLORIDE 100#
NITRIC ACID 1000#

√ LB-36 Johnson Matthey Catalog Chemicals Iron Specpure
Aesar/Alfa
(5) .1 LITER | 1 EHS NITRIC ACID 1000#

√ LB-37 Johnson Matthey Catalog Chemicals Silicon Specpure
Aesar/Alfa
(5) .1 LITER | 1 EHS HYDROCHLORIC ACID 100#
NITRIC ACID 1000#

√ LB-38 Johnson Matthey Catalog Chemicals N/a Copper Specpure
Aesar/Alfa
(5) .1 LITER | 1 CONT NO LONGER ON SITE TIME TO DEL

√ LB-39 Johnson Matthey Catalog Chemicals Calcium Specpure
Aesar/Alfa
(5) .1 LITER | 1 CONT EHS NITRIC ACID 1000#

✓ LB-40	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	N/A Aluminum Specpure NO LONGER AN SUPPLY FUNDS TO DGR
LB-41	Johnson Matthey Catalog Chemicals Aesar/Alfa		N/A Boron Specpure
✓ LB-42	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	Molybdenum Specpure EHS HYDROGEN CHLORIDE - GAS ONLY HYDROGEN FLUORIDE 100#
✓ LB-43	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	Zirconium Specpure EHS HYDROGEN CHLORIDE - GAS ONLY
✓ LB-44	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	Lead Specpure EHS NITRIC ACID 1000#
✓ LB-45	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 2 CUT	Tin Specpure EHS HYDROGEN CHLORIDE - GAS ONLY
✓ LB-46	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	Zinc Specpure EHS NITRIC ACID 1000#
✓ LB-47	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1 CUT	Tantalum Specpure EHS HYDROFLUORIC ACID 100#
✓ LB-48	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	.1 LITER | 1	Indium Specpure EHS NITRIC ACID 1000#
✓ LB-49	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Hafnium Specpure EHS HYDROGEN CHLORIDE - GAS ONLY
✓ LB-50	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Magnesium Specpure EHS - NITRIC ACID 1000#
✓ LB-51	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	duplicate msds	Thorium Specpure LB-30
✓ LB-52	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Yttrium Specpure EHS - NITRIC ACID 1000#
✓ LB-53	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Titanium Specpure EHS - HYDROGEN CHLORIDE - GAS ONLY HYDROGEN FLUORIDE 100#
✓ LB-54	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Manganese Specpure EHS NITRIC ACID 1000#
✓ LB-55	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Phosphorus Specpure EHS PHOSPHOROUS 100# NITRIC ACID 1000#
✓ LB-56	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Tellyrium Specpure EHS - TELLURIUM ON LIST 500# TELLURIUM CHLORIDE IN PRODUCT
✓ LB-57	Johnson Matthey Catalog Chemicals Aesar/Alfa 5	same	Selenium Specpure HYDROGEN CHLORIDE - GAS ONLY EHS NITRIC ACID 1000#

✓ LB-58 Johnson Matthey Catalog Chemicals — Cerium Specpure
Aesar/Alfa
(S) 0.1 liter / 1 ounce
(EHS) NITRIC ACID 1000#

✓ LB- SPEX INDUSTRIES INC.
(S) 1/2 liter / 1 ounce
7440-50-8 7697-37-2
10,000 ppm COPPER IN 5% NITRIC ACID
SPEX CATALOG NUMBER PLCU2-3X
(EHS) NITRIC ACID 1000#

✓ LB- SPEX INDUSTRIES INC.
(S) 1/2 liter / 1 ounce (EHS - NITRIC ACID 1000#)
7440-02-0 7697-37-2
10,000 ppm NICKEL IN 5% NITRIC ACID
SPEX CATALOG NUMBER PLNI2-3X

✓ LB- SPEX INDUSTRIES INC.
(S) 1/2 liter / 1 ounce (EHS - HYDROCHLORIC ACID GAS ONLY)
7429-90-5 7647-01-0
10,000 ppm ALUMINUM IN 5% HYDROCHLORIC ACID
SPEX CATALOG NUMBER PLAL1-3X

✓ LB- SPEX INDUSTRIES INC.
(S)
Same as LB-27 Ni, As } 0.1% ALL OTHERS 1% (EHS) NOT THREATENED PLAN GUARDS
100 ppm EACH OF PHOSPHORUS, SULFUR AND POTASSIUM, AND 20 ppm EACH OF MANGANESE, MOLYBDENUM, NICKEL, SCANDIUM, ARSENIC, LANTHANUM, SODIUM AND LITHIUM ALL IN A 2% HYDROCHLORIC ACID 7647-01-0
SPEX CATALOG NUMBER CALMIX3

LB- SPEX INDUSTRIES INC.
(N/a)
10,000 ppm SILICON IN WATER
SPEX CATALOG NUMBER PLSI9-3X 16919-19-0

✓ LB- JOHNSON MATTHEY CATALOG CHEMICALS
(S) NITRIC ACID 1/2 liter / 1 ounce
(EHS 1000#) — NITRIC ACID
SCANDIUM SPECPURE ICP STANDARD SOLUTION
10,000 ppm
SCANDIUM OXIDE 5.2 13465-60-6
NITRIC ACID 5.0 7697-37-2
WATER BALANCE 7732-18-5

NO MSDS LB- FISHER
SODIUM CARBONATE
(?)

✓ LB- JOHNSON MATTHEY CATALOG CHEMICALS
(S)
4 gallon max
2 gall average
HYDROFLUORIC ACID
(EHS) HYDROGEN FLUORIDE 100#

LB-
SODIUM HYDROXIDE
(?)

QA-MSDSINLB

(E) (EHS) EXTREMELY HAZARDOUS SUBSTANCES

(S) STATEMENT ON MSDS - SUBJECT TO REPORTING REQUIREMENTS OF SECTION 313 OF SARA TITLE III AND 40 CFR 372.

Form Approved OMB No.: 2070-0093

Approval Expires: 01/94

(Important: Type or print; read instructions before completing form.)

EPA U.S. Environmental Protection Agency

TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

Public reporting burden for this collection of information is estimated to vary from 30 to 34 hours per response, with an average of 32 hours per response, including time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing this burden, to Chief, Information Policy Branch (PM-223), US EPA, 401 M St., SW, Washington, D.C. 20460 Attn: TRI Burden and to the Office of Information and Regulatory Affairs, Office of Management and Budget, Paperwork Reduction Project (2070-0093), Washington, D.C. 20603.

EPA FORM **R**

PART I. FACILITY IDENTIFICATION INFORMATION

(This space for your optional use.)

1.	1.1 Are you claiming the chemical identity on page 3 trade secret?	1.2 If "Yes" in 1.1, is this copy:	1.3 Reporting Year
	[ ] Yes (Answer question 1.2; Attach substantiation forms.) [X] No (Do not answer 1.2; Go to question 1.3.)	[ ] Sanitized [ ] Unsanitized	19 90

2. CERTIFICATION (Read and sign after completing all sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: Patrick A. Tighe — Superintendent, Facilities Coordination

Signature: Patrick A. Tighe — Date signed: June 28, 1991

3. FACILITY IDENTIFICATION

3.1	Facility or Establishment Name: Metco Division Perkin-Elmer Corporation	
	Street Address: 220 Miller Place	
	City: Hicksville	County: Nassau
	State: New York	Zip Code: 11801
	TRI Facility Identification Number: 11801PRKNL220MI	
3.2	This report contains information for (Check only one): a. [ ] An entire facility b. [X] Part of a facility.	
3.3	Technical Contact: Patrick A. Tighe	Telephone Number (include area code): (516) 334-1300 Ext. 495
3.4	Public Contact: Same as 3.3	Telephone Number (include area code):
3.5	SIC Code (4 digit): a. 3399 b. c. d. e. f.	
3.6	Latitude: Degrees 086, Minutes 13, Seconds 00	Longitude: Degrees 003, Minutes 47, Seconds 00
3.7	Dun & Bradstreet Number(s): a. 05-773-1663	b.
3.8	EPA Identification Number(s) (RCRA I.D. No.): a. NYD981558570	b.
3.9	NPDES Permit Number(s): a.	b.
3.10	Receiving Streams or Water Bodies (enter one name per box): a. N/A	b.
	c.	d.
	e.	f.
3.11	Underground Injection Well Code (UIC) Identification Number(s): a. N/A	b.

WHERE TO SEND COMPLETED FORMS:

1. EPCRA REPORTING CENTER
   P.O. BOX 23779
   WASHINGTON, DC 20026-3779
   ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix G)

4. PARENT COMPANY INFORMATION

4.1	Name of Parent Company: Perkin-Elmer Corporation	4.2	Parent Company's Dun & Bradstreet Number: 00-118-4480

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART II. OFF-SITE LOCATIONS TO WHICH TOXIC CHEMICALS ARE TRANSFERRED IN WASTES

(This space for your optional use.)

1. PUBLICLY OWNED TREATMENT WORKS (POTWs)

1.1 POTW name		1.2 POTW name	
N/A			
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip

2. OTHER OFF-SITE LOCATIONS (DO NOT REPORT LOCATIONS TO WHICH WASTES ARE SENT ONLY FOR RECYCLING OR REUSE).

2.1 Off-site location name		2.2 Off-site location name	
N/A			
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

2.3 Off-site location name		2.4 Off-site location name	
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

2.5 Off-site location name		2.6 Off-site location name	
EPA Identification Number (RCRA ID. No.)		EPA Identification Number (RCRA ID. No.)	
Street Address		Street Address	
City	County	City	County
State	Zip	State	Zip
Is location under control of reporting facility or parent company? [ ] Yes [ ] No		Is location under control of reporting facility or parent company? [ ] Yes [ ] No	

[ ] Check if additional pages of Part II are attached. How many? _____

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART III. CHEMICAL-SPECIFIC INFORMATION

(This space for your optional use.)

1. CHEMICAL IDENTITY (Do not complete this section if you complete Section 2.)

1.1	[Reserved]
1.2	CAS Number (Enter only one number exactly as it appears on the 313 list. Enter NA if reporting a chemical category.) 7440-02-5
1.3	Chemical or Chemical Category Name (Enter only one name exactly as it appears on the 313 list.) Nickel Powder
1.4	Generic Chemical Name (Complete only if Part I, Section 1.1 is checked "Yes." Generic name must be structurally descriptive.)

2. MIXTURE COMPONENT IDENTITY (Do not complete this section if you complete Section 1.)

Generic Chemical Name Provided by Supplier (Limit the name to a maximum of 70 characters (e.g., numbers, letters, spaces, punctuation).)

3. ACTIVITIES AND USES OF THE CHEMICAL AT THE FACILITY (Check all that apply.)

3.1	Manufacture the chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing e. [ ] As a byproduct	d. [ ] For sale/distribution f. [ ] As an impurity
3.2	Process the chemical:	a. [ ] As a reactant d. [ ] Repackaging only	b. [ ] As a formulation component	c. [X] As an article component
3.3	Otherwise use the chemical:	a. [ ] As a chemical processing aid	b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

4. MAXIMUM AMOUNT OF THE CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

[0 4] (enter code)

5. RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)		A. Total Release (pounds/year) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1 Fugitive or non-point air emissions	5.1a	[ ]	[ ]	[ ]	NA	5.1b [ ]	
5.2 Stack or point air emissions	5.2a	[ ]	[ ]	[ ]	5100	5.2b [C]	
5.3 Discharges to receiving streams or water bodies (Enter letter code from Part I Section 3.10 for stream(s) in the box provided.) 5.3.1 [ ]	5.3.1a	[ ]	[ ]	[ ]	NA	5.3.1b [ ]	5.3.1c %
5.3.2 [ ]	5.3.2a	[ ]	[ ]	[ ]	NA	5.3.2b [ ]	5.3.2c %
5.3.3 [ ]	5.3.3a	[ ]	[ ]	[ ]	NA	5.3.3b [ ]	5.3.3c %
5.4 Underground injection	5.4a	[ ]	[ ]	[ ]	NA	5.4b [ ]	
5.5 Releases to land 5.5.1 On-site landfill	5.5.1a	[ ]	[ ]	[ ]	NA	5.5.1b [ ]	
5.5.2 Land treatment/application farming	5.5.2a	[ ]	[ ]	[ ]	NA	5.5.2b [ ]	
5.5.3 Surface impoundment	5.5.3a	[ ]	[ ]	[ ]	NA	5.5.3b [ ]	
5.5.4 Other disposal	5.5.4a	[ ]	[ ]	[ ]	NA	5.5.4b [ ]	

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

EPA

EPA FORM R
PART III. CHEMICAL-SPECIFIC INFORMATION (continued)

(This space for your optional use.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)	A. Total Transfers (pounds/yr) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1.1 Discharge to POTW (enter location number from Part II, Section 1.) 1	[ ]	[ ]	[ ]	NA	6.1.1b	
6.2.1 Other off-site location (enter location number from Part II, Section 2.) 2	[ ]	[ ]	[ ]	NA	6.2.1b	6.2.1c M
6.2.2 Other off-site location (enter location number from Part II, Section 2.) 2	[ ]	[ ]	[ ]	NA	6.2.2b	6.2.2c M
6.2.3 Other off-site location (enter location number from Part II, Section 2.) 2	[ ]	[ ]	[ ]	NA	6.2.3b	6.2.3c M

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

7. WASTE TREATMENT METHODS AND EFFICIENCY

NA Not Applicabl;e (NA) - Check if no on-site treatment is applied to any waste stream containing the chemical or chemical catagory

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a	7.1b	7.1c	7.1d [ ]	7.1e %	7.1f [ ]	[ ]
7.2a	7.2b	7.2c	7.2d [ ]	7.2e %	7.2f [ ]	[ ]
7.3a	7.3b	7.3c	7.3d [ ]	7.3e %	7.3f [ ]	[ ]
7.4a	7.4b	7.4c	7.4d [ ]	7.4e %	7.4f [ ]	[ ]
7.5a	7.5b	7.5c	7.5d [ ]	7.5e %	7.5f [ ]	[ ]
7.6a	7.6b	7.6c	7.6d [ ]	7.6e %	7.6f [ ]	[ ]
7.7a	7.7b	7.7c	7.7d [ ]	7.7e %	7.7f [ ]	[ ]
7.8a	7.8b	7.8c	7.8d [ ]	7.8e %	7.8f [ ]	[ ]
7.9a	7.9b	7.9c	7.9d [ ]	7.9e %	7.9f [ ]	[ ]
7.10a	7.10b	7.10c	7.10d [ ]	7.10e %	7.10f [ ]	[ ]

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

8. POLLUTION PREVENTION: OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of Modification (enter code)	B. Quantity of the Chemical in Wastes Prior to Treatment or Disposal: Current reporting year (pounds/year)	Prior year (pounds/year)	Or percent change (Check (+) or (-))	C. Index	D. Reason for Action (enter code)
M 7			+ - %		R

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R
PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Part III. Number the lines used sequentially from lines in prior sections (e.g., 5.3.4, 6.1.2, 7.11)

(This space for your optional use.)

ADDITIONAL INFORMATION ON RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE (Part III, Section 5.3)

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)			A. Total Release (pounds/yr) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C. % From Stormwater
5.3 Discharges to receiving streams or water bodies	5.3.___ ☐	5.3.___a	[ ]	[ ]	[ ]		5.3.___b ☐	5.3.___c %
(Enter letter code from Part I Section 3.10 for stream(s) in the box provided.)	5.3.___ ☐	5.3.___a	[ ]	[ ]	[ ]		5.3.___b ☐	5.3.___c %
	5.3.___ ☐	5.3.___a	[ ]	[ ]	[ ]		5.3.___b ☐	5.3.___c %

ADDITIONAL INFORMATION ON TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS (Part III, Section 6)

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)		A. Total Transfers (pounds/yr) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C. Type of Treatment/ Disposal (enter code in box provided)
6.1.___ Discharge to POTW (enter location number from Part II, Section 1.)	1 ☐	[ ]	[ ]	[ ]		6.1.___b ☐	
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ]	[ ]	[ ]		6.2.___b ☐	6.2.___c M ☐☐
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ]	[ ]	[ ]		6.2.___b ☐	6.2.___c M ☐☐
6.2.___ Other off-site location (enter location number from Part II, Section 2.)	2 ☐	[ ]	[ ]	[ ]		6.2.___b ☐	6.2.___c M ☐☐

ADDITIONAL INFORMATION ON WASTE TREATMENT METHODS AND EFFICIENCY (Part III, Section 7)

A. General Wastestream (enter code in box provided)	B. Treatment Method (enter code in box provided)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]
7.___a ☐	7.___b ☐☐☐	7.___c ☐	7.___d [ ]	7.___e %	7.___f [ ]	[ ]

(IMPORTANT: Type or print; read instructions before completing form)

Form Approved OMB Number: 2070-0093
Approval Expires: 11/92

EPA United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: COBALT POWDER

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

For EPA use only

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 92

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms)
[X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: JOE MACRI, MANAGER FACILITIES

Signature: Joseph Macri

Date Signed: June 30, 1993

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: METCO DIVISION PERKIN-ELMER CORPORATION

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.

		Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
4.6	Latitude and Longitude	086	13	00	003	47	00

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663	b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570	b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A	b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A	b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA PERKIN-ELMER CORPORATION
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COBALT
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. ☐ Produce b. ☐ Import	If produce or import: c. ☐ For on-site use/processing d. ☐ For sale/distribution e. ☐ As a byproduct f. ☐ As an impurity
3.2	Process the toxic chemical:	a. ☐ As a reactant b. ☐ As a formulation component	c. ☒ As an article component d. ☒ Repackaging
3.3	Otherwise use the toxic chemical:	a. ☐ As a chemical processing aid b. ☐ As a manufacturing aid	c. ☐ Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	310	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name				
	N/A				
5.3.2	Stream or Water Body Name				
	N/A				
5.3.3	Stream or Water Body Name				
	N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = 1
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3 Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate

6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information

6.1.B.__ POTW Name N/A		6.1.B.__ POTW Name	
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: COBALT POWDER

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: LONI-JO SCRAP METAL

Street Address: 70 KINKEL STREET

City: WESTBURY

County: NASSAU

State: NY

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 240	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 1
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] **Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.**

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Chemical, Category, or Generic Name
COBALT POWDER

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1991 (pounds/year)	Column B 1992 (pounds/year)	Column C 1993 (pounds/year)	Column D 1994 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	270	240	250	250
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.95			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b.	c.
8.10.2	W29	a. T04	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

M S L

Material Safety Data Sheet

MSL
Metallurgical Specialties Ltd.
717 E. Jericho Turnpike
Suite 235
Huntington Station, NY 11746
516-254-3620

Product: MSL MC5050

MSDS No. : MSL 43
Revision: 1
Date: October 28, 1991

SECTION I. MATERIAL IDENTIFICATION

Trade/Material Name: MSL MC5050

Description: Ceramic Powder

Other Designations: CHROMIUM OXIDE POWDER

Date of Issue: October 15, 1991

SECTION II. INGREDIENTS AND HAZARDS

Ingredient Name:	Exposure Limits:
Chromium III	OSHA PEL: 0.5 mg/m^3 ACGIH TLV: 0.5 mg/m^3 OSHA PEL: 10 mg/m^3 5 mg/m^3 (Respirable) ACGIH TLV: 10 mg/m^3

SECTION III. PHYSICAL DATA

Appearance & Odor: Powder; No Odor.

Boiling Point:	N/A	Evaporation rate:	N/A
Vapor Pressure:	N/A	Specific gravity (H_2O = 1):	2.0
Water Solubility (%):	Neg.	Melting Point:	4200-4400
Vapor Density (air = 1):	N/A	% Volatile by Volume:	N/A
pH:	N/A	Molecular Weight:	N/A

SECTION IV. FIRE AND EXPLOSION DATA

Flash Point (method): None Limits: LEL %: N/A UEL %: N/A

Extinguishing Media: Use Class D Fire Extinguisher

Unusual fire or explosion hazards: Moderate fire hazard in the form of dust when exposed to flame.

Special fire-fighting procedures: Treat as a metallic fire.

 MSDS No. MSL 43 CONTINUES ON PAGE 2

M S L

Material Safety Data Sheet

PB47421

Metallurgical Specialties Ltd.
717 E. Jericho Turnpike
Suite 235
Huntington Station, NY 11746
516-254-3620

Product: MSL MC5050

MSDS No. : MSL 43
Revision: 1
Date: October 28, 1991

SECTION V. REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Chemical incompatibilities: Oxidizers.

Hazardous decomposition products: Ozone and nitric oxide are formed by plasma flame (independent of powder)

SECTION VI. HEALTH HAZARD INFORMATION

Summary of risks:

CHROMIUM III: Histologic fibrosis lungs, dermatitis

Medical conditions which may be aggravated by contact: Consult a physician

Target organs: Respiratory System, Skin.

Primary entry route(s): Inhalation.

Signs and symptoms of overexposure:

Eye contact: Possible irritation.

Skin contact: Possible dermatitis.

Inhalation: Respiratory irritation.

Ingestion: Possible irritation.

First aid:

Eye contact: Flood eye with water. If irritation persists, consult a physician.

Skin contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

MSDS No. 43 CONTINUES ON PAGE 3

M S L

Material Safety Data Sheet

MSL
Metallurgical Specialties Ltd.
717 E. Jericho Turnpike
Suite 235
Huntington Station, NY 11746
516-254-3620

Product: MSL MC5050

MSDS No. : MSL 43
Revision: 1
Date: October 28, 1991

SECTION VII. SPILL, LEAK AND DISPOSAL PROCEDURES

Spill / Leak Procedures: Material that is spilled into the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste Management / Disposal: Consult local, state and federal regulations.

SECTION VIII. SPECIAL PROTECTION INFORMATION

Personal protective equipment:

Goggles: The following lens shades are recommended for the process indicated -- Combustion spraying shade #5, plasma spraying up to 40KW shade #9, 40 to 60 KW shade #10, and greater than 60KW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other: Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements). Aluminized apron is to be worn during plasma spray process.

Workplace considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety Sations: Eye Wash Station is recommended.

Other: N/A.

SECTION IX. SPECIAL PROCEDURES

Storage segregation: Store away from incompatibles.

Special Handling / Storage: Cool and dry area.

Other precautions: Avoid oral ingestion and excessive skin contact.

Prepared / Revised by: MSL
October 15, 1991

THE INFORMATION CONTAINED HEREIN IS BASED ON AVAILABLE DATA AND TESTS AND IS BELIEVED TO BE ACCURATE. IT IS PREPARED SOLELY FOR YOUR CONSIDERATION AND VERIFICATION SINCE CONDITIONS OF USE, STORAGE AND HANDLING MAY VARY.

EPA

U.S. Environmental
Protection Agency 191 PM 04/12/94 #12
401 M Street, SW (7408)
Washington, DC 20460

Official Business
Penalty for Private Use
$300

First Class Mail
Postage and Fees Paid
EPA
G-35

11590PRKNL1101P
PERKIN-ELMER CORP.
JOE MACRI
1101 PROSPECT AVE.
WESTBURY, NY 11590

42

Dear Facility Owner/Operator/Compliance Manager:

This card is to inform you that there has been a delay in the distribution of the 1993 Toxic Chemical Release Inventory (TRI) Form R and Instructions document and Magnetic Media submission package. The scheduled date for mailing these packages is April 22, 1994. In the meantime, to assure that the July 1 deadline is met, you can use last year's Form R to start your calculations and transfer this information to the 1993 Form R or the magnetic media diskettes when they arrive. In addition, to reduce the occurrence of data entry errors, we strongly urge that you use the magnetic media diskettes to submit your TRI data. If you do not receive your instruction package by May 9, 1994 or if you have any other questions regarding TRI please call the Emergency Planning and Community Right-to-Know Information Hotline at 1-800-535-0202 between 8:30 a.m. and 7:30 p.m. EST. We apologize for this delay and regret any inconvenience this may cause.

ALCAN

ALCAN PACKAGING

9 June 2003

Mr. Juzer Rasani
Environmental Engineer
New York State Department of Environmental Conservation
Bureau of Hazardous Waste Management
625 Broadway, 8th Floor
Albany, New York 12233-7251

RE: Hazardous Waste Minimization Plan for Reporting Year 2002

Dear Mr. Rasani:

In accordance with New York State Environmental Conservation Law §27-0908, please find the Alcan Packaging Hazardous Waste Minimization Plan for reporting year (RY) 2002 for Plan due date: 1 July 2003.

As in past years, the New Hyde Park facility has experienced success in various waste reduction efforts; as well as concurrently experiencing significant growth in other waste streams. This growth is not due to a lack of commitment to waste reduction, but rather as a result of rapid operational changeovers, customer requirements and marked increases in business opportunities. However, please rest assured of our commitment to undertake new challenges as they relate to waste reduction in all practical and economically feasible areas.

Alcan Packaging is committed to providing a safe and healthful working environment for its employees, customers and the community in which we reside.

If you have any questions regarding this Plan, please do not hesitate to call me at: 516.355.2587.

Sincerely,
Alcan Packaging

LAWSON MARDON
JUN 6 2003
EHS MANAGER

Alfonso A. Rolli - Manager
Environmental and Safety Engineering

HAZARDOUS WASTE MINIMIZATION PLAN

for:

Alcan Packaging
1403 Fourth Avenue
New Hyde Park, New York 11040

Alfonso A. Rolli
EHS Manager

TABLE OF CONTENTS

1.0 INTRODUCTION AND BACKGROUND 1

Purpose of the Hazardous Waste Minimization Plan 1

1.2 Facility Background 1

2.0 FACILITY HAZARDOUS WASTE STREAMS 2

Hazardous Waste Identification 2

2.2 Description of Hazardous Waste Generation and Disposal 3
2.2.1 Press Room Waste Streams

3.0 HAZARDOUS WASTE MANAGEMENT COSTS 4

3.1 Treatment, Storage, and Disposal (TSDF) Costs 5

3.2 Hazardous Waste Taxes 5

3.3 Regulatory Fees 5

3.4 Labor Cost Estimates 6

3.5 Summary of Hazardous Waste Management Costs 6

4.0 WASTE MINIMIZATION INDICES 7

5.0 IDENTIFICATION OF WASTE MINIMIZATION METHODS 8

5.1 Summary of Potential Waste Minimization Options 8

5.2 Technical and Economic Feasibility Study 9
5.2.1 Source Minimization 9
5.2.2 Solvent Conversion 9
5.2.2 Recycling and Reuse 9
5.2.3 Good Operating Practices 10

6.0 HAZARDOUS WASTE MINIMIZATION POLICIES 10

6.1 Hazardous Waste Minimization Team 10
6.1.1 Membership 11
6.1.2 Charter 11
6.1.3 Meetings 11

6.2 Compliance Program 13

Attachments: Form IC, Form GM and Regulatory Fee Information for CY2001
Lawson Mardon Hazardous Waste Generation Matrix for CY2001

HAZARDOUS WASTE MINIMIZATION PLAN

1.0 INTRODUCTION AND BACKGROUND

1.1 Purpose of the Hazardous Waste Minimization Plan

Alcan Packaging-New Hyde Park (APNHP) continues to utilize its formal program to reduce the generation of hazardous waste. APNHP will accomplish these goals by using its Hazardous Waste Minimization Plan (HWMP). APNHP utilizes this Plan in compliance with the Hazardous Waste Minimization Act (the Act). The Act requires facilities that release hazardous wastes to the environment to reduce, to the maximum extent possible, hazardous waste generation. Reductions shall be achieved through the use of technically feasible and economically practicable waste minimization technologies, process or operational changes, or any other acceptable manner. The Act asserts that these waste minimization and prevention practices will assist New York State in achieving an overall minimization in the generation and release of hazardous waste by fifty percent in the next ten years.

The purpose of the HWMP is to identify, evaluate and implement potential hazardous waste minimization opportunities with the ultimate goal of reducing, to the maximum extent practical, the quantity of hazardous waste generated at APNHP through reducing, re-using and recycling materials utilized in our manufacturing processes, while continuing to produce industry-leading products for our customers. Alcan Pacakaging is committed to conducting its operations with respect for the environment, for the benefit of our employees, customers and the general public.

1.2 Facility Background

APNHP is a manufacturer of roll-fed labels for the beverage industry. The facility currently employs 161 employees working three (3) shifts per day and between five and seven days per week. The facility currently houses seven (7) solvent-based flexographic printing presses. The aforementioned labels are presently found on many different types and brands of beverages and food products including Coca-Col ®, Pepsi®, Gatorade®, Skippy®, Folgers Coffee® and many other name brands.

Operations associated with the production of flexographic roll fed labels are most closely referenced under Standard Industrial Code 2759, Commercial Printing, n.e.c.

<u>All of the hazardous waste streams addressed in this HWMP</u> are generated directly or indirectly as a by-product of manufacturing operations. These waste streams are identified and characterized further in Section 2.0 of this Plan.

2.0 FACILITY HAZARDOUS WASTE STREAMS

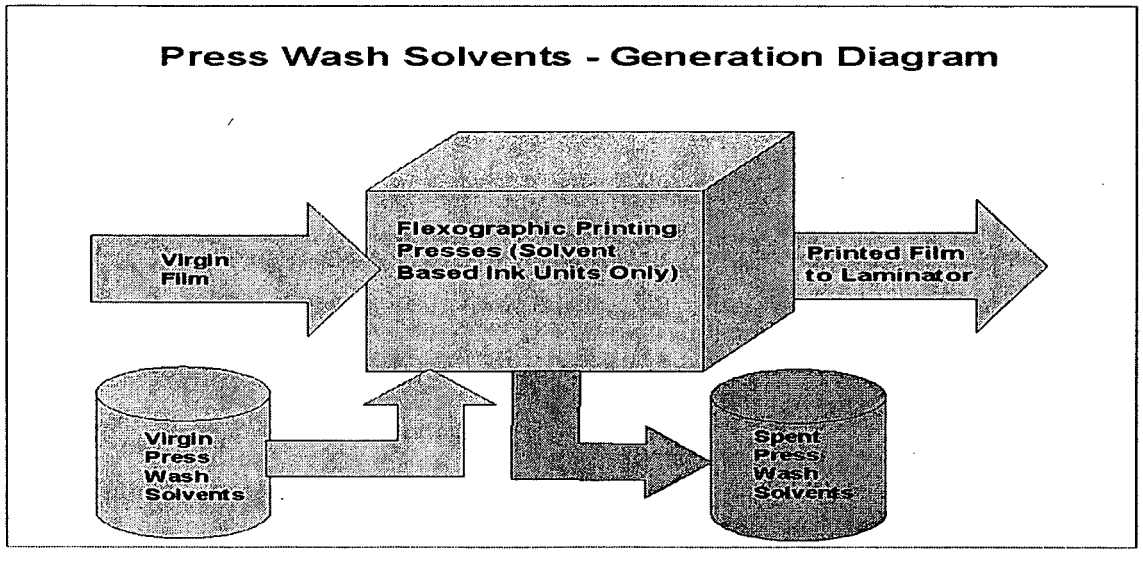
2.1 Hazardous Waste Identification

Using 1995 as the baseline year, APNHP has identified waste streams, which will remain accounted for throughout the life of this Plan, regardless of whether these referenced waste streams will no longer be produced or meet the reporting threshold of this plan.

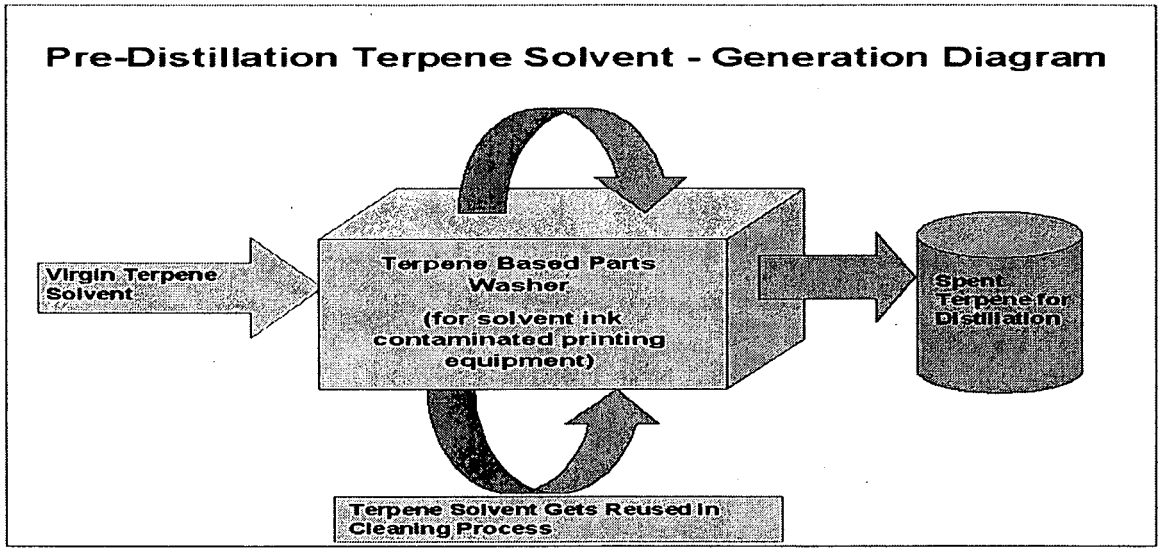
APNHP has identified the following operational waste streams, which meet the targeting criteria of the Hazardous Waste Minimization Act: Press Wash Solvents, Pre-Distillation Terpene Solvent, Terpene Still Bottoms, Waste Solvent Adhesive and Solvent Contaminated Shop Towels.

The aforementioned waste streams meet the target criteria of the HWMP by either being reported in years previous; being generated in excess of five (5) tons during the calendar year; being classified as Acute Hazardous Wastes; and/or to account for the remaining portion of the hazardous waste generated during the previous calendar year, for a total of 90% of the hazardous waste generated. These target waste streams are described and illustrated in greater detail in the following paragraphs:

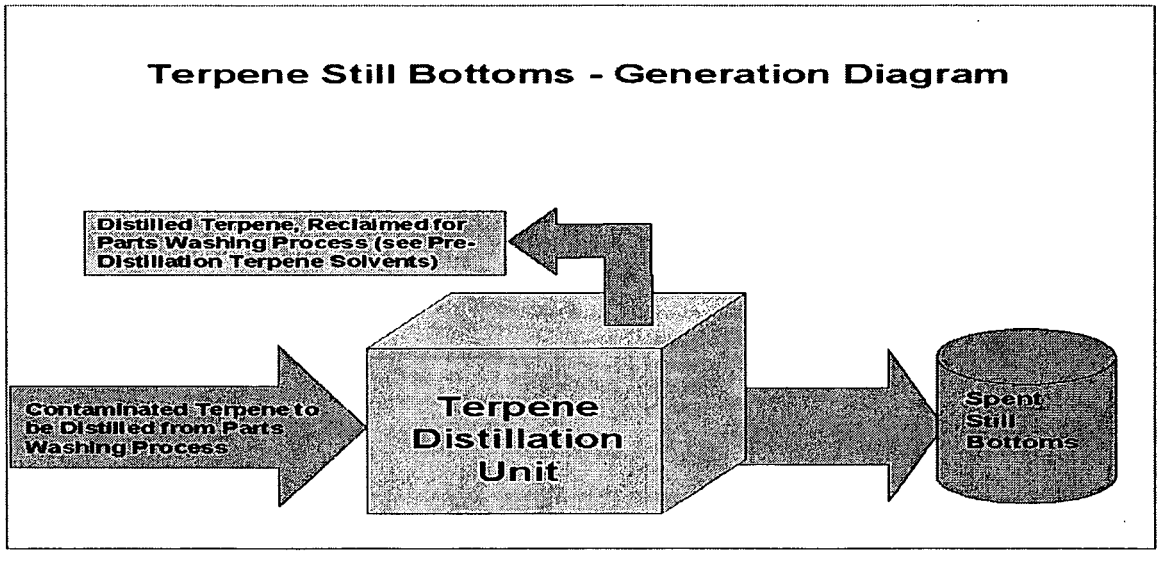
- **Press Wash Solvents** – (EPA Codes D001, D005, F003) are generated from the cleanup and line flushing of flexographic printing presses. This waste stream is further detailed on Page 2 of NYSDEC Form GM, the CY2002 Annual Waste Generation and Management Report (attached).



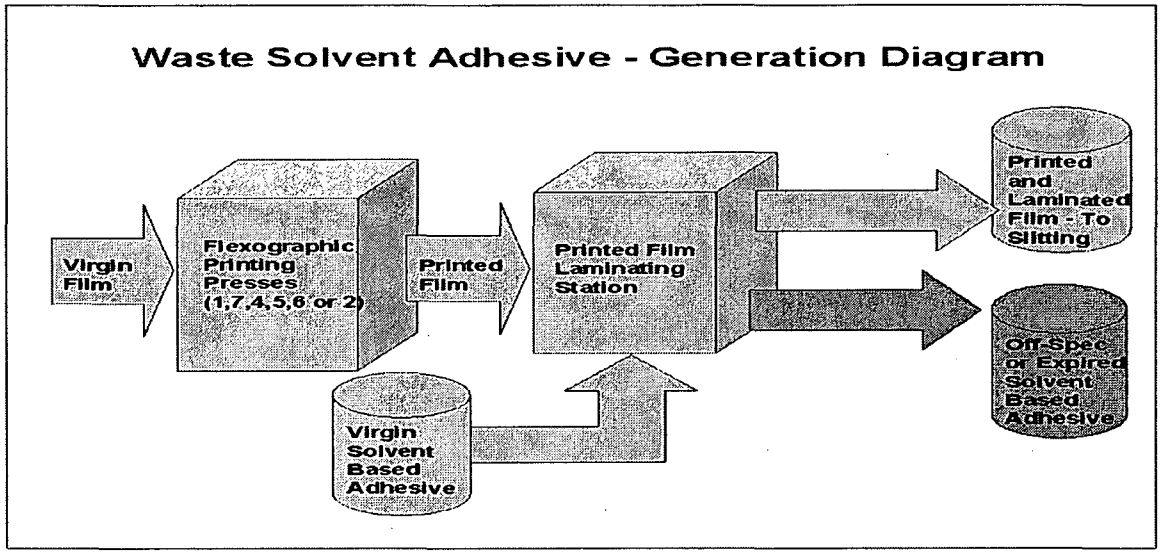
- **Pre-Distillation Terpene Solvent**– (EPA Codes D001, D005, F003) is generated from the Terpene-based parts washing operation. Terpene solvent, used to clean fouled printing equipment in the parts washer, is reused and recycled in the Distillation unit for an estimated average of five (5) times. Distillation of this stream yields Terpene Still Bottoms, further discussed in the following description. This Pre-Distillation Terpene Solvent is further detailed on Page 3 of NYSDEC Form GM, the CY2002 Annual Waste Generation and Management Report (attached).



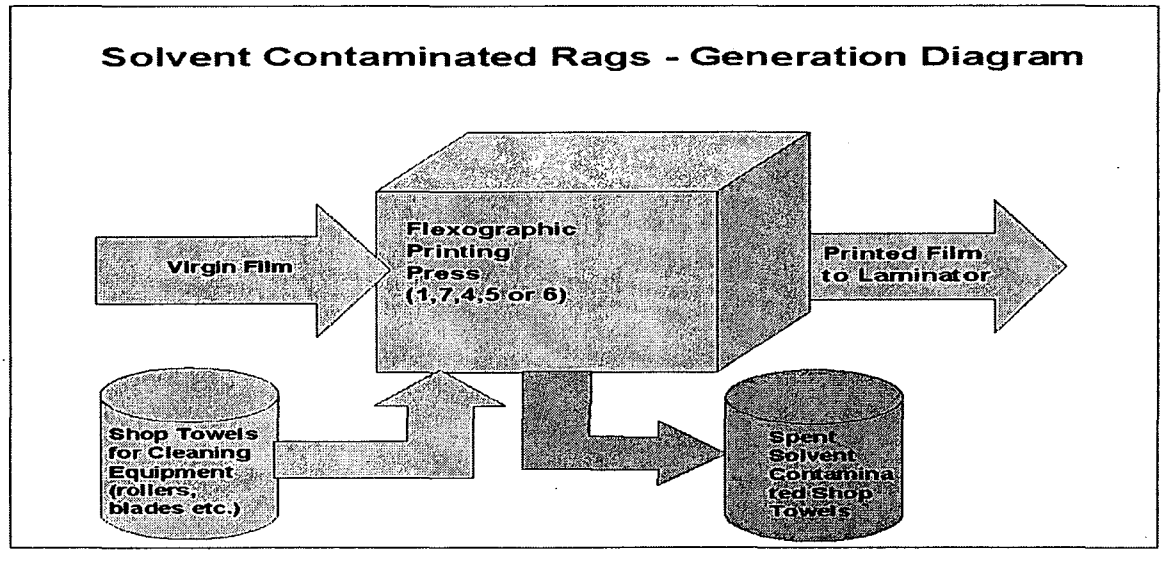
- **Terpene Still Bottoms** – (EPA Codes D001, D005, F003) are generated from the Terpene Distillation unit, which recycles the terpene used for parts washing operations. This waste stream is further detailed on page 4 of NYSDEC Form GM, the CY2002 Annual Waste Generation and Management Report (attached).



- **Waste Solvent Adhesive** – (EPA Codes D001) is expired or off-specification adhesive used in the printed film to clear plastic lamination process. This waste stream is further detailed on page 2 of NYSDEC Form GM, the CY2002 Annual Waste Generation and Management Report (attached).



- **Solvent Contaminated Shop Towels** (EPA Codes D001, F003, D005) are the depleted and soiled towels used in the cleaning of the flexographic press equipment. This waste stream is further detailed on page 5 of NYSDEC Form GM, the CY2002 Annual Waste Generation and Management Report (attached).



Said waste streams are summarized below in Table 2.1.

TABLE 2.1 HAZARDOUS WASTE GENERATION & DISPOSAL SUMMARY						
IDENTIFICATION OF WASTE	EPA WASTE CODE(S)	QUANTITY GENERATED (POUNDS)			WASTE GENERATION SOURCE	METHOD OF DISPOSAL
		2000	2001	2002		
Press Wash Solvents	D001 D005 F003	282,882	378,515	611,170	Spent Press Wash Solvents	Off-Site incineration
Pre-Distillation Terpene Solvent	D001 D005 F003	167,712	156,531	237,833	Parts Washing Operation	On-Site recycling (RCRA Exempt)
Terpene Still Bottoms	D001 D005 F003	31,512	29,411	46,638	Spent Terpene still bottoms contaminated with printing inks	Off-Site incineration
Waste Solvent Adhesive	D001	0	0	0	Expired or off-spec. adhesive	APNHP presently utilizes water-based adhesives
Solvent Contaminated Shop Towels	D001 D005 F003	15,366	14,907	16,742	Towels contaminated with inks and cleaning solvents used to clean the presses.	Recycling by licensed (Pennsylvania) vendor (cleaning and re-use)

2.2 Description of Hazardous Waste Generation and Disposal

Press Wash Solvents:

As the roll fed flexographic presses vary in numbers of print stations (number of color options) by press (anywhere between 6 and 8 with front and/or back printing capabilities), so do the print jobs (batch runs may vary from all day operations to numerous switchovers in any given shift to accommodate smaller orders). Press Wash Solvent Waste volume is generated in proportion to the number of cleanings (which must occur between job switchovers) and print stations used. The Press Wash Solvents waste stream results from cleaning the cylinders, flushing the ink lines and other miscellaneous cleaning activities between operations. The waste is collected in 55-gallon drums, which get shipped out on a weekly basis by a licensed TSDF for incineration.

Pre-Distillation Terpene Solvent:

Between switchovers, the blades, rollers and ink kit five gallon buckets containing a customized ink color for each print station) and other process equipment (for each print station) must be cleaned, prior to use on another job. A parts washer (similar concept to an industrial washing machine), performs the cleaning activities using a non-hazardous Nutre Clean 196S® Terpene-based cleaning solvent. Although the cleaning solvent is inherently non-hazardous, after use it becomes contaminated with the printing inks, thereby exhibiting both characteristic and listed properties. The waste is not shipped out for disposal, but rather reused/recycled on site in RCRA exempt units, through a Distillation Unit (further detailed under section 5.2.2). This stream gets re-used and distilled an estimated average of five times before it is too contaminated for successful distillation. Should the still breakdown, this waste stream would have to be sent off site for proper disposal by a licensed TSDF.

Terpene Still Bottoms:
The preceding waste stream (Pre-Distillation Terpene Solvent) gets recycled by the Terpene Still. The distillation process results in this waste stream (Terpene Still Bottoms). This waste stream is transferred into 55-gallon drums for eventual incineration off site by a licensed TSDF.

Waste Solvent Adhesive:
Adhesive is used to laminate a clear polypropylene overlay to the printed substrate to protect the printed labels from abrasions, handling, and the elements. A coater (lamination station) is found on the backside of most of the presses. This adhesive waste is discarded in 55-gallon containers in cases of expiration and/or off-specification, by a licensed TSDF. No such waste is presently generated as a result of any processes or operations at the New Hyde Park facility (non-hazardous water-based adhesives are presently in use).

Solvent Contaminated Shop Towels:
Shop Towels are generated concurrently (and in the same operation) as the Press Wash Solvents. These towels are used to wipe down equipment and for miscellaneous cleaning activities.

NOTE: As of 17 September 2002, Contaminated Shop Towels are collected into 55-gallon drums and transported and recycled (cleaned) by a licensed (Pennsylvania) recycler and returned to the New Hyde Park facility for re-use. Company investment and waste stream reduction conclusions will be realized at the end of calendar year 2003.

3.0 HAZARDOUS WASTE MANAGEMENT COSTS

As part of the Hazardous Waste Minimization Plan, detailed below are the costs associated with the treatment, storage, and disposal, taxes, regulatory charges and labor/administration fees associated with the reportable hazardous waste streams:

3.1 Treatment, Storage, and Disposal (TSDF) Costs

Only legally licensed, permitted and insured TSDFs are utilized by APNHP. Although negotiation and pricing tactics are employed, TSDFs charge accordingly for their services; and proper disposal comes at a significant cost as detailed below.

TABLE 3.1
TREATMENT, STORAGE, and DISPOSAL COSTS

WASTE STREAM	2000	2001	2002
All Hazardous waste streams	$59,840.00	$80,240.00	$134,555.00

3.2 Hazardous Waste Taxes

Taxes are paid quarterly to New York State Department of Taxation and Finance (Form TP-550). Hazardous waste is taxed at $27/ton for landfilled hazardous waste, $16/ton for treated hazardous waste, and $9/ton for incinerated hazardous waste.

TABLE 3.2
HAZARDOUS WASTE TAXES

Year	Treatment Method			Total Cost (Dollars)
	Tons Landfilled ($27/Ton)	Tons Treated ($16/ton)	Tons Incinerated (9$/Ton)	
2000	0	0	249.42	$2,244.78
2001	0	0	294.44	$2,649.96
2002	0	0	337.28	$3,035.59

3.3 Regulatory Fees

New York State requires a variable "Generator Fee" from the generator depending upon the quantity of hazardous waste (non-wastewater) generated over the course of a calendar year. Generation of between 15 and 100 tons/year of hazardous waste results in a $1000 fee, a $6,000 regulatory fee is required for generation of between 100 tons and 500 tons per year, a $20,000 generator fee for between 500 tons and 1,000 tons/year, and a generator fee of $40,000 for quantities of hazardous waste generated in excess of 1,000 tons/year.

TABLE 3.3
REGULATORY FEE

YEAR	RESULTING GENERATOR FEE
2000	$6,000.00
2001	$6,000.00
2002	$6,000.00

3.4 Labor Cost Estimates

Time spent collecting, segregating, labeling, internally transporting and inspecting hazardous waste streams are estimated to take approximately 1/3 hour per drum. At an estimated labor cost of $14.75 per hour, labor and administrative costs are summarized below.

TABLE 3.4 MAN-HOUR LABOR: WASTE HANDLING						
WASTE CODE	NO. OF DRUMS			LABOR COSTS		
	2000	2001	2002	2000	2001	2002
Press Wash Solvents	704	944	1,683	$3,136.32	$4,172.48	$8,128.89
Pre-Distillation Terpene Solvent	NA	N/A	N/A	NA	NA	N/A
Terpene Still Bottoms	75	70	111	$334.13	$309.40	$538.35
Waste Solvent Adhesive	0	0	0	$0.00	$0.00	$0.00
Solvent Contaminated Rags	67	65	76	$298.50	$287.30	$368.60
TOTAL LABOR WASTE HANDLING				**$3,768.95**	**$4,769.18**	**$9,035.84**

3.5 Summary of Hazardous Waste Management Costs

The monatary totals of all such activities are summed below.

TABLE 3.5 HAZARDOUS WASTE MANAGEMENT COSTS			
COST	**2000**	**2001**	**2002**
TSDF COSTS	$59,840.00	$80,240.00	$134,555.00
TAXES	$2,244.78	$2,650.00	$3,035.59
REGULATORY	$6,000.00	$6,000.00	$6,000.00
LABOR/ADMINISTRATIVE	$3,768.95	$4,769.18	$9,035.00
TOTAL COSTS	**$71,853.73**	**$93,659.18**	**$152,643.59**

4.0 WASTE MINIMIZATION INDICES

Waste Generation Indices have been developed for each of the targeted waste streams. These indices, listed in Table 4.0 below, relate the quantity of hazardous waste generated (tons) to each 100 tons of product produced for each waste stream. These indices may be used for evaluating waste Minimization efforts and progress over time.

TABLE 4.0
(NYSDEC Table 1.0)
HAZARDOUS WASTE GENERATION SUMMARY

NAME OF WASTE	SOURCE OF GENERATION	DISPOSAL METHOD	QUANTITY OF HAZARDOUS WASTE GENERATED (TONS)			PERCENT OF ANNUAL HAZARDOUS WASTE GENERATED			INDICES (TONS WASTE GENERATED/ 100 TONS (including scrap) PRODUCT PRODUCED)		
			2000	2001	2002	2000	2001	2002	2000	2001	2002
Press Wash Solvents	Job Make-readys/Press Cleaning	Incineration	141	190	305.5	58%	59%	62%	2.21	2.47	3.40
Pre-Distillation Terpene Solvent	Parts Washing	NA - Recycled	83.8	78.2	118.5	34%	34%	31%	1.30	1.31	1.33
Terpene Still Bottoms	Terpene Distillation	Incineration	15.7	14.7	23.2	5%	4%	4	.24	.22	.25
Waste Solvent Adhesive	Lamination	N/A	0	0	0	0%	0		0	0	0
Solvent Contaminated Rags	Job Make-readys/Press Cleaning	Incineration	7.7	7.4	8.38	3%	3%	3%	.16	.14	.19

5.0 IDENTIFICATION OF WASTE MINIMIZATION METHODS

5.1 Summary of Potential Waste Minimization Options

Table 5.1 summarizes potential waste Minimization options for each of the targeted waste streams. Options include solvent substitution, recycling and reuse, technology modifications, waste segregation and good operating practices. Technical evaluations of the potential minimization methods are further discussed in the following sections.

TABLE 5.1
(NYSDEC Table 2.0)
HAZARDOUS WASTE MINIMIZATION PROGRAM

WASTE STREAM	POTENTIAL MINIMIZATION METHODS	ESTIMATED WASTE REDUCTION	METHOD USED TO CALCULATE ROI	ESTIMATED ROI	GOAL DATE	REMARKS
Press Wash Solvents	• Good Operating Practices	To be determined	AC	To Be Determined	Ongoing	Preparing minimal solvent-based ink batches (Just-in-time) production) Reduction in number of wash-ups being performed on presses. Exploring non-haz solvents to press station cleaning only.
Pre-Distillation Terpene Solvent	• Preventative Maintenance • Good Operating Practices	To be determined	PP AC	To Be Determined	On-Going	Exploring other solvents for increased re-use life.
Terpene Still Bottoms	• Recycling/Re-use	100%	IRR	Undetermined	Completed	
Waste Solvent Adhesive	• Solvent Substitution	100%	AC		Completed	
Solvent Contaminated Towels	• Recycling/Re-use	To be determined	AC	To Be Determined	Completed in Sept. 02	Saving and waste reduction to be realized at the end of CY2003.

R.O.I. - Return on investment: **AC** - Annualized Cost **IRR** - Internal Rate of Return **NPV** - Net Present Value **PP** - Payback Period **PI** - Profitability Index

5.2 Technical and Economic Feasibility Study

Technical and economic feasibility assessments will continually be integrated with our waste minimization methods to determine the most beneficial options.

5.2.1 Source Minimization

As waste minimization alternatives are examined, great emphasis was placed on minimization through source substitution. Solvent-based adhesive has been replaced with a non-hazardous water-based adhesive. Even though the solvent-based adhesive was not the most significant waste stream, through solvent substitution, we achieved significant VOC air emission reductions. In addition, recycling (cleaning and re-use) of solvent contaminated shop towels has effectively eliminated the waste stream.

5.2.2 Solvent Conversion

For several years, APNHP has substituted the use of solvent-based inks for water-based inks on two of its press operations, with mixed quality results. As a result of the poor quality history associated with our use of water-based ink formulations, APNHP has made the transition from water-based formulations to solvent-based formulations on the two remaining presses, which had been utilizing water-based inks systems.

Nevertheless, Alcan Packaging - New Hyde Park will stay committed in our efforts to reduce the amount of waste generated at our facility and will continue to manage all of our generated waste responsibly and expertly.

5.2.3 Recycling and Re-use

A Terpene distillation unit, for the recovery of Terpene used in the parts washer process, has been installed and operational for a number of years. It is estimated that the Terpene still has decreased virgin Terpene purchases by as much as five (5) times, or 500%, as it is estimated that for every 100 gallons of Terpene used, only 20 gallons of Terpene still bottoms are generated. Undistilled or virgin Terpene is not disposed of unless there is a problem with the material or distillation unit. Therefore, the unit has eliminated the requirement to dispose of Pre-Distillation Terpene Solvent. It is estimated that payback of initial capital expenditures have already been achieved by reducing virgin Terpene purchases and reducing Spent Terpene waste disposal.

As stated in Sub-section 5.2.1: recycling (cleaning and re-use) of solvent contaminated shop towels has effectively eliminated the waste stream.

5.2.4 Good Operating Practices

Alcan Packaging - New Hyde Park is committed to reducing hazardous waste and preventing its generation in all our manufacturing, maintenance and related activities. Good operating practices are imperative to minimizing hazardous waste generation at the source, and are vital to our efforts of further reducing hazardous waste generation from our operations.

Good operating practices provide an economically effective means of reducing hazardous waste generation through improved scheduling, materials usage, revised press maintenance requirements, handling and storage, preventative maintenance, and inventory control. It also encourages the active participation of company employees.

6.0 HAZARDOUS WASTE MINIMIZATION POLICIES

Alcan Packaging is an industry leader in flexible label manufacturing. (We) place great importance on manufacturing our products in a safe, efficient and environmentally sound manner. We are committed to conducting all operations with respect for the environment, for the benefit of our employees, customers and the general public. APNHP is committed to reducing hazardous waste and preventing its generation in all of our manufacturing operations. Adherence to our Hazardous Waste Minimization Plan is of principal importance.

APNHP is committed to providing an effective environmental, health and safety program at all of its facilities. We strictly adhere to all applicable environmental, health and safety regulations.

6.1 EHS Steering Team

Our New Hyde Park facility has created an EHS Steering Team (formerally called the Hazardous Waste Minimization Team), with one of its objectives being pollution prevention. An important pollution prevention goal for the Team is to implement company policies and procedures to minimize hazardous waste generation in an environmentally sensitive manner.

6.1.1 Membership

The Team shall be comprised of representatives of most functional areas within APNHP including, but not be limited to: top management, manufacturing, supervisory, environmental, health & safety, scheduling, quality assurance and administration departments.

6.1.2 Charter

The Team shall adhere to and implement the following hazardous waste minimization objectives:

- Conduct all operations with respect for the environment and in compliance with all applicable environmental, health and safety rules, regulations and policies.
- Encourage recycling and the re-use of chemical wastes.
- Apply the best available practical technology to reduce and ultimately prevent chemical releases during manufacturing.
- Monitor progress toward the achievement of the objectives in the Hazardous Waste Minimization Plan.
- Ensure the full participation of all New Hyde Park employees in the Waste Minimization and Prevention Program.
- Coordinate training for all New Hyde Park employees on the Waste Minimization and Prevention Program and the objectives.

6.1.3 Meetings

At a minimum, meetings are held on a quarterly basis. The agenda will be published prior to the meeting and the minutes will be published in a timely manner.

6.2 Compliance Program

Our employees receive regular RCRA training so that each one understands our policies with respect to safety and the environment. APNHP has updated its environmental, health and safety manual, which details all applicable policies and procedures to sustain an effective compliance program. APNHP conducts in-house audits on operations to determine compliance with its policies and procedures. Our insurance and brokerage consultants also conduct scheduled environmental, health and safety surveys to assist us in maintaining our Environmental, Health and Safety Program. Routine and periodic audits are an integral part of our environmental, health and safety program.

Adherence to our environmental, health and safety policies and procedures is of central importance. It is through this commitment that we can assure Alcan Packaging - New Hyde Park conformance to sound operational stewardship.

METCO *PERKIN ELMER*

Material Safety Data Sheet

METCO PERKIN-ELMER
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300

Product: METCO 14C, 14E

MSDS No.: METCO / 50-101
Revision No.: 3
Revision Date: February 18, 1993
Original Date of Issue: September 7, 1987

EMERGENCY CONTACT: CHEMTREC 800-424-9300
CALLS OUTSIDE THE UNITED STATES: 202-483-7616

SECTION 1 MATERIAL IDENTIFICATION

Trade/Material Name: METCO 14C, 14E

Description: Metal Powder

Other Designation: SELF-FLUXING ALLOY POWDER

SECTION II COMPOSITION AND TOXICITY

Composition	%	CAS#	OSHA PEL	ACGIH TLV	Toxicity
Carbon	0.6	7440-44-0	5 mg/m³ TWA respirable 10 mg/m³ TWA total dust	2 mg/m³ TWA respirable	
Silicon	3.3	7440-21-3	10 mg/m³ TWA total dust 5 mg/m³ TWA respirable	10 mg/m³ TWA **	
Boron	2.8	7440-42-8	10 mg/m³ TWA as B_2O_3	10 mg/m³ TWA as B_2O_3	
Iron	4	7439-89-6	10 mg/m³ TWA total particulate Fe_2O_3 fume, as Fe	5 mg/m³ TWA Fe_2O_3 fume, as Fe	
Nickel *	75	7440-02-0	1 mg/m³ TWA	1 mg/m³ TWA	
Cobalt *	0.3	7440-48-4	0.05 mg/m³ TWA metal dust and fume, as Co	0.05 mg/m³ TWA metal dust and fume, as Co	
Chromium *	14	7440-47-3	1 mg/m³ TWA	0.5 mg/m³ TWA	

* Indicates toxic chemical(s) subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments & Reauthorization Act (SARA) and supplier notification requirements (40 CFR Part 372).

** Contains no asbestos and <1% crystalline silica.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	**Specific Gravity (H_2O = 1):**	4.4
Vapor Pressure (mmHg):	N/A	**Melting Point:**	1800-2100° F
Vapor Density (Air=1):	N/A	**Percentage Volatiles:**	N/A
Solubility in water (%):	N/A	**Evaporation Rate:**	N/A
Appearance and Odor:	Powder, no odor	**pH of Solution**	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	NONE	**Flammable Limits:**	**LEL %:**	N/A	**UEL%:** N/A

Extinguishing Media: Use Class D Fire Extinguisher.

Special Fire Fighting Procedures: Treat as a metallic fire.

Unusual Fire and Explosive Hazards: Fine metal dusts are flammable and may explode when exposed to heat, flame or oxidizers. Carbon reacts violently with chlorine trifluoride, potassium, fluorine, potassium superoxide. Dusts of carbon may be explosive when exposed to heat, flame or oxides, peroxides, oxosalts, halogens, interhalogens, oxygen, bromates, chlorates, iodates. Silicon may ignite if exposed to flame or oxidizers, do not heat or expose to water. Iron and chromium may ignite if airborne in the presence of an ignition source. Cobalt may ignite if airborne in the presence of an ignition source or spontaneously.

SECTION V — REACTIVITY DATA

Material is stable. Hazardous polymerization will not occur.

Incompatibility (Materials to Avoid): Oxidizers, Acids, Sulfur, $Ni(NO_3)_2$; Combustibles. Carbon is incompatible with air, metals, oxidants, unsaturated oils.

Hazardous Decomposition Products: Ozone and nitric oxide are formed by the plasma flame (similar to welding fumes). This action is independent of the metal powder.

SECTION VI — HEALTH HAZARD DATA

COMPONENTS:	SUMMARY OF RISKS:
CARBON:	Hazard by inhalation and eye contact. Inhalation may cause irritation to upper respiratory tract. Eye contact may cause irritation to the eyes. Target Organ(s): Upper respiratory tract, eyes.
SILICON:	No known toxicity associated with inhalation of this form. Under normal use/conditions silicon dioxide is formed. Inhalation of silicon dioxide may cause pneumoconiosis: silicosis. Silicosis is a pulmonary fibrosis characterized by generalized fibrotic changes on X-ray examination, shortness of breath, cough, decreased chest expansion, lessened capacity for work and increased susceptibility to tuberculosis. Target Organ(s): Lungs.

BORON: Hazard by inhalation, skin and eye contact. Pulmonary, skin and eye irritation due to abrasive action.

Target Organ(s): Lungs, skin, eyes.

IRON: Hazard by inhalation. Inhalation may cause Siderosis (benign pneumoconiosis).

Target Organ(s): Lungs.

NICKEL: Hazard by inhalation and skin contact. Inhalation may cause cancers of the lung and nasal sinuses. Skin contact may cause dermatitis. Nickel is found to be a potential carcinogen in IARC Monographs. Nickel is listed in the NTP Annual Report on Carcinogens.

Target Organ(s): Respiratory tract, skin.

COBALT: Hazard by inhalation and skin contact. Inhalation may cause progressive, diffuse pneumonia, respiratory sensitization characterized by cough, wheezing and shortness of breath. Skin contact may cause allergic dermatitis or eczema. Cobalt is found to be a confirmed carcinogen by other reference guide sources such as Carcinogenically Active Chemicals published by Van Nostrand.

Target Organ(s): Lungs, skin.

CHROMIUM: Hazard by inhalation and skin contact. Inhalation may cause pneumoconiosis and mucous membrane irritation or ulceration. Skin contact may cause dermatitis, sensitization or chrome lesions. A portion of metallic chromium may be converted during the thermal spray process to hexavalent chromium. Exposure to hexavalent chromium may cause bronchogenic, lung and stomach cancers.

Target Organ(s): Lungs, skin.

Medical Conditions Which May be Aggravated by Contact: Consult a physician.

Primary Entry Route(s): Inhalation, ingestion, skin contact.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

Eye Contact: Irritation.

Skin Contact: Possible dermatitis.

Inhalation: Irritation, pneumoconiosis.

Ingestion: Consult a physician.

FIRST AID

Eye Contact: Flush eye with sufficient amounts of water. If irritation persists, consult a physician.

Skin Contact: Wash with soap and water.

Inhalation: Expose to fresh air. Consult a physician if irritation or respiratory distress persists.

Ingestion: Consult a physician.

SECTION VII — SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Vacuum loose powder only with vacuums equipped with HEPA filtration. Vacuums appropriate for use with metallic dusts should be utilized. Wipe the area clean. Do not use water for clean up operations. Do not sweep. Avoid generating airborne dust.

Waste Management and Disposal: Empty product containers, product waste and cleaning media should be stored and disposed of according to the appropriate local, state and federal regulatory guidelines.

SECTION VIII — SPECIAL PROTECTION INFORMATION

PERSONAL PROTECTIVE EQUIPMENT

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40-60 kW shade #10 and greater than 60 kW shade #11. Goggles may be appropriate during other phases of product handling.

Gloves: Aluminized gloves are to be worn during the plasma spray process. Rubber or other appropriate gloves may be worn as necessary during other phases of product handling to avoid excessive skin contact.

Respirator: A respirator approved by NIOSH with filter cartridges approved for dust/fumes/mists should be worn at all times during the thermal spray process to protect the operator from exposure to dust and fumes. Respirators may also be worn when product handling generates dust.

Clothing/Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (Refer to the appropriate regulatory guidelines.) An aluminized apron is to be worn during the plasma spray process. Other appropriate protective clothing may be worn as necessary during product handling to avoid excessive contact with the skin.

WORKPLACE CONSIDERATIONS

Ventilation: Product should be used with the appropriate local exhaust ventilation provided.

Safety Stations: Eye wash station(s) is/are recommended.

Other: Wash facilities are recommended.

SECTION IX — HANDLING AND STORAGE PRECAUTIONS

Storage/Handling: Store away from incompatibles. Store product containers in a well-ventilated, clean, cool and dry area. Store in a manner to minimize punctures and breakage of containers.

Other Precautions: Avoid ingestion, inhalation and excessive skin contact. Avoid contact of powder with water and oxidizers.

While this information is furnished in good faith, no guaranty is made as to accuracy. This material is for the Thermal Spraying Process, and relevant instructions should be consulted before use. The user assumes all risk in connection with the use of this material. Metco Perkin-Elmer shall in no event be liable for special, incidental or consequential damages in connection with this information or for any damage or injury caused by this material if used for any other purpose than the Thermal Spraying Process or if proper safety practices are not followed.

(Important: Type or print; read instructions before completing form.)

EPA

EPA FORM R

PART IV. SUPPLEMENTAL INFORMATION

Use this section if you need additional space for answers to questions in Part III. Number the lines used sequentially from lines in prior sections (e.g., 5.3.4, 6.1.2, 7.11)

(This space for your optional use.)

ADDITIONAL INFORMATION ON RELEASES OF THE CHEMICAL TO THE ENVIRONMENT ON-SITE (Part III, Section 5.3)

You may report releases of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)			A. Total Release (pounds/yr) A.1 Reporting Ranges 1-10 11-499 500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C.% From Stormwater
5.3 Discharges to receiving streams or water bodies	5.3.___	5.3.___a	[ ] [ ] [ ]		5.3.___b	5.3.___c %
(Enter letter code from Part I Section 3.10 for stream(s) in the box provided.)	5.3.___	5.3.___a	[ ] [ ] [ ]		5.3.___b	5.3.___c %
	5.3.___	5.3.___a	[ ] [ ] [ ]		5.3.___b	5.3.___c %

ADDITIONAL INFORMATION ON TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS (Part III, Section 6)

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)	A. Total Transfers (pounds/yr) A.1 Reporting Ranges 1-10 11-499 500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code in box provided)	C. Type of Treatment/ Disposal (enter code in box provided)
6.1.___ Discharge to POTW (enter location number from Part II, Section 1.) 1	[ ] [ ] [ ]		6.1.___b	
6.2.___ Other off-site location (enter location number from Part II, Section 2.) 2	[ ] [ ] [ ]		6.2.___b	6.2.___c M
6.2.___ Other off-site location (enter location number from Part II, Section 2.) 2	[ ] [ ] [ ]		6.2.___b	6.2.___c M
6.2.___ Other off-site location (enter location number from Part II, Section 2.) 2	[ ] [ ] [ ]		6.2.___b	6.2.___c M

ADDITIONAL INFORMATION ON WASTE TREATMENT METHODS AND EFFICIENCY (Part III, Section 7)

A. General Wastestream (enter code in box provided)	B. Treatment Method (enter code in box provided)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes No
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]
7.___a	7.___b	7.___c	7.___d [ ]	7.___e %	7.___f [ ] [ ]

EPA

EPA FORM R
PART III. CHEMICAL-SPECIFIC INFORMATION (continued)

(This space for your optional use.)

6. TRANSFERS OF THE CHEMICAL IN WASTE TO OFF-SITE LOCATIONS

You may report transfers of less than 1,000 pounds by checking ranges under A.1. (Do not use both A.1 and A.2)	A. Total Transfers (pounds/yr) A.1 Reporting Ranges 1-10	11-499	500-999	A.2 Enter Estimate	B. Basis of Estimate (enter code)	C. Type of Treatment/ Disposal (enter code)
6.1.1 Discharge to POTW (enter location number from Part II, Section 1.) 1 .	[ ]	[ ]	[ ]		6.1.1b	
6.2.1 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.1b	6.2.1c M
6.2.2 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.2b	6.2.2c M
6.2.3 Other off-site location (enter location number from Part II, Section 2.) 2 .	[ ]	[ ]	[ ]		6.2.3b	6.2.3c M

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

7. WASTE TREATMENT METHODS AND EFFICIENCY

☐ Not Applicabl;e (NA) - Check if no on-site treatment is applied to any waste stream containing the chemical or chemical catagory

A. General Wastestream (enter code)	B. Treatment Method (enter code)	C. Range of Influent Concentration (enter code)	D. Sequential Treatment? (check if applicable)	E. Treatment Efficiency Estimate	F. Based on Operating Data? Yes	No
7.1a	7.1b	7.1c	7.1d [ ]	7.1e %	7.1f [ ]	[ ]
7.2a	7.2b	7.2c	7.2d [ ]	7.2e %	7.2f [ ]	[ ]
7.3a	7.3b	7.3c	7.3d [ ]	7.3e %	7.3f [ ]	[ ]
7.4a	7.4b	7.4c	7.4d [ ]	7.4e %	7.4f [ ]	[ ]
7.5a	7.5b	7.5c	7.5d [ ]	7.5e %	7.5f [ ]	[ ]
7.6a	7.6b	7.6c	7.6d [ ]	7.6e %	7.6f [ ]	[ ]
7.7a	7.7b	7.7c	7.7d [ ]	7.7e %	7.7f [ ]	[ ]
7.8a	7.8b	7.8c	7.8d [ ]	7.8e %	7.8f [ ]	[ ]
7.9a	7.9b	7.9c	7.9d [ ]	7.9e %	7.9f [ ]	[ ]
7.10a	7.10b	7.10c	7.10d [ ]	7.10e %	7.10f [ ]	[ ]

[ ] (Check if additional information is provided on Part IV-Supplemental Information.)

8. POLLUTION PREVENTION: OPTIONAL INFORMATION ON WASTE MINIMIZATION

(Indicate actions taken to reduce the amount of the chemical being released from the facility. See the instructions for coded items and an explanation of what information to include.)

A. Type of Modification (enter code)	B. Quantity of the Chemical in Wastes Prior to Treatment or Disposal: Current reporting year (pounds/year)	Prior year (pounds/year)	Or percent change (Check (+) or (-))	C. Index	D. Reason for Action (enter code)
M			☐ + ☐ - %	.	R

Field Investigation
Article XI Facility
Nassau County Department of Health

☐ Tank Test ☐ Retest
☒ Tank Removal ☐ Compliant
☐ Installation

Date of Job 2/2/88 Time _____ Facility ID# ~~06326~~ 54043
Date Received 1/28/88 Time _____ Spill No. _____
Contractor Rice Tank
Telephone # _____

033 H88 R12

Establishment Name MetCo
Address Duffy Ave (325)
Town Hicksville Telephone # _____
Cross Street: _____
No. of Tanks 1 Type of Test _____

Tank #							
System Test							
Tank Test							
Size							
Product							
Leak Rate							
Pass/Fail							
Fee							
Fee Paid							
Retest Needed							

Tank Removal

Tank #	1	2					
Visible Hole		NO					
# Holes		None.					
Size	10,000	20000					
Location							
Photo							

Excavation: ☒ Clean ☐ Contanimated Soil ☐ Free floating oil

Soil Removed (Y/N) Amount

Installation: Tank size _____ Approved plans ☐ Yes ☐ No

Notes: TANK #1 ABANDONED IN PLACE - TOP CUT - TANK CLEANED AND FILLED WITH SAND - SITE WELL (one) TO BE INSTALLED SOUTH OF TANK. 2/10/88 - INSPECTED SITE - NO SITE WELLS IN AS YET.

Inspector _____ Supervisor _____

Employee Number _____ Date _____ ☐ Continued on Reverse Side

[illegible] HP Tracker
#4564H

RONMENTAL
ETH
tinuation Sheet
ssau County Health Department

Owner or Agent : Metco
Address: 325 Duffy ave. Hicksville

Inspector

DATE	COMMENTS
2/17/88	Mr O'Leary & I met with Frank F Buscher Jr. and John Murphy* at their location. We gave them a copy of article 12 regulations and discussed site well installation. They have contacted Marine Pollution. The well will be located 10-15' due south of edge of tank: R. Morris
	* JWP Energy System Inc.
2/26/88	SITE INSPECTION REVEALED SITE WELLS NOT INSTAL. AS YET. McCloskey
7/15/88	SPOKE TO MARINE POLLUTION CONTROL - JOHN EMINGTON - SITE WELL INSTALLED IN MAY 88 - They ARE MONITORING IT. - McCloskey

EH 109a 1/68
DH-1198, 9/71

JWP ENERGY SYSTEMS INC.
405A OAKWOOD ROAD
HUNTINGTON STATION, NEW YORK 11746
516-673-7223

August 9, 1989

TO Metco

1101 Prospect Avenue

Westbury, New York 11590

Att: Mr. H. Hockman

Invoice No. 101

Re: Monitor Observation Well

Metco: 325 Duffy Avenue
Hicksville, NY

As per Article II, Nassau County Health Department

Observations: $125.00/Observation and Test

9/6/88	12/17/88
9/12/88	12/28/88
9/19/88	1/4/89
9/26/88	1/13/89
10/9/88	1/17/89
10/11/88	1/27/89
10/17/88	2/1/89
10/24/88	2/7/89
11/4/88	3/10/89
11/23/88	4/12/89
11/30/88	5/11/89
12/7/88	7/11/89

24 Observations and Test @ $125.00	$3,000.00
Tax	240.00
TOTAL AMOUNT DUE	$3,240.00

This completes requirements for the Test Well.
We are forwarding a report to Nassau County.
Attached is a copy of our cover letter.

JWP ENERGY SYSTEMS INC.
A SUBSIDIARY OF JWP INC.
405A OAKWOOD RD. • HUNTINGTON STATION, NY 11746 • 516 673-7828

RECEIVED
JAN 29 1990

January 24, 1990

Nassau County Health Department
Bureau of Water Pollution Control
240 Old Country Road
Mineola, New York 11501

Attention: Ms. Robin Rhode

Dear Ms. Rhode:

This will confirm the closing and observation of well installed by us for Metco, 325 Duffy Avenue, Hicksville, New York. This resolves the "Abandonment of Underground Facilities" as per 12.2 (VI) under Ordinance Article XI at this location.

Thank you for your cooperation and we look forward to working with you in the future.

Very truly yours,

J.W.P. ENERGY SYSTEMS INC.

Frank E. Buschor Jr.

Frank E. Buschor, Jr.
Vice President Industrial

FB:cy
cc: C. Conroy
J. Goff

JWP ENERGY SYSTEMS INC.
A SUBSIDIARY OF JWP INC.
405A OAKWOOD RD. • HUNTINGTON STATION, NY 11746 • 516 673 7223

August 10, 1989

Nassau County Health Department
Bureau of Water Pollution Control
240 Old Country Road
Mineola, New York 11501

Attention: Mr. Tom Norris

Dear Sir:

Attached are well observations performed under my contract for Metco, 325 Duffy Avenue, Hicksville, New York. Your records indicate we abandoned an underground fuel oil tank at this site in July of 1988. As per Article XI, Section 12.2(6), the observation well was installed, properly observed and tested for the full 12 month period. All tests were performed by Mr. Todd Klein of Marine Pollution Control. This concludes tank abandonment requirements at this location.

Advise if any additional information is required.

Very truly yours,

JWP ENERGY SYSTEMS INC.

Frank E. Buschor, Jr.
Vice President Industrial

FB:cy
Encl.

THOMAS S. GULOTTA
COUNTY EXECUTIVE

JOHN J. DOWLING, M.D., M.P.H.
COMMISSIONER

STANLEY JUCZAK, P.E., M.C.E.
DIRECTOR
CENTER FOR ENVIRONMENTAL PROTECTION

NASSAU COUNTY
DEPARTMENT OF HEALTH
240 OLD COUNTRY ROAD, MINEOLA, N.Y. 11501

August 11, 1989

Metco
Mr. P. Tighe
325 Duffy Ave.
Hicksville, N.Y. 11801

Dear Facility Operator:

We have received the final site well monitoring report for your abandoned fuel oil tank. In the interest of safety and to prevent accidental contamination of the ground water we suggest that the well be closed in conformance with the enclosed DEC specifications.

If you have any questions regarding this matter please contact me at 535-3315.

Very truly yours,

Thomas R. Norris
Senior Public Health Sanitarian
Bureau of Land Resources Management

TRN:ah

Enc.

#2256I

RECEIVED
AUG 16 1989

NEW YORK STATE
DEPARTMENT OF ENVIRONMENTAL CONSERVATION
Building 40 - SUNY Campus
Stony Brook, New York 11790

SPECIFICATIONS

SEALING AND ABANDONING SITE WELLS

1. The portion of the well occupied by the screen shall be filled with clean sand and gravel, but in no case shall this filling extend above the top of the screen.

2. The entire casing including riser pipe and annular spaces between casing shall be filled with cement grout. Cement grout shall contain not more than six gallons of water per bag. The grout shall be placed under pressure through pipes to the bottom of the space to be filled in order to prevent dilution of grout. Placing of grout shall be continuous until grout appears at top of casing, at which time the grout pipe may be withdrawn.

Tel: 654-4900

Fax: 654-4935

MPC ENVIRONMENTAL SERVICES
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville - Metco DATE 7-11-89 TIME 1400

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	51.16			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metro DATE 5/11/89 TIME 1430

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	54.98			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Mitco DATE 4/12/89 TIME 1300

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.58			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metro DATE 3/10/89 TIME 1300

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	56.04			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metro DATE 2/7/89 TIME 1000

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55' 9 1/8"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metco DATE 2/1/89 TIME 1300

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55' 8 3/4"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Meteo DATE 1/27/89 TIME 1500

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55' 8 1/4"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Test Completed

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Patco DATE 1/17/88 TIME 1500

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55' 6½"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Mitco DATE 1/13/89 TIME 1100

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55' 7 1/2"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: HICKSVILLE - METCO DATE 1-4-89 TIME 1045

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.74			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Meteor DATE 12/28/88 TIME 1400

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	56' 6 3/4"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 12-17-86 TIME 0830

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.67			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metco DATE 12-7-88 TIME

STORAGE TANK LEVEL 1. 2. 3. 4.

CUMULATIVE TOTAL

PUMPING RATE RW1 RW2 RW3 RW4

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.72			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL
P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metco DATE 11-30-89 TIME 1400

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.36			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Holtsville [illegible] DATE 11-23-86 TIME 1230

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	–			24.			
RW 2.	–			25.			
RW 3.	–			26.			
RW 4.	–			27.			
1.	55.44			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metro DATE 11-4-88 TIME 1245

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.90			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			—
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 10-24-88 TIME 1430

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.88			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville - Meteo DATE 10-17-88 TIME 1130

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	56.11			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville - Metco DATE 10-11-88 TIME 1300

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.94			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 10-9-88 TIME 1000

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.88			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metro DATE 9-26-88 TIME 1130

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.62			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 9-19-88 TIME 1200

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	–			24.			
RW 2.	–			25.			
RW 3.	–			26.			
RW 4.	–			27.			
1.	55.41			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville - Metco DATE 9-12-88 TIME 1100

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	–			24.			
RW 2.	–			25.			
RW 3.	–			26.			
RW 4.	–			27.			
1.	55.52			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 9-6-88 TIME 1430

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55'5 3/8"			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

T.K.

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville Metco DATE 8-31-88 TIME 1430

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.				24.			
RW 2.				25.			
RW 3.				26.			
RW 4.				27.			
1.	55.38			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Metco Hicksville DATE 8-22-88 TIME 1130

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.14			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

Tel: 654-4900

MARINE POLLUTION CONTROL

P.O. BOX 2220
EAST PATCHOGUE, N.Y. 11772

LOCATION: Hicksville MTCo DATE 8-17-88 TIME 1200

STORAGE TANK LEVEL 1. _____ 2. _____ 3. _____ 4. _____

CUMULATIVE TOTAL _____

PUMPING RATE RW1 _____ RW2 _____ RW3 _____ RW4 _____

WELL #	DTW	DTP	PRODUCT	#	DTW	DTP	PRODUCT
RW 1.	-			24.			
RW 2.	-			25.			
RW 3.	-			26.			
RW 4.	-			27.			
1.	55.14			28.			
2.				29.			
3.				30.			
4.				31.			
5.				32.			
6.				33.			
7.				34.			
8.				35.			
9.				36.			
10.				37.			
11.				38.			
12.				39.			
13.				40.			
14.				41.			
15.				42.			
16.				43.			
17.				44.			
18.				45.			
19.				46.			
20.				47.			
21.				48.			
22.				49.			
23.				50.			

West Virginia Department of
Commerce, Labor & Environmental Resources
Air Pollution Control Commission
1558 Washington Street, East
CHARLESTON, WEST VIRGINIA 25311

[PROPOSED]

45CSR27

TITLE 45
LEGISLATIVE RULES
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION

SERIES 27
TO PREVENT AND CONTROL THE EMISSIONS OF TOXIC AIR POLLUTANTS

Index.

§45-27-1. General.

§45-27-2. Definitions.

2.1. "Air Pollution"

2.2. "Air Pollution Control Device"

2.3. "BAT" 'Best Available Technology'

2.4. "Chemical Processing Unit"

2.5. "Commission"

2.6. "Director"

2.7. "Plant" 'Facility'

2.8. "Person"

2.9. "Stack"

2.10. "Toxic Air Pollutant"

2.11. "Toxic Air Pollutant Service"

2.12. "Modification"

§45-27-3. Chemical Processing Units.

§45-27-4. Fugitive Emissions of Toxic Air Pollutants.

§45-27-5. Tanks.

§45-27-6. Wastewater from Chemical Processing Units.

§45-27-7. Loading and Unloading Railcars and Tank Trucks.

§45-27-8. Registration.

§45-27-9. Permits.

§45-27-10. Reports, Records and Testing.

§45-27-11. Compliance Programs and Schedules.

§45-27-12. Variance.

§45-27-13. Inconsistency Between Regulations.

45CSR27

TITLE 45
LEGISLATIVE RULES
WEST VIRGINIA AIR POLLUTION CONTROL COMMISSION

SERIES 27
TO PREVENT AND CONTROL THE EMISSIONS OF TOXIC AIR POLLUTANTS

§45-27-1. **General.**

1.1. **Scope.**

The purpose of Regulation 27 is to prevent and control the discharge of toxic air pollutants by requiring the application of best available technology.

1.2. **Authority.**

This regulation is issued under the authority of the West Virginia Code, Chapter 16, Article 20, Section 5. This regulation relates to West Virginia Code, Chapter 16, Article 20, Sections 1 through 13 inclusive.

1.3. **Filing Date.**

This regulation was promulgated or last amended on the 1st day of May, 1990, was filed with the office of the Secretary of State the 1st day of May, 1990. Further, this regulation was filed pursuant to West Virginia Code, Chapter 29A, Article 2, Section 5 on the 1st day of May, 1990 in the office of the Secretary of State.

1.4. **Effective Date.**

The effective date of this regulation is the 30th day of June, 1990.

1.5. **Type.**

This regulation is a legislative rule as defined in West Virginia Code, Chapter 29A, Article 2.

§45-27-2. **Definitions.**

2.1. "Air Pollution", 'statutory air pollution' has the meaning ascribed to it in Section 2, of Chapter 16, Article 20 of the Code of West Virginia, as amended.

2.2. "Air Pollution Control Device" means any equipment used for the purpose of preventing, reducing, or controlling the emission of toxic air pollutants into the open air.

2.3. "BAT", 'Best Available Technology' means an emissions limitation requiring the application of the maximum degree of reduction and control which the Director, on a case-by-case basis, determines is achievable for each toxic air pollutant which would be emitted from any stack, pipe, air pollution control device, or from any other equipment or facilities associated with a chemical processing unit. In the case of chemical processing units constructed or modified after the effective date of this regulation, BAT shall not be less stringent than the most stringent emissions level that is achieved in practice by similar sources or processes. For existing chemical processing units, BAT may be less stringent than requirements for new or modified units. For all facilities, BAT shall represent the maximum degree of emission reduction that the Director determines is achievable taking into consideration the cost of achieving such emission reduction, and public health and environmental impacts. No BAT proposal shall be approvable that represents a level of control less stringent than any requirement for

a chemical processing unit under 40CFR61 or 40CFR60. BAT measures shall include but not be limited to measures which:

a. reduce or eliminate the emission rate of toxic pollutants through process changes or substitution of materials,

b. enclose or seal equipment or systems to eliminate toxic air pollutant emissions,

c. collect, capture, destroy and/or otherwise treat toxic air pollutants released from a process, stack, storage, or fugitive emissions point,

d. are work practice or operational methods.

2.4. "Chemical Processing Unit" means an assembly of reactors, tanks, distillation columns, heat exchangers, vaporizers, compressors, dryers, decanters, and/or other equipment used to treat, store, manufacture, or use toxic air pollutants. For the purpose of this regulation, the term chemical processing unit includes surface coating equipment or similar equipment utilizing a toxic air pollutant as a solvent or for other purposes but does not include equipment used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.

2.5. "Commission" means the West Virginia Air Pollution Control Commission.

2.6. "Director" means the Director of the West Virginia Air Pollution Control Commission.

2.7. "Plant" 'Facility' means all chemical processing units existing on one or more contiguous or adjacent properties, which are owned by or under the control of the same person or persons.

2.8. "Person" means any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any

municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country, and any firm, partnership or association of whatever nature.

2.9. "Stack", for the purpose of this regulation, means, but is not limited to, any stack, vent, duct, control equipment exhaust, or similar apparatus, from which a toxic air pollutant is or may be emitted into the open air.

2.10. "Toxic Air Pollutant" means any of the following chemicals: Acrylonitrile, Allyl chloride, Benzene, 1,3-Butadiene, Carbon tetrachloride, Chloroform, Ethylene dichloride, Ethylene oxide, Formaldehyde, Methylene chloride, Propylene oxide, Trichloroethylene, Vinyl chloride, and Vinylidene chloride.

2.11. "Toxic Air Pollutant Service" means for the purpose of this regulation that a piece of equipment such as a pump, valve or flange contains or contacts a process fluid containing 10% or more by weight of a toxic air pollutant.

2.12. "Modification" or "Modified" means any physical change or change in the method of operation of a chemical processing unit which increases its potential to emit a toxic air pollutant.

§45-27-3. **Chemical Processing Units.**

3.1. Except as provided in Sections 3.2 and 3.3 of this regulation, the owner or operator of a plant that discharges or may discharge a toxic air pollutant into the open air in excess of the amount shown in the Table A shall employ BAT at all chemical processing units emitting the toxic air pollutant: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such regulation or standard.

Table A

	Pounds/year
Acrylonitrile	500
Allyl Chloride	10,000
Benzene	1,000
1,3 Butadiene	500
Carbon Tetrachloride	1,000
Chloroform	1,000
Ethylene Dichloride	1,000
Ethylene Oxide	500
Formaldehyde	1,000
Methylene Chloride	5,000
Propylene Oxide	5,000
Trichloroethylene	10,000
Vinyl Chloride	1,000
Vinylidene Chloride	2,000

3.2. A BAT program for a plant containing multiple chemical processing units or emission sources may, for each chemical, consider the overall effectiveness of emissions control measures within a unit or the plant. All BAT programs shall fully consider the additive or cumulative health and environmental impacts of multiple pollutant and multiple unit emissions.

3.3. The Director may exempt a chemical processing unit from the BAT requirement if the owner/operator can demonstrate to the satisfaction of the Director that the maximum toxic air pollutant emissions from the source or unit, taking into consideration all other toxic air pollutant sources at the plant and other sources in the area of the plant, cause insignificant impacts upon public health and the environment.

If the Director so exempts a unit from the BAT requirement, the maximum emission rates of toxic air pollutants discharged to the air from the unit shall be set forth as enforceable limitations within the compliance program required or established under Section 11 of this regulation.

3.4. All chemical processing units shall be properly instrumented to alert the operator of process upsets, leaks, and other abnormal discharges of toxic air pollutants into the air and the operator shall record all such incidents and the associated emissions estimated from direct measurements of toxic air pollutant concentration and/or calculations using other process measurements.

3.5. The Director may on a case-by-case basis require the installation and proper operation of monitoring devices to continuously or intermittently determine the concentrations or mass emission rates of toxic air pollutants normally or routinely emitted to the air.

§45-27-4. **Fugitive Emissions of Toxic Air Pollutants:**

4.1. All owners and operators subject to the requirements of this regulation shall, by application of BAT, prevent and control fugitive emissions to the air of toxic air pollutants as a result of leakage from equipment in toxic air pollutant service including but not limited to, pump seals, compressor seals, valves, sampling connections, open-ended lines, safety relief valves, and flanges. In no event shall any equipment standard, program, or work practice less stringent than required under 40CFR61, Subpart V be deemed to represent BAT for control of toxic air pollutant emissions: Provided, that any source or equipment specifically subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation or standard. Equipment to be used in toxic air pollutant service installed after the effective date of this regulation shall, to the maximum extent possible, be designed and operated so as to prevent leaks of toxic air pollutants.

4.2. In quantifying plant or facility emissions of a toxic air pollutant pursuant to determining the applicability of this regulation under Section 3.1, emissions from potentially leaking equipment components which handle streams containing the toxic air pollutant shall be included. Such quantification shall be in accordance with estimation methods approved by the Director.

§45-27-5. **Tanks.**

5.1. Owners and operators of chemical processing units or facilities subject to the requirements of this regulation shall prevent and control working and filling losses of toxic air pollutants from tanks by routing such tank emissions to BAT control devices. The Director may approve the use of floating roof storage tanks as BAT, provided that such tanks are designed and operated in a manner which minimizes toxic air pollutant emissions taking into consideration the toxic air pollutant emission rate, tank size, and control efficiency associated with such tanks. On a case-by-case basis, the Director may exempt very small process or storage tanks or tanks storing material mixtures containing low mass fractions of toxic air pollutants from the BAT requirement taking into consideration the actual level of emissions control and/or the toxic air pollutant emission rate from the tank.

§45-27-6. **Wastewater from Chemical Processing Units.**

6.1. Owners and operators of chemical processing units and/or wastewater treatment systems subject to this regulation shall employ BAT to remove and control or destroy toxic air pollutants from wastewater at the source and/or apply BAT at the wastewater treatment plant to prevent or control the discharge of toxic air pollutants resulting from air stripping or evaporation: Provided, that this provision shall not be more stringent than any specifically applicable federal regulation or standard.

6.2. In quantifying total plant or facility emissions of a toxic air pollutant pursuant to determining the applicability of this regulation under Section 3.1, emissions

of a toxic air pollutant resulting from the discharge of the toxic air pollutant to wastewater streams and the subsequent treatment of wastewater shall be included. Emissions shall be determined by a method specified or approved by the Director.

6.3. The Director may exempt wastewater treatment units, tanks, or equipment from the requirement for BAT if the owner or operator can demonstrate to the satisfaction of the Director that air stripping or volatilization and emission to the air of toxic air pollutants from such sources does not occur or is insignificant from the standpoint of emissions and/or impact upon public health.

§45-27-7. **Loading and Unloading Railcars and Tank Trucks.**

7.1. Owners and operators of chemical processing units or facilities subject to the requirements of this regulation shall employ BAT to prevent or control toxic air pollutant discharges in the loading and unloading of railcars and tank trucks with toxic air pollutants or material mixtures containing toxic air pollutants.

§45-27-8. **Registration.**

8.1. Not later than ninety (90) days after the effective date of this regulation, all persons owning and/or operating an existing chemical processing unit(s) which discharges or may discharge a toxic air pollutant shall register each such chemical processing unit with the Commission. The information required for registration shall be determined by the Director, and shall be provided in the manner specified by the Director.

§45-27-9. **Permits.**

9.1. No person shall construct, modify, or relocate chemical processing unit(s) without first obtaining a permit in accordance with the provisions of WV Code 16-20-11b, as amended, and all applicable regulations of this agency. If the construction of a new chemical processing unit or the modification of an existing chemical processing unit at a plant increases total plant emissions of a toxic air pollutant to a level in

excess of that in Table A, all chemical processing units emitting the pollutant shall become subject to BAT requirements or alternatively total plant emissions of the toxic air pollutant shall be reduced below the level of Table A.

§45-27-10. **Reports, Records and Testing.**

10.1. At such reasonable times as the Director may designate, the owner or operator of any chemical processing unit may be required to conduct or have conducted tests to determine the compliance with this regulation. Such tests shall be conducted in such manner as the Director may specify or approve and be filed on forms and in a manner specified by the Director. The Director, or his duly authorized representative, may at his option witness or conduct such tests. Should the Director exercise his option to conduct such tests, the operator will provide all the necessary sampling connections and sampling ports to be located in such manner as the Director may require, power for test equipment, and the required safety equipment such as scaffolding, railings, and ladders to comply with generally accepted good safety practices.

10.2. The Director, or his duly authorized representative, may conduct such other tests as he may deem necessary to evaluate toxic air pollutant emissions.

10.3. Written records shall be maintained that identify all pumps, compressors, pressure relief valves, valves, sampling connections, open-ended lines, and flanges of a chemical processing unit that are in toxic air pollutant service. These records shall record the results of all monitoring and inspections, emissions control measures applied and the nature, timing, and results of repair efforts.

10.4. The emission to the air of any toxic air pollutant resulting from an abnormal release or spill in excess of the following amounts shall be reported to the Director or his authorized representative not later than 24-hours after the chemical processing unit owner/operator has knowledge of such emission:

a. For ethylene oxide, and vinyl chloride, one (1) pound

b. For acrylonitrile and butadiene, ten (10) pounds

c. For all other toxic air pollutants, fifty (50) pounds.

The owner or operator shall file a written report with the Director stating the details of all such incidents resulting in the emission of more than fifty (50) pounds of any toxic air pollutant within seven (7) days of the occurrence. The owner/operator shall submit to the Director, at his request, records of all abnormal toxic air pollutant discharges to the air.

10.5. Any period of failure or inoperability of air pollution control equipment required by this regulation shall be reported to the Director not later than 24-hours after the owner/operator has knowledge of such failure. Such reports shall be made in conjunction with necessary requests for variances as provided under Section 12.

§45-27-11. **Compliance Programs and Schedules.**

11.1. In the event that a chemical processing unit in existence prior to the adoption of this regulation does not meet the requirements of this regulation an acceptable program to fully comply with this regulation shall be submitted to the Director by July 1, 1991 by the owner or operator. Any compliance program for a chemical processing unit submitted to the Director on or before April 1, 1991 and approved by the Commission within a Consent Order on or before June 30, 1991 shall be accepted as and deemed to be a voluntary emission reduction plan. A compliance program may be submitted to the Commission for individual chemical processing units or alternatively a single compliance program for all chemical processing units at one plant may be submitted.

11.2. In proposing a BAT plan, the owner or operator must fully document and describe all potentially applicable emissions control measures or technologies and fully justify that any selected control measure providing less emission reduction than

the most stringent measures achieved in practice for similar processes is technologically or economically infeasible for application to a particular chemical process unit requiring BAT.

11.3. Upon approval by the Commission of a compliance program, the owner or operator of a chemical processing unit or facility is not in violation of this regulation so long as the approved or amended compliance program is observed: Provided, that the Commission may re-evaluate toxic air pollutant emissions, control technology employed, and risks to public health at the end of a seven (7) year period following completion of each compliance program and may require additional or improved control measures.

11.4. Any compliance programs or Consent Orders that have previously been approved by the Commission shall remain in effect unless an emissions control program required by this regulation must replace a prior program with more stringent control measures.

11.5. All compliance plans and orders required or approved under this regulation shall contain detailed compliance plans with increments of progress, schedules or completion dates and, to the extent possible, shall set forth maximum compliance emission rates for controlled sources upon completion of the compliance program.

11.6. In the event that an owner or operator subject to this regulation fails to submit an acceptable compliance program by July 31, 1991, the Commission shall, by Order, determine the compliance program.

§45-27-12. **Variance.**

12.1. Due to unavoidable malfunction of equipment or other conditions resulting in emissions exceeding a level established in the compliance program, emissions exceeding those provided for in this regulation may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such

application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Commission provided a corrective program has been submitted by the owner or operator ahd approved by the Commission.

§45-27-13. **Inconsistency Between Regulations.**

13.1. In the event of any inconsistency between this regulation and any other regulation of the Commission, the resolution of such inconsistency shall be resolved by the determination of the Director and such determination shall be based upon the application of the more stringent provision, term, condition, method, rule or regulation.

G. Dale Farley
Secretary
West Virginia Air Pollution Control Commission

S... METCO (US) INC.
FEB 1 1 2008
EHS DEPARTMENT

TIER 2 SUBMIT

Facility Submission Guide

November 2007

U.S. Environmental Protection Agency
Chemical Emergency and Preparedness Office
Washington, DC

National Oceanic and Atmospheric Administration
Office of Response and Restoration/
Hazardous Materials Response Division
Seattle, WA

USER'S MANUAL

Table of Contents

Chapter 1 - Introduction

Tier2 in brief
Getting Tier2 Submit
CAMEO in brief
Getting CAMEO
Technical Support

Chapter 2 - What do I need to get Started?

Hardware requirements
Software requirements
Installation procedures
Import last year's Tier2 Submit data into Tier2 Submit 2007

Chapter 3 - Entering Data

P2SUL002320

Entering data for one facility (step by step instruction)
Entering data for multiple facilities (step by step instruction)

Tier2 Field Descriptions
State Tier2 Field Descriptions

Chapter 4 - Modifying Tier2 Submit Data

Add a Facility
Add a Contact
Add a Chemical to Inventory

Delete a Facility
Delete a Contact
Delete a Chemical from Inventory

Change a Facility
Change a Contact
Change a Chemical in Inventory

Chapter 5 - Validating Data

Validate Record
Validation Report

Chapter 6 - Submitting Data!

Submit with only one Facility in Tier2 Submit
Submit with more than one Facility in Tier2 Submit

Chapter 7 - Importing / Exporting

Importing

Exporting

Chapter 8 - Reference Information

Frequently Asked Questions (FAQs)
Hot Buttons
File Menu
Edit Menu
Record Menu
Search Menu
Scripts Menu
Help Menu
Tier2 Field Descriptions
State Tier2 Field Descriptions
Statutes and Regulations
How to report your facility's latitude and longitude

CHAPTER 1 - Introduction

Tier2 Submit is a software program developed by the Environmental Protection Agency (EPA) and National Oceanic Atmospheric Administration (NOAA) for use by facilities to enter and submit Emergency Planning and Community Right-to-Know Act (EPCRA) 311/312 chemical information, commonly known as **Tier II reports**. Tier2 Submit will allow users to enter multiple facilities, chemicals and contacts. The program also includes many of the state's additional data requirements.

You can use Tier2 Submit in two ways:

- **Facilities:** Enter, store, print and export Tier II information for sending to State Emergency Response Commissions (SERCs), Local Emergency Planning Committees (LEPCs) and Fire Departments. Tier2 Submit is designed to help the reporting facility enter the data efficiently and submit the electronic information easily.
- **SERCs, LEPCs & Fire Depts:** Receive Tier2 Submit files from facilities to import into CAMEO or other database applications for emergency planning.

Tier2 Submit is organized into three modules (parts):

- **Facilities module** - where the user enters business name, address, Standard Industrial Code, etc.
- **Contacts module** - where the user enters owner, emergency, and other contact's addresses and phone numbers.
- **Chemicals in Inventory module** - where the user enters chemical property and storage information, etc.

The user can navigate to each of these modules freely to add, delete or edit the

information. Tier2 Submit has virtually unlimited capacity so even companies with thousands of facilities can use the software effectively. Tier2 Submit is also designed with basic and advanced search features, so facilities, SERCs, LEPCs and Fire Departments can search by county or State for efficient regulatory submission or emergency planning tasks.

Getting Tier2 Submit

You can obtain the latest Tier2 Submit information and a free copy of the software at the Tier2 Submit web site http://www.epa.gov/osweroe1/content/epcra/tier2.htm

CAMEO in brief

CAMEO is a suite of software programs you can use to plan for and respond to chemical emergencies. It was developed for frontline chemical emergency planners and responders by EPA's Chemical Emergency Preparedness and Prevention Office (EPA CEPPO) and the National Oceanic and Atmospheric Administration's Office of Response and Restoration (NOAA OR&R). CAMEO includes a set of databases, or modules, a toxic gas dispersion model, and an electronic mapping program. CAMEO runs on Microsoft Windows and Apple Macintosh computers.

You can use CAMEO in two main ways:

- To access, store, and evaluate information needed for emergency response. Firefighters, police officers, and other emergency workers know that a response can be hampered by lack of accurate information about the substance spilled and safe response actions. CAMEO is designed to help you quickly access just such information , when you need it at the scene of a response.
- To develop emergency plans for your community. It's especially designed to help you meet the requirements of the Emergency Planning and Community Right-to-Know Act (EPCRA, also known as SARA Title III).

CAMEO initially was developed because NOAA recognized the need to assist first responders with easily accessible and accurate response information. Since 1988, EPA CEPPO and NOAA OR&R have collaborated to further development of

CAMEO.

Note: While CAMEO is highly compatible with Tier2 Submit and an excellent tool for emergency planning and response, facilities, SERCs, LEPCs and Fire Depts do not need CAMEO to enter and submit Tier II data.

Getting CAMEO

You can obtain the latest CAMEO information and a free copy of the software at the CAMEO web site http://www.epa.gov/osweroe1/content/cameo/index.htm

Technical Support

Tier2 Submit was developed by NOAA and EPA and is now maintained by the RMP Reporting Center. For **Tier2 Submit technical support, please call 301-429-5018 or e-mail: userrmp.usersupport@csc.com**. Monday-Friday 8am-4:30pm Eastern.

For answers to questions about completing your **Tier II information**, please see the Tier II Instructions or contact the Environmental Protection Agency (EPA) RCRA, Superfund & EPCRA Call Center at 1-800-424-9346 or TDD (800) 553-7672. Monday-Friday 9am-5pm Eastern.

TOC < PREV NEXT >

CHAPTER 2 - What do I need to get Started?

In this chapter, you'll find both the system hardware and software requirements in addition to the installation instructions for Tier2 Submit.

Hardware Requirements

PC: Intel-compatible Pentium-class computer; 256 MB RAM, hard disk drive with 60 MB of free hard drive space, SVGA color display.

Macintosh: Macintosh computer with a G3, G4, or G5 processor; 256 MB RAM, hard disk drive with 60 MB of free hard drive space.

Software requirements

You may use Tier2 Submit with either:

PC: Windows 2000 (Service Pack 4), Windows XP (Service Pack 2).

Macintosh: Mac OS 10.3.9 or 10.4.

You also need an Internet browser.

Installation procedures

1. Go to http://www.epa.gov/osweroe1/content/epcra/tier2.htm and follow the instructions for downloading Tier2 Submit 2007.

   The software can take up to 40 minutes to download from a dial up connection

   Important 2006 Users! - DO NOT DELETE Tier2Submit 2006 - You may need your old version (Tier2Submit 2006) to export your data into the new version (Tier2Submit2007).

2. After the software has downloaded, click on the Tier2Submit Installer icon and follow the on screen instructions (Click "Next" and then "Finish" - This will create a **Tier2Submit2007** folder on your computer's C drive).

   If you experience any trouble downloading or installing Tier2 Submit 2007, please contact the RMP Reporting Center at 301-429-5018 or e-mail: userrmp.usersupport@csc.com.

Import last year's Tier2 Submit data into Tier2 Submit 2007

Note: If you have last year's submission file (zip file created during electronic submission) skip to step 2. If you did not create a submission file last year or cannot locate it, start at step 1.

1. Locate last year's Tier2 Submit program. Go to **File** on the top menu bar and click "Create Submission". Choose "All Records" and click "Start Submission Validation". On the next screen click "Electronic File". Next on the "Save As" window, name your submission (e.g., AcmeChem2006.zip) and be sure to name the file with the .zip extension. On the following screen click the "Done" button.

   Now you have successfully exported your 2006 Tier2 Submit data. Now to import into Tier2Submit2007.

2. Open up the Tier2Submit2007 program.

   From the **Facilities** *module in Tier2 Submit (If you are not in the* **Facilities** *module go to* **File** *on the top menu bar and click Open and then select Facilities from the list).*

   Go to **File** from the top menu bar and click "Import/Export".
   Click the "Import Files" button on the next window.
   On the next window choose "Browse" and find the directory where you saved the zip file (Tier2 Submit 2006 submission). Click on the zip file and then click the "Open" button.
   Click OK on the pop up window and then the "Done" button.

   Congratulations you have successfully imported your 2006 data into Tier2Submit2007.

TOC < PREV NEXT >

CHAPTER 3 - Entering Data

In this chapter a new user will learn how to enter Tier II facility, contact and chemical information into Tier2 Submit. The user will also learn how to validate, print and export the data for either a Single Facility or Multiple Facilities

Some points to remember while entering your Tier II information:

- There are three parts to the instructions: **Entering Data, Validating Data** and **Submitting Data.**
- Federally required fields are marked with a blue asterisk * State required fields are marked with a red **X**.
- Your data is automatically saved as you enter it, there is no separate "save" function.
- If you need data field descriptions use Tier2 Field Descriptions or State Tier2 Field Descriptions.

Entering Data - Single Facility

*Federally required fields are marked with a blue asterisk * State required fields are marked with a red X. Your data is automatically saved as you enter it, there is no separate "save" function*

Facilities Module

1. Type in your facility address information and be sure to fill in all the required fields (marked with a blue asterisk *)
2. Next proceed to enter the appropriate data in the **Location & ID** Tab.

Location & ID

3. Enter the SIC code(s) and any Dun&Bradstreet Numbers if applicable (some states require additional IDs).

Note: You must click once into the blank ID type field to bring up the ID type pull down menu.

4. Enter the number of employees at the facility.
5. Enter the facility's Latitude/Longitude if the state has requested it.

   See "How to report a facility latitude and longitude" for further details

6. Enter method of finding Lat/Long and Description of the Lat/Long location if

applicable.

7. Click the box "Check if chemicals are identical to last years submission" if applicable.

   Next proceed to the "Contacts" Tab.

   Contacts

8. Read the Federal Contact requirements on the window and the additional State Contact requirements (if applicable).

9. Click the "Add Contact" button.

10. Enter the Owner/Operator's contact information. If the Owner Operator is a Business name - enter the Business/Corporation Name in the Last Name field.

11. Choose the phone type from the pull down list and then enter the appropriate phone number.

12. Be sure to choose Owner/Operator from the "Contact Type" pull down list (click in the blank field for the pull down list).

13. Click "Done".

14. Click the "Add Contact" button again.

15. Enter the first Emergency Contact's information.

16. Choose the 24-hour phone type from the pull down list then enter the appropriate phone number.

17. Choose Emergency Contact from the "Contact Type" pull down list.

18. Feel free to enter any other phone numbers for the Emergency Contact (**24 hour number is federally required**).

19. Click "Done".

    Back at the Contacts Tab

20. Repeat previous steps for the 2nd emergency contact (if applicable) and for any additional state required contacts.

    When all contacts have been entered

21. Click on the "State Fields" tab.

State Fields

22. Enter the appropriate data into any state requested fields.

Next, click on the **Chem Inventory List** hot button at the top of the Facilities module.

Chemicals in Inventory module

23. Enter Chemical Name (you can use the "Lookup Chemical Name" feature as a tool but please not that this list includes additional chemicals that are not regulated by EPCRA).

24. The CAS# may have been entered automatically if you used the "Lookup Chemical Name" feature. If not, please enter the CAS# if applicable.

25. Check off EHS and/or Trade Secret if applicable.

    The Physical State & Quantity tab should be open. If not, click the "Physical State & Quantity" Tab.

Physical State & Quantity

26. Check off all Physical States, Hazards and Health Effects that apply.

27. Enter the number of days that the chemical is onsite (1-366).

28. Actual weight of chemical is required in some states; you must enter actual weight in the Average and Maximum fields (if marked with an X).

29. All states require the Weight Estimate code. Click the field Estimate Code Average and Maximum field to choose the chemical's weight range from the pull down list.

30. Some states require "Max amount in largest container". Enter amount in pounds if applicable.

31. Click the "Storage Locations" tab.

Storage Locations

32. Choose the appropriate Type, Pressure and Temperature storage codes from the pull down lists.

33. Enter the physical location of the chemical into the Location Field. (If the location is confidential type the word "Confidential" button in the Location field).

34. Enter the amount of the chemical at that particular storage location into the "Amount" field and choose the proper unit from the "Units" pull down list.

Reminder: Federally required fields are marked with a blue asterisk *

State required fields are marked with a red X.

35. If the reported chemical is located in multiple places at the facility repeat steps 32-34 for each location of the reported chemical at the facility.

36. If the reported chemical is a mixture click the "Mixture Components" Tab if the Chemical is a pure substance skip to step 43.

Mixture Components

37. Check off the EHS field if the mixture component is an EHS.

38. Enter the CAS # of the mixture component.

39. Enter the Component's Chemical Name into the Component field (you may use the "Lookup Chemical Name" button to find the component's name).

40. Enter the percentage of the component in the mixture and choose either Weight or Volume from the wt/vol field's pull down list.

41. Repeat steps 37-40 if there are multiple components in the mixture.

42. Click "State Fields" tab.

State Fields

43. Make sure all the appropriate information is entered into any state requested fields.

Next...

44. If the facility is reporting multiple chemicals click the **New Chemical In Inventory** hot button on the top of the window and repeat steps 23-43 for each additional chemical.

After all the chemicals in inventory have been entered

45. Click the **Facility Record** hot button from the top of the window.

Facilities module

46. Click the "Certification" Tab

Certification

47. Check off the appropriate optional attachments if applicable (Some state may require optional attachments).

48. Type in the name of the owner/operator or the owner/operator's authorized representative with official title in the "Signature" Field.

49. Type the date into the "Date" field (e.g., 02/25/05)

If necessary click the **Notes** *tab and type any notes to the receiving agency*

You have finished entering your first facility's chemical inventory information into Tier2 Submit! now on to validation.

Validating the data

50. To check all the fields for completion go to the **Record** menu on the top menu bar and click "Validate Record".

51. If any there is any missing data click the "Go to Field" button on the pop up window - If not, click "OK" and skip to step 55.

52. Enter the missing information into the data field and return to the Facility record screen (To quickly navigate to the Facility Record - Go to **File** from the top menu bar and choose Open, then click "Facilities").

> **Note:** You must be in the **Facilities** module to validate your record.

53. Go to the **Record** menu on the top menu bar and click "Validate Record" again.

54. If there is still missing data repeat steps 50-53 - If not click "OK" and skip to **Submitting Tier II Report** (step 55).

Submitting Tier II reports

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

55. Go to the **File** menu on the top menu bar and click "Create Submission".

    Found Set is the default and your Found set is the one facility you just entered.

56. Click the "Start Submit Validation" button.

    Validation Passed

57. Click the "State Submission Requirements" button to review your state's reporting procedures for 2007

58. After reviewing your state's submission requirements - Choose either "Create Electronic File" (Go to step 59) or one of the Paper Report options (Go to step 61) as a submission method, whichever your state prefers.

Electronic Submission

59. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME in Vermont reporting year 2007 = ACME_VT2007.zip).

Note: If your state prefers to receive the Tier2 Submit on diskette or CD please save the facility's Tier2 Submit file to the media . If your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New for 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

60. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen

Paper Submission

61. After you have clicked "Create Complete Paper Report" or "Create Original Style Paper Report".....click the "Print Report" button.

62. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette/CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm**.

TOC < PREV NEXT >

Entering Data - Multiple Facilities

*Federally required fields are marked with a blue asterisk * State required fields are marked with a red X.*
Your data is automatically saved as you enter it, there is no separate "save" function

Facilities Module

1. Type in your facility address information and be sure to fill in all the required fields (marked with a blue asterisk *)
2. Next proceed to enter the appropriate data in the **Location & ID** Tab.

Location & ID

3. Enter the SIC code(s) and any Dun&Bradstreet Numbers if applicable (some states require additional IDs).

> **Note:** You must click once into the blank ID type field to bring up the ID type pull down menu.

4. Enter the number of employees at the facility.
5. Enter the facility's Latitude/Longitude if the state has requested it.

   See "How to report a facility latitude and longitude" for further details

6. Enter method of finding Lat/Long and Description of the Lat/Long location if applicable.

7. Click the box "Check if chemicals are identical to last years submission" if applicable.

   Next proceed to the "Contacts" Tab.

   Contacts

8. Read the Federal Contact requirements on the window and the additional State Contact requirements (if applicable).

9. Click the "Add Contact" button.

10. Enter the Owner/Operator's contact information. If the Owner Operator is a Business name - enter the Business/Corporation Name in the Last Name field.

11. Choose the phone type from the pull down list and then enter the appropriate phone number.

12. Be sure to choose Owner/Operator from the "Contact Type" pull down list (click in the blank field for the pull down list).

13. Click "Done".

14. Click the "Add Contact" button again.

15. Enter the first Emergency Contact's information.

16. Choose the 24-hour phone type from the pull down list then enter the appropriate phone number.

17. Choose Emergency Contact from the "Contact Type" pull down list.

18. Feel free to enter any other phone numbers for the Emergency Contact (**24 hour number is federally required**).

19. Click "Done".

    Back at the Contacts Tab

20. Repeat previous steps for the 2nd emergency contact (if applicable) and for any additional state required contacts.

    When all contacts have been entered

21. Click on the "State Fields" tab.

State Fields

22. Enter the appropriate data into any state requested fields.

Next, click on the **Chem Inventory List** hot button at the top of the Facilities module.

Chemicals in Inventory module

23. Enter Chemical Name (you can use the "Lookup Chemical Name" feature as a tool but please not that this list includes additional chemicals that are not regulated by EPCRA).

24. The CAS# may have been entered automatically if you used the "Lookup Chemical Name" feature. If not, please enter the CAS# if applicable.

25. Check off EHS and/or Trade Secret if applicable.

    The Physical State & Quantity tab should be open. If not, click the "Physical State & Quantity" Tab.

Physical State & Quantity

26. Check off all Physical States, Hazards and Health Effects that apply.

27. Enter the number of days that the chemical is onsite (1-366).

28. Actual weight of chemical is required in some states; you must enter actual weight in the Average and Maximum fields (if marked with an X).

29. All states require the Weight Estimate code. Click the field Estimate Code Average and Maximum field to choose the chemical's weight range from the pull down list.

30. Some states require "Max amount in largest container". Enter amount in pounds if applicable.

31. Click the "Storage Locations" tab.

Storage Locations

32. Choose the appropriate Type, Pressure and Temperature storage codes from the pull down lists.

33. Enter the physical location of the chemical into the Location Field. (If the location is confidential type "Confidential" into the Location field).

34. Enter the amount of the chemical at that particular storage location into the "Amount" field and choose the proper unit from the "Units" pull down list.

> **Reminder:** Federally required fields are marked with a blue asterisk *
>
> State required fields are marked with a red X.

35. If the reported chemical is located in multiple places at the facility repeat steps 32-34 for each location of the reported chemical at the facility.

36. If the reported chemical is a mixture click the "Mixture Components" Tab if the Chemical is a pure substance skip to step 43.

Mixture Components

37. Check off the EHS field if the mixture component is an EHS.

38. Enter the CAS # of the mixture component.

39. Enter the Component's Chemical Name into the Component field (you may use the "Lookup Chemical Name" button to find the component's name).

40. Enter the percentage of the component in the mixture and choose either Weight or Volume from the wt/vol field's pull down list.

41. Repeat steps 37-40 if there are multiple components in the mixture.

42. Click "State Fields" tab.

State Fields

43. Make sure all the appropriate information is entered into

any state requested fields.

Next...

44. If the facility is reporting multiple chemicals click the New Chemical In Inventory hot button on the top of the window and repeat steps 23-43 for each additional chemical.

After all the chemicals in inventory have been entered

45. Click the Facility Record hot button from the top of the window.

Facilities module

46. Click the "Certification" Tab

Certification

47. Check off the appropriate optional attachments if applicable (Some state may require optional attachments).

48. Type in the name of the owner/operator or the owner/operator's authorized representative with official title in the "Signature" Field.

49. Type the date into the "Date" field (e.g., 02/25/04)

If necessary click the **Notes** *tab and type any notes to the receiving agency*

You have finished entering your first facility's chemical inventory information into Tier2 Submit! now on to validation.

Validating the data

50. To check all the fields for completion go to the **Record** menu on the top menu bar and click "Validate Record".

51. If any there is any missing data click the "Go to Field" button on the pop up window - If not, click "OK" and skip to step 55.

52. Enter the missing information into the data field and return to the Facility record screen (To quickly navigate to the Facility Record - Go to **File** from the top menu bar and choose Open, then click "Facilities").

> **Note:** You must be in the **Facilities** module to validate your record.

53. Go to the **Record** menu on the top menu bar and click "Validate Record" again.

54. If there is still missing data repeat steps 50-53 - If not click "OK" and skip to **Entering data for the next facility** (step 55).

Entering data for the next facility

- If your next facility is in any way similar to the facility previously entered (same addresses, chemicals or contacts) you may duplicate the facility and change the appropriate data to save time. To do this go to **Record** on the top menu bar and choose "Duplicate Facility" then proceed to repeat steps 1-54 changing the appropriate data when necessary .
- If your next facility does not have duplicate or similar information simply click the "New Facility" button on the top the window and repeat steps 1-54.
- If you do not have another facility to enter proceed to step 56

Submitting Tier II reports

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

To create electronic submission files (Tier II Chemical Inventory Reports saved on diskette or attached to e-mail) OR printed paper Tier II Chemical Inventory Reports for a group of facilities you must first start a Search to properly select the facilities you need to submit.

56. Go to **Record** on the top menu bar and select "Show all Records".

57. Go to **Search** on the top menu bar and select "Start Search".

There are several ways you can search Tier2 Submit.

If you would like to ***submit facilities to a particular State*** *:*

- pick the State from the pull down list and then click the "Search" button.

If you would like to ***submit facilities to a particular County*** *:*

- type the County into the "County" field and then click the "Search" button.

After your search Tier2 Submit will display the found facilities in the **Facilities** *module in List view.*

58. Go to the File menu on the top menu bar and click "Create Submission".

    Found Set is the default and your Found set are the facilities you just searched for (e.g., only ACME Chemical facilities in Vermont).

59. Click the "Start Submit Validation".

    Validation Passed

60. Click the "State Submission Requirements" button to review your state's reporting procedures for 2007

61. After reviewing your state's submission requirements - Choose either "Create Electronic File" (Go to step 62) or one of the Paper Report options (Go to step 64) as a submission method, whichever your state prefers.

    Electronic Submission

62. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME facilities in Vermont reporting year 2007 = ACME_VT2007.zip).

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facilities' Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

63. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

64. After you have clicked "Create Complete Paper Report" or "Create Original Style Paper Report", click the "Print Report" button.

65. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette/CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you need to make multiple submissions (to another state or another LEPC) - return to step 56 to start a new search and submit again

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm**.

TOC < PREV NEXT >

Tier2 Submit Field Descriptions

Facilities

[illegible]	[illegible]
Facility Name	Enter the full name of your facility (and company identifier where appropriate).
Department	Enter the full name of the facility department that is reporting
Street Address	
Street	full street address or state road of the facility
City	city in US or territory where facility is located
County	County, parish, island or district where facility is located
Fire District	Local Fire Department District where facility is located
State	State or Territory where facility is located
Zip	5 digit zip code where the facility is located
Mailing Address	
Street	full mailing street address of the facility or facility's parent company
City	mailing address city
State	mailing address State
Zip	mailing address zipcode
Country	mailing address Country
SIC	Enter the primary Standard Industrial Classification (SIC) code

Dun & Bradstreet Facility Code	Primary Dun & Bradstreet number for the facility. The financial officer of your facility should be able to provide the Dun & Bradstreet number. If your firm does not have this information, contact the State or regional office of Dun & Bradstreet to obtain your facility number or have one assigned.
RMP	EPA Facility ID given to the facility by the EPA for use with Risk Management Plan (only if applicable)
NAICS	North American Industry Classification System - Industry Classification System that is replacing the SIC. For more info visit Census - NAICS
Community Right to Know #	Number required by the State of Washington for applicable facilities
State ID	Number /code given to the facility by the state
Latitude	facility latitude
Longitude	facility longitude
Method for determining Latitude and Longitude	What method did the facility use to obtain LAT/LONG
Description of location identified by Latitude and Longitude	Where at the facility was the lat /long obtained (i.e plant entrance)
Number of employees	Number of employees that work at the facility
Check if all chemical in inventory are identical to last years submission	
I have submitted a site plan	Check this box if you have submitted a site plan the state, LEPC and fire dept. or are going to submit a site plan with the Tier 2 Submit submission
I have attached a description of dikes and other safeguards/measures	Check this box if you are going to attach a description of dikes and other safeguards/ measures with the Tier 2 Submit submission
I have attached a list of site coordinates abbreviations	Check this box if you are going to attach a list of site coordinate abbreviations with the Tier 2 Submit submission
Failed Tier2 Submit validation	This box with be automatically checked if the report did not pass the minimum requirements for submission
State / Local Fees Total	Total fees paid

Signature	Name of Owner/operator or authorized representative
Date Signed	Date the Owner/Operator or the authorized representative signed the submission

Contacts

First Name	First Name of contact - if entering the owner/ operator DO NOT enter a corporation name if this facility is not individually owned. Enter the operator.
Last	Last Name of the contact - if entering the owner/operator DO NOT enter a corporation name if this facility is not individually owned. Enter the operator.
Address	Mail address for the contact listed (Only the Owner/Operator is federally required). This mailing address may contain street address, post office box, or rural route number/box number
City	City name for address listed
State	State code for address listed
Zip	Zip code for address listed.
Country	Country for the address listed
Title	Title of the contact
E-mail	E-mail address for the contact
Phone Type	Choose a phone type for the contact from this field's pull down menu *Reminder 24-hour phone is required for the facility's emergency contact*
Phone #	type the appropriate phone number into this field for each phone type *Reminder be sure to include the area code*
Contact Type	Choose the appropriate contact type for each contact from this field's pull down menu *Reminder both Owner/Operator and Emergency Contact are federally required

Chemicals in Inventory

[illegible]	[illegible]
CAS #	Chemical Abstract Service (CAS) registry number - To find the CAS number of a chemical, consult the Material Safety Data Sheet (MSDS) for the chemical or product.
Chem Name	Chemical Name - enter the pure chemical, trade name, brand name or the company's code name for the substance in the space provided.
EHS	check off if the chemical reported is an Extremely Hazardous Substance or contains any ingredients (at a concentration greater then 1%) that are on the Extremely Hazardous Substances List *Tier 2 Submit will automatically check off EHS if an EHS chemical is chosen from the "Lookup Chemical Name" feature
Trade secret	DO NOT check off this data field UNLESS you are the manufacturer of a trade secret product which is being entered under this chemical description block. If you are withholding the name of a chemical in accordance with the criteria specified under EPCRA, Section 322, enter the generic chemical and check off the trade secret box.
Physical State	• Pure - check off if the chemical reported is a pure substance • Mixture - check off if the chemical reported is a mixture • Solid - check off if the chemical reported is a solid when used • Liquid - check off if the chemical reported is a liquid when used • Gas - check off if the chemical reported is a gas when used

Hazards	• Fire - check off if the chemical is or includes products which are flammable, combustible liquid, pyrophoric, and/or oxidizer as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Pressure - check off if the chemical is or includes products which are explosive or a compressed gas as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Reactive - check off if the chemical is or includes products which are unstable reactives, organic peroxides, and/or water reactive as defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR)
Health Effects	• Acute - check of if the chemical is or includes products which are highly toxic, corrosive, toxic, irritants, sensitizers and other chemicals which cause an adverse effect to a target organ, which manifests itself after a long period of time following exposure or after repeated contact with the substance defined by 1910.1200 of the Title 29 Code of Federal Regulations (CFR) • Chronic - check of if the chemical is or includes products which are carcinogens, mutagens or teratogens and other hazardous chemicals that cause an adverse effect to a target organ that manifests itself after a long period of time following exposure or after repeated contact with the substance as defined by 1910.1200 of

	the Title 29 Code of Federal Regulations (CFR)
Chemical information identical to previous year	check off this box if the information for this chemical is the same as the previous reporting year
Days On Site	Total number of days during the calendar year the chemical was located at the facility
Maximum Daily Amount	The maximum amount of each chemical at your facility should be based on the highest quantity of the substance (in pounds) that was stored at any one time during the calender year.
Max Code	Maximum Daily Amount Code- the maximum range of each chemical at your facility should be based on the highest quantity of the substance (in pounds) that was stored at any one time during the calender year.
Average Daily Amount	The average amount of each chemical at your facility should be based on the average quantity of the substance (in pounds) that was stored during the calender year.
Avg Code	Average Daily Amount Code - the average range of each chemical at your facility should be based on the average quantity of the substance (in pounds) that was stored during the calender year.
Max Amount in Largest Container	Maximum amount of reported chemical at your facility in the largest container (in pounds) that was stored at any one time during the calender year.

Storage Codes	• Type - choose the type of chemical storage container that the reported chemical was stored in during the calendar year from the pull down menu in this field • Press - choose the appropriate pressure storage code for the reported chemical from the pull down menu in this field • Temp - choose the appropriate temperature storage code for the reported chemical from the pull down menu in this field
Location	Type the location of each storage container at the facility. Each row represents one storage location (i.e. Chlorine tank #1 = Building 2 Quad 4)
Max Amount at Location	Type the maximum amount of the reported chemical that was stored at this location during the calendar year
Unit	Choose the Unit of measurement for the reported chemical at this location (Most states prefer pounds)
Mixture Components EHS	Check off if the mixture component reported is an Extremely Hazardous Substance or the component contains any ingredients (at a concentration greater then 1%) that are on the Extremely Hazardous Substances List
Mixture Components CAS	Chemical Abstract Service (CAS) registry number - To find the CAS number of a chemical, consult the Material Safety Data Sheet (MSDS) for the chemical or product
Component	Enter the pure chemical, trade name, brand name or the company's code name for the substance in the space provided
%	Number that represents the percentage of the component in the chemical being reported

Wt/Vol	Choose Wt=weight or Vol=volume from the pull down menu to correctly label the component's percentage.

TOC < PREV NEXT >

CHAPTER 4 - Modify Tier II information

In this Chapter you will learn how to modify your Tier II information within Tier2 Submit. This chapter includes instructions on how to:

- Add a Facility
- Add a Contact
- Add a Chemical

- Delete a Facility
- Delete a Contact
- Delete a Chemical

- Change a Facility
- Change a Contact
- Change a Chemical

Add Facility

There are two ways to add a facility

- To add a facility that has similar Facility, Contact or Chemical information to a previously entered facility.

  - Click the rolodex icon on the left of the window to scroll through any previously entered facilities, choose the facility that is the most similiar to the new facility you would like to enter.

  - Go to the **Record** menu on the top menu of the program and choose Duplicate facility. Now you may navigate through the windows to enter/edit the data for the new facility as appropriate.

- To start a completely new facility record - Simply click the New Facility button on the top of the window.

Add Contact

1. Click the Contact List button on top of the window (Tier2 Submit will list the contacts already associated with the selected facility).
2. Click the New Contact button from the top of the window.
3. Enter all the appropriate contact data into the fields.

   In the third block you must associate the new contact to one or more facilities.
4. Click the "Add Facility" button.
5. Click on the facility you want to add the contact to (The facility will have the little black bar to the left of the year when selected).
6. Then click the "Select" button.

   Repeat steps 4-6 if you would like to associate this new contact with any other facilities.

Add a Chemical to Inventory

If you have more than one facility entered into Tier2 Submit here is a quick tip (If you only have one facility skip to step 2).

1. Click the Rolodex icon on the left side of the window to "flip" through the facility records you have already entered - Choose the facility record that you would like to add a chemical to, then...
2. Click the Chem Inventory List button on the top of the window.
3. Click the New Chemical in Inventory button on top of the window.
4. Enter all the appropriate data.

Delete Facility

1. Click the [View List] button from the top of the window.
2. Click on the Facility you would like to delete (a little black bar to the left of the year indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Facility".

   Quick tip - Use the Rolodex on the left side of the window to choose the facility you want to delete then go to the **Record** on the top menu bar and choose Delete Facility.

Delete Contact

1. Click the Contact List button from the top of the window.
2. Click on the Contact you would like to delete (a little black bar to the left of the last name indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Contact".

TOC < PREV NEXT >

TIER2 SUBMIT

Delete a Chemical from Inventory

1. Click the Chem Inventory List button from the top of the window.
2. Click on the Chemical you would like to delete (a little black bar to the left of the last name indicates that the record is selected).
3. Go to **Record** from the top menu bar and choose "Delete Chemical in Inventory".

TOC < PREV NEXT >

TIER2 SUBMIT

Change a Facility's information

1. Click the [View List] button from the top of the window.
2. Click on the Facility you would like to change (a little black bar to the left of the year indicates that the record is selected).
3. Click the [View Record] button.
4. Proceed to navigate through the data fields to change the appropriate information.

   The program will save any changes automatically.

Change a Contact's information

1. Click the Contact List button from the top of the window.
2. Click on the Contact you would like to change (a little black bar to the left of the last name indicates that the record is selected).
3. Click the View Record button from the top of the window.
4. Proceed to navigate through the contact's data fields to change the appropriate information.

   In the third block you can associate the contact with more facilities.
5. Click the "Add Facility" button.
6. Click on the facility you want to add the contact to (The facility will have the little black bar to the left of the year when selected).
7. Then click the "Select" button.

   The program will save any changes automatically

TIER 2 SUBMIT

Change a Chemical's information

1. Click the Chem Inventory List button from the top of the window.
2. Click on the Chemical you would like to change (a little black bar to the left of the last name indicates that the record is selected).
3. Click the View Record button from the top of the window.
4. Proceed to navigate through the chemical's data fields to change the appropriate information.

   The program will save any changes automatically.

CHAPTER 5 - Validating Data

Validation

Validation is Tier2 Submit's way of checking that the minimum required fields for Tier II Chemical Inventory Reports are complete. This saves time for both the receiving agency and the reporting facility.

To save time validate after you enter each facility.

- After you have entered all of the facility, contact and chemical information - Go to the facility record you wish to validate then go to **Record** from the top menu bar and choose "Validate Record".
- If the minimum fields for submission are complete a pop up window will appear stating that the facility has passed all validation checks. Click the "OK" button to complete the validation process.
- If a field did not have all the appropriate information for submission click the "Go to Field" button from the pop up window and correct the data. Then navigate back to the **Facilities** module (Go to the **File** menu choose **Open** and then "Facilities" from the list). Now check all the facility information again by going to **Record** from the top menu bar and choose "Validate Record".
- If another field did not have all the appropriate information for submission repeat the last step until your facility has all the minimum fields completed for submission.

Make a Validation Report

A user can view or print a validation report with Tier2 Submit.

- From the **Facilities** module go to the **File** menu and choose "Make Validation Report".

- The Tier2 Submit Validation report window appears and you can choose to make a validation report for the Current Record or for the "Found Set" of records.
- After choosing to make a validation report for either the Found Set or the Current Record, another window appears. You have the choice of viewing or printing the validation report in this window.
- When you "view" the validation report use the **File** menu and "Close" to return to your Facility record.

TOC < PREV NEXT >

CHAPTER 6 - Submitting Data!

After you have validated the facility you would like to submit. Follow the submission steps below:

If you only have one facility entered into Tier2 Submit:

Tier2 Submit will only create submissions from the **Facilities** module *- If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

1. Go to the **File** menu on the top menu bar and click "Create Submission".

   Found Set is the default and your Found set is the one facility you just entered.

2. Click the "Start Submit Validation" button.

   The facility passed if you completed validation before this step. If not see Chapter 5- Validation.

3. Click "State Submission Requirements" to double check your state's 2004 Tier II reporting procedures.

4. After reviewing your state's submission requirements choose either "Create Electronic File" (Go to step 5) or "Create Complete Paper Report" (Go to step 7) or "Create Original Style Paper Report" (Go to step 7).

   Electronic Submission

5. After you have clicked "Create Electronic File", in the "Save As" pop up

window type the name of the file (make a unique facility identifier (e.g.= ACME in Maryland reporting year 2007 = ACME_MD2007).

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facility's Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

6. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

7. After you have clicked "Create Complete Paper Report" or "Create Original Style Report", click the "Print Report" button.
8. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette / CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you have more than one facility entered into Tier2 Submit:

After you have validated the facilities you would like to submit. Follow the submission steps below:

Tier2 Submit will only create submissions from the **Facilities** module - *If you are not in the* **Facilities** *module - Go to* **File** *on the top menu bar then select "Open" and choose Facilities from the list.*

To create electronic submission files (Tier II Chemical Inventory Reports

saved on diskette or attached to e-mail) OR printed paper Tier II Chemical Inventory Reports for a group of facilities you must first start a Search to properly select the facilities you need to submit.

1. Go to **Record** on the top menu bar and select "Show all Records".
2. Go to **Search** on the top menu bar and select "Start Search".

There are several ways you can search Tier2 Submit.

If you would like to ***submit facilities to a particular State*** *:*

- pick the State from the pull down list and then click the "Search" button.

If you would like to ***submit facilities to a particular County*** *:*

- type the County into the "County" field and then click the "Search" button.

After your search Tier2 Submit will display the found facilities in the **Facilities** *module in List view.*

3. Go to the File menu on the top menu bar and click "Create Submission".

   Found Set is the default and your "Found set" are the facilities you just searched for (e.g., only ACME Chemical facilities in Maryland).

4. Click the "Start Submit Validation".

   The facility passed if you completed validation before this step. If not see Chapter 5- Validation.

5. Click "State Submission Requirements" to double check your state's 2004 Tier II reporting procedures.
6. Choose either "Create Electronic File" (Go to step 7) or "Create Complete Paper Report" (Go to step 9) or "Create Original Style Report" (Go to step 9).

   Electronic Submission

7. After you have clicked "Create Electronic File", in the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= ACME facilities in Maryland reporting year 2007 = ACME_MD2007.zip).

   Note: *The Tier2 Submit submission file can consist of multiple facilities!*

Note: If your state prefers to receive the Tier2 Submit file on diskette or CD please save the facilities Tier2 Submit file to the media or if your state prefers to have the Tier2 Submit file e-mailed, save the zip file to an accessible directory so it can be attached in an e-mail message.

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

8. After you have entered a unique filename and chosen the appropriate location to save click the "Save" button and the "Done" button on the next screen.

Paper Submission

9. After you have clicked "Create Complete Paper Report" or "Create Original Style Report", click the "Print Report" button.
10. Then click "OK" on the Print set up pop up window (make sure you have selected the correct printer).

Congratulations! Now you must either: **A.)** mail the diskette / CD to your State, LEPC and Fire Dept or **B.)** e-mail the zip file to your State, LEPC or Fire Dept or **C.)** mail the printed report to your State, LEPC and Fire Dept.

If you need to make multiple submissions (to another state or another LEPC) - return to step 1 to start a new search and submit again.

Note: If you have created an electronic submission zip file, do not attempt to open the file directly. These files are designed to only be read by Tier2 Submit or **CAMEOfm.**

TOC < PREV NEXT >

CHAPTER 7 - Importing / Exporting

To import Tier2 Submit submissions*:

New in 2006 and 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

1. Save the zip files (Tier2 Submit submissions) to a single directory (folder) on your computer or network.

   For example: C:\Tier II submissions

   From the **Facilities** *module in Tier2 Submit (If you are not in the* **Facilities** *module go to* **File** *on the top menu bar and click "Open" and then select "Facilities" from the list).*

2. Go to **File** from the top menu bar and click "Import/Export".
   a. If you are importing multiple zip files check the "Batch (multiple file) Import" box before step 3.

3. Click the "Import Files" button on the next window.

4. On the pop up window browse to find the directory where you saved the zip file (s) (Tier2 Submit submissions).

   Example: C:\Tier II Submissions

5. Highlight the zip file and click the "Open" button.

a. If you are importing multiple zip files select the first zip file in the directory. All zip files will be imported into Tier2 Submit 2007 from that directory.

6. Click "OK" on the next pop up window and then click "Done" on the following screen.

* Tier2 Submit 2007 will only take zip files created by Tier2 Submit 2003 and later. If you have a submission from Tier2 Submit 2001 or 2002 and do not have access to Tier2 Submit 2002 or 2003, contact the RMP Reporting Center **at 301-429-5018 or e-mail: userrmp.usersupport@csc.com**. Monday-Friday 8am-4:30pm eastern.

If you would like to import your Tier2 Submit data in CAMEO see Chapter 7 of the CAMEOfm User's Manual. CAMEOfm and the User's Manual can be downloaded from http://www.epa.gov/osweroe1/content/cameo/index.htm

---

Exporting Tier2 files:

Exporting should **NOT** be utilized by a reporting party. Exporting is a function for receiving agencies **ONLY**. States, LEPCs and Fire Depts. can use this command to export Tier2 Submit files to CAMEO or another program.

New in 2006 amd 2007: Tier2 Submit now has the option to save as a "t2s file" in addition to the "zip file" format, due to the increase in zip file restrictions. Both file formats will work seamlessly with CAMEOfm and Tier2 Submit.

To export a particular group of facilities you must first start a Search to properly select the facilities you need to export.

1. Go to **Record** on the top menu bar and select "Show all Records".
2. Go to **Search** on the top menu bar and select "Start Search".

There are several ways you can search Tier2 Submit.

If you would like to ***export facilities from a particular State :***

- pick the State from the pull down list and then click the "Search" button.

If you would like to ***export facilities from a particular County :***

- type the County into the "County" field and then click the "Search" button.

If you would like to ***export a single facility out of your list of facilities:***

- type the facility name into the "Facility Name" field and then click the "Search" button.

(Or simply pick the facility from the Facility List and choose "Current Record" from the Import/Export screen).

After your search Tier2 Submit will display the found facilities in the **Facilities** *module in List view.*

3. Go to the **File** menu on the top menu bar and click "Import/Export".

   Found Set is the default and your Found set are the facilities you just searched for (i.e only facilities in VT).

4. Click the "Export Files" button.

5. In the "Save As" pop up window type the name of the file (make a unique facility identifier (e.g.= All facilities in Vermont reporting year 2007 = VT_Tier2_2007.zip).

6. Click "Save" and then click "Done".

The zip file created after a Tier2 Submit submission or export is CAMEO import ready! See Chapter 7 of the CAMEOfm User's Guide for details.

CAMEOfm and the User's Manual can be downloaded from http://www.epa.gov/osweroe1/content/cameo/index.htm

---

TOC | < PREV | NEXT >

CHAPTER 8 - Reference Information

This chapter contains basic reference information you may find useful as you work with Tier2 Submit: explanations of the functions of Tier2 Submit button commands, menu commands, data descriptions and an overview of the legislation on which Tier II Chemical Inventory reports are based.

Frequently Asked Questions

Tier2 Submit FAQs are now available at: http://www.epa.gov/osweroe1/content/epcra/tier2submitfaq.htm

Hot Buttons

Tier2 Submit has hot buttons which allow the user to navigate from module to module (e.g.= from Facilities to Chemical in Inventory) and between Record view and List view.

Record view is the default view and is best for entering new or editing old data within Facilities, Contacts or Chemicals in Inventory.

List view is best for seeing all records that have been entered in Tier2 Submit (e.g. = view all the facilities or all the contacts for a facility or all the chemicals in a particular facility's inventory).

The hot buttons are located on the top of each module window in both Record view and List view.

Below is a list of all the hot buttons and their functions organized by module.

NOTE: The [Help] button will take you to the Users Manual in any module.

Facilities module (Record View)

- [View List] This button switches over to the List view which allows the user to see all the facilities that have been entered into Tier2 Submit.
- [Chem Inventory List] This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- Contact List This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- New Facility This button creates a new facility record

Facilities module (List View)

- View Record This button switches over to the Record view which allows the user to add or edit information for the selected facility.

- Chem Inventory List This button closes the **Facilities** module and opens the **Chemical in Inventory** module in List view (if there are not any chemicals already entered then the Chemical in Inventory Record view is opened).

- Contact List This button closes the **Facilities** module and opens the **Contacts** module in List view (if there are not any contacts already entered then the Contacts Record view is opened).

- New Facility This button creates a new facility record

- View All Facilities This button only appears at the top of the window if the user is working with a "found set" of records.
(e.g.= User searches Tier2 Submit for all facilities in Anne Arundel County, Maryland. The "found set" is only those facilities in Anne Arundel County, Maryland. The View all Facilities button clears the "found set" and shows all the facility records).

Contacts module (Record View)

- View List This button switches over to the List view which allows the user to see all the contacts that are associated with the currently selected facility.

- Facility List This button shows all the facilities associated with the current contact. (if no facilities are associated with the contact then all the facilities are show in List view).

- [New Contact] This button creates a new contact record.
- [Back / Close] This button closes the Contacts module and takes the user back to the Facility Record.

Contacts module (List View)

- [View Record] This button switches over to the Record view which allows the user to add or edit information for the selected contact.
- [Facility List] This button shows all the facilities associated with the selected contact. (Click on a contact to select - a black bar to the left of the last name indicates selection).
- [New Contact] This button creates a new contact record.
- [View All Contacts] This button only appears at the top of the window if the user is working with a "found set" of records.

  (e.g.= User clicks the [Contact List] button from the **Facilities** module and a short list of three contacts appears in the next window. These three contacts are associated with the currently selected facility. Clicking the "View all Contact" button simply clears the "found set" and shows all the contacts records in Tier2 Submit).
- [Back / Close] This button closes the Contacts module and takes the user back to the Facility Record.

Chemicals in Inventory module (Record View)

- [View List] This button switches over to the List view which allows the user to see all the chemicals associated with the currently selected facility.
- [Facility Record] closes the **Chemical in Inventory** module and shows the currently selected facility in Record view.
- [Contact List] This button closes the **Chemicals in Inventory** module and opens the **Contacts** module in List view.

- New Chemical In Inventory This button creates a new chemical in inventory record in Record view.

- Back / Close This button closes the Contacts module and takes the user back to the Facility Record.

Chemicals in Inventory module (List View)

- View Record This button switches over to the Record view which allows the user to add or edit information for the selected chemical.

- Facility Record closes the **Chemical in Inventory** module and shows the currently selected facility in Record view.

- Contact List This button closes the **Chemicals in Inventory** module and opens the **Contacts** module in List view.

- New Chemical In Inventory This button creates a new chemical in inventory record in Record view.

- View All Chemical Inventories This button appears at the top of the window if the user is working with a "found set" of chemical in inventory records. The "found set" are the chemicals associated with the currently selected facility.

  Click View All Chemical Inventories to show all the Chemicals in Inventory for all facilities.

- Back / Close This button closes the Contacts module and takes the user back to the Facility Record.

TOC < PREV NEXT >

File menu

Open

Hierarchical menu which gives Tier2 Submit users access to either one of the other modules (Facilities, Contacts or Chemical in Inventory). Users can only have one module open at a time, so opening a module via this command would automatically close any open module.

For example - The Facilities module is open and the user goes to the **Open** *command from the* **File** *menu, then chooses either Contacts or Chemicals in Inventory - The Facilities module closes and the chosen module opens.*

Close

This command closes the open module.

Import/Export

Takes user to a view in the Navigator module where options are displayed for importing or exporting data. This view would not otherwise be visible to users.

Make Validation Report

Only available from the Facility Module. Takes user to a view in the Navigator module where options are displayed for making a validation report. This view would not otherwise be visible to users.

Create Submission

Only available from the Facility module. Takes user to a view in the Navigator module where options are displayed for submit validation then options for making electronic or printed Tier II reports. This view would not otherwise be visible to users.

Exit

Exits from the Tier2 Submit program (all data is saved automatically).

TOC < PREV NEXT >

Edit menu

Copy

Copies selected contents of a field.

Paste

Pastes copied contents into an applicable field.

Select All

Selects all contents of a field.

Spelling

Check Selection - spell checks the selected text.

Record menu

View List

Switch to list view in the open module.

View Record

Switch to record view in the open module.

Next Tab

Opens the next tab in the open module (only applicable in Record view of the Facilities and Chemicals in Inventory modules).

(e.g., User is in the Facilities module in Record view and the "State Fields" tab is open. User goes to the **Record** menu the clicks **Next Tab** and the "Certification" tab opens).

Show Related

In the Facilities module:

Show Related Chemicals in Inventory - shows all the chemicals in inventory for the currently selected facility (in List view).

Show Related Contacts- shows all the contacts for the currently selected facility (in List view).

In the Contacts module:

Show Related Facilities- shows all the facilities that are associated with the currently selected contact (in List view).

In the Chemicals in Inventory module:

Show Related Contacts- shows all the contacts for the currently selected facility (in List view).

Show Related Facility- shows the facility that is associated with the currently selected chemical (in Record view).

Sort

User can sort records by any field in each of the three modules.

(e.g.= user would like to sort all the facilities (in List view) by county in the Facilities module- user goes to the **Record** menu and clicks **Sort**. To clear the default sort the user clicks the "Clear all" button then selects FCounty from list to the left then the "Move" button and then the "Sort" button. Now all the facilities are sorted alphabetically by county).

Show All

This command clears all "found sets" and shows all the records in the opened module.

New

In the Facilities module:

New Facility - creates new facility record (in Record view).

In the Contacts module:

New Contact - creates new contact record (in Record view).

In the Chemicals in Inventory module:

New Chemical in Inventory - creates new chemical in inventory record (in Record

view).

Duplicate

Only available in the Facilities module.

This command duplicates the currently selected facility.

Delete

In the Facilities module:

Delete Facility - deletes the currently selected facility record.

In the Contacts module:

Delete Contact - deletes the currently selected contact record.

In the Chemicals in Inventory module:

Delete Chemical in Inventory - deletes the currently selected chemical in inventory record.

Delete All

available only from List view

This command deletes all the records from the open module or all of the "found set" in the open module.

Revert Record

Available only from Record view

Changes the current record back after changes have been made in any module.

Validate Record

Available only from the Facilities module

Checks all of the selected facilities' Tier II information for minimum requirements.

Go To

This command takes the user to records in each open module.

First - first record in the list
Previous- record the user was at last
Next- next record in the list
Last- last record of the list

TOC < PREV NEXT >

Search menu

Start Search

Starts the Basic Tier2 Submit search window where a user can search within each of the three modules.

Append Search

Starts the Basic Tier2 Submit search where a user can add to the existing search for better or broader results.

Subset Search

Starts the Basic Tier2 Submit search window where a user can search the "found set" in any module to narrow results.

Clear Search

Clears the previous search results' "found set".

Scripts Menu

The **Scripts** Menu - **no commands are available in this menu** for Tier2 Submit

Help menu

Tier2 Submit Help

This is the only command under the Help menu. Takes the user to this manual.

Statutes and Regulations

What is the Emergency Planning and Community Right-to-Know Act (EPCRA)?

The Emergency Planning and Community Right-to-Know Act of 1986 establishes requirements for Federal, State and local governments and industry regarding emergency planning and "Community Right-to-Know" reporting on hazardous and toxic chemicals. This law built upon EPA's Chemical Emergency Preparedness Program (CEPP) and numerous State and local programs aimed at helping communities to better meet their responsibilities in regard to potential chemical emergencies. The Community Right-to-Know provisions, through the creation of State Emergency Response Commissions and Local Emergency Planning Committees, help increase the public's knowledge and access to information on the presence of hazardous chemicals in their communities and releases of these chemicals into the environment. States and communities, working with facilities, will be better able to improve chemical safety and protect public health and the environment.

Regulations

- EPCRA Regulations: 40 CFR Chapter I, Sub-chapter J
- Amendments to Hazardous Chemical Reporting Thresholds, Streamlining Requirements. 40 CFR Parts 355 and 370 (Signed May 21, 1998; Published June 8, 1998) (HTML)
- Emergency Planning and Community Right-to-Know Programs; Amendments to Hazardous Chemical Reporting Thresholds for Gasoline and Diesel Fuel at Retail Gas Stations; Final Rule (Signed February 4, 1999; Published February 11, 1999) (HTML)
  Also available in PDF.

For more Tier II information please see EPCRA Information

TOC < PREV NEXT >

How to report your facility latitude and longitude

There are four data elements to report for latitude and longitude:

1. Lat/long Description
2. Lat/Long Method
3. Reporting the Latitude and Longitude

1.) Choosing your Lat/Long Description

You will first need to choose your Lat/Long "Description" which represents the exact location of your latitude and longitude values. The most common Lat/Long "Descriptions" are "PG" for Plant Gate or entrance and "CE" indicates the Center of your facility. Tier2 Submit contains a list of codes to be used for this element.

Latitude and Longitude Description of Reference Point Codes

AB- Administrative Building: a building, structure, or portion thereof that houses the administrative functions of a facility as opposed to production or manufacturing activities.

AE- Atmospheric Emissions Treatment Unit: equipment installed for the express purpose of treating chemical emissions prior to their release into the atmosphere.

AM- Air Monitoring Station: equipment installed at a predetermined location for the automatic, manual, or periodic collection of environmental air samples.

AS- Air Release Stack: a free-standing vertical structure constructed for the conveyance and release of chemical emissions into the air.

AV- Air Release Vent: a horizontal structure constructed for the release of chemical emissions into the air, typically from the side or roof of a building.

CE- Center of Facility: a representative center point within the boundary of a facility. FC Facility Centroid: the calculated center of a contiguous facility.

IP- Intake Pipe: a pipe or intake opening constructed for the collection and conveyance of water.

LC- Loading Area Centroid: the calculated center of a portion of a facility associated with loading activities.

LF- Loading Facility: the portion of a facility associated with loading and/or transshipment activities.

LW- Liquid Waste Treatment Unit: Equipment installed for the express purpose of treating chemical emissions prior to their release to water, publicly owned treatment works (POTW) or off-site transfer.

NE- NE Corner of Land Parcel: the northeast most corner or boundary of a land parcel.

NW- NW Corner of Land Parcel: the northwest most corner or boundary of a land parcel.

OT- Other.

PC- Process Unit Area Centroid: the calculated center of a portion of a facility associated with processing and/ or manufacturing activities.

PF- Plant Entrance (Freight): the entrance to a facility associated with transshipment activities.

PG- Plant Entrance (General): the front gate or general entrance of a facility.

PP- Plant Entrance (Personnel): the entrance to a facility associated with employees.

PU- Process Unit: the portion of a facility associated with processing and/or manufacturing activities.

SD- Solid Waste Treatment/Disposal Unit: the portion of a facility associated with the treatment and/or disposal of solid waste.

SE- SE Corner of Land Parcel: the southeast most corner or boundary of a land parcel.

SP- Lagoon or Settling Pond: the portion of a facility designed to accommodate sedimentation or settling of chemical by-products necessitated by the manufacture, production, or use of chemicals.

SS- Solid Waste Storage Area: the portion of a facility associated with the storage of solid waste.

ST- Storage Tank: a receptacle or chamber used for storing bulk fuels or chemicals.

SW- SW Corner of Land Parcel: the southwest most corner or boundary of a land parcel.

UN- Unknown

WA- Wellhead Protection Area: an area at the earth's surface buffering a wellhead.

WL- Well: a shaft drilled in the earth for purposes such as obtaining subsurface drinking water, or collecting groundwater monitoring samples.

WM- Water Monitoring Station: a location or study area for the automatic, manual, or periodic collection of water samples.

WR- Pipe Release to Water: the point at which a pipe constructed for the conveyance and release of water-borne chemical emissions reaches a water body.

2.) Choosing your Method

Next, you need to choose a "Method" for determining your Lat/Long. There are four general methods to determine your site latitude and longitude: Global Positioning Systems (GPS); Geographic Information Systems (GIS); Internet Internet based finders; and paper maps. These methods are described below in order of accuracy (GPS is the most accurate way to determine a lat/long, paper maps is the least

accurate method). Although it is preferable that you use the most accurate method available to you, all four methods are acceptable. You must enter your latitudinal and longitudinal coordinates in decimal degrees.

(a) Global Positioning Systems (GPS). If you have access to a GPS unit, take the reading at the place specified by the Lat/Long "Description" that you choose. Most GPS units allow you to choose between display in decimal degrees and degrees/ minutes/seconds. You should choose decimal degrees.

(b) Geographic Information Systems (GIS). If you have your own GIS, navigate to your street and pinpoint the exact location that you choose for your Lat/Long "Description" field. Your GIS should report (usually on a status bar) the latitude and longitude of the focus point or map marker. Your GIS should also allow a preference for display in degrees/minutes/seconds or decimal degrees. Choose decimal degrees.

(c) Internet-based address finders. There are numerous Internet sites for viewing maps and finding specific locations. EPA has developed the TRI Facility Siting Tool to allow facilities that submit Toxic Release Inventory (TRI) reports to obtain their latitude and longitude. This tool may also be used by facilities submitting Tier II Chemical Inventory reports. The tool asks you to enter either a zip code or a city and state. It then provides a map that you can zoom into and pan sideways, to identify your location. Once you get to the maximum zoom-in level, it will show a satellite photo over the map, to further assist in pinpointing your exact location.

The TRI Facility Siting Tool can be accessed at the following web address: http://www.epa.gov/tri/report/siting_tool/index.htm

(d) Paper maps. Choose a map that shows a relatively small area, and that has latitude/longitude tick marks along the edges. A county map book with a small section of the county on each page, or a USGS topographic map is ideal. County map books are available in many public libraries, bookstores and office supply stores. USGS maps are available in many libraries or may be purchased directly from the USGS by submitting a written request to:

Distribution Branch of the USGS
P.O. Box 25286
Denver Federal Center
Denver, CO 90225
Phone: (303) 236-5900.

Do not use a common road atlas with one state map per page or state highway maps because they generally show too large an area to obtain adequate latitude/longitude value. After finding your exact location on the map, see where that point lies in

relation to the latitude and longitude tick marks.

You must convert decimal degrees/minutes/seconds to decimal degrees. Use the following link from the University of Kentucky to covert degrees/minutes/seconds to decimal degrees - http://www.uky.edu/KGS/gis/converter.htm

The table below lists all of the codes to be used for this element and provides a brief description of each method.

Code Description of Method

A1- Address Matching House Number: derived from a point corresponding to a house or building number along a street segment.

A2- Address Matching - Block Face: derived from a calculated midpoint of one side of a street segment with regard to odd or even addresses.

A3- Address Matching - Street Centerline: derived from a calculated midpoint and centerpoint of a street segment.

A4- Address Matching - Nearest Intersection: derived from the intersection closest to a house or building number.

A5- Address Matching – Primary Name: derived from the primary name of a township or city.

A6- Address Matching – Digitized: derived from hands-on use of computer-based mapping tools.

AO- Address Matching - Other: derived through the use of non-specific matching techniques.

C1- Census Block - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Block as defined by the U.S. Bureau of the Census.

C2- Census Block/Group - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Block/ Group as defined by the U.S. Bureau of the Census.

C3- Census Block Tract - 2000 - Centroid: derived from the calculated centerpoint of a 2000 Census Tract as defined by the U.S. Bureau of the Census.

CO- Census - Other: derived from other Census-defined areas, such as Metropolitan Statistical Areas (MSAs).

GO- GPS-Unspecified: derived through the use of an unspecified GPS device.

G1- Global Positioning System (GPS) Carrier Phase Static Relative Positioning Technique: derived through the use of a GPS device employing Carrier Static Relative Positioning Technique.

G2- GPS Carrier Phase Kinematic Relative Positioning Technique: derived through the use of a GPS device employing Phase Kinematic Relative Positioning Technique.

G3- GPS Code Measurements (Pseudo Range) Differentially Corrected: derived through the use of a GPS device where measurements have been corrected for error based on the existence of known base stations relative to the study area.

G4- GPS Code Measurements (Pseudo Range) Precise Positioning Service: derived through the use of a GPS device employing real-time precise positioning techniques. G5- GPS Code Measurements (Pseudo Range) Standard Positioning Service SA OFF: derived through the use of a GPS device when the Department of Defense Selective Ability was turned off.

G6- GPS Code Measurements (Pseudo Range) Standard Positioning Service SA ON: derived through the use of a GPS device when the Department of Defense Selective Ability was turned on.

G7- GPS Code Measurements (Pseudo Range) Standard Positioning Service Corrected using Canadian Active Control System: derived through the use of a GPS device employing the Canadian Active Control System.

I1- Interpolation – Map: derived from a paper or other non-digital map

I2- Interpolation – Photo: derived from an aerial photograph

I3- Interpolation – Satellite: derived from a satellite image.

I4- Interpolation - Digital map source (TIGER): derived from a digital map, mapping software or mapping tool.

I5- Interpolation - SPOT: derived from a SPOT image.

I6- Interpolation - MSS (Multi-spectral Scanner): derived from a MSS image

I7- Interpolation - TM (Thematic Mapper): derived from a thematic mapper

L1- Loran C: derived from the use of a Loran-C positioning device

P1- Public Land Survey-Section: a coordinate pair corresponding to a point from a public land survey.

P2- Public Land Survey-Quarter Section: a coordinate pair corresponding to a point from a public land survey

P3- Public Land Survey-Eighth Section: a coordinate pair corresponding to a point from a public land survey.

P4- Public Land Survey-Sixteenth Section: a coordinate pair corresponding to a point from a public land survey.

P5- Public Land Survey-Footing: a coordinate pair corresponding to a point from a public Land survey.

S1- Classical Surveying Techniques: derived from traditional surveying techniques associated with construction activities.

UN- Unknown.

Z1- ZIP Code-Centroid: derived from the calculated center of a U.S. postal ZIP code.

Z2- ZIP+2 Code-Centroid: derived from an averaging of multiple street segments.

Approximately the size of a Census Block Group.

Z4- ZIP+4 Code-Centroid: derived from a calculated midpoint of one side of a street segment with regard to odd or even house or building numbers.

3.) Reporting Latitude and Longitude

Once you have your latitude and longitude values, you'll need to make sure they are in the proper format, you will report latitude and longitude coordinates in "decimal degrees." Enter only numerical data. Do not preface numbers with letters such as N or W to denote the hemisphere.

Default for the hemisphere is "+" for east and north. However because "+" is assumed by the system, you must leave that space blank for east and north. For west and south, enter a negative, "-," as the first character.

For example: Latitude 38.123456 Longitude -123.123456

Be careful not to reverse your latitude and longitude coordinates. Latitude in the 48 contiguous states ranges from 25° to 49°, while longitude ranges from -72° to -124°

TOC < PREV

Confidential Business Information

You may not withhold information from the Commissioner of the Department because it is confidential. However, when the Commissioner is requested to consider information confidential, it must be treated according to NYSDEC regulations contained in Section 87 of the Public Officers Law and 6 NYCRR Part 616. These regulations provide that a business may, if it desires, assert a claim of business confidentiality (CBI) covering all or part of the information furnished to NYSDEC.

The Department will treat information covered by such a claim in accordance with the procedures set forth in Part 616. If someone requests release of information covered by a claim of confidentiality, or if the Department otherwise decides to make a determination as to whether such information is entitled to confidential treatment, the Department will notify the business. NYSDEC will not disclose information as to when a claim of confidentiality has been made except to the extent of and in accordance with 6 NYCRR Part 616. However, if the business does not claim confidentiality when it furnishes the information, NYSDEC may make the information available to the public without notice to the business.

WHEN AND WHERE TO FILE

New York State requires submission of the 1992 Hazardous Waste Report by April 1, 1993. No extensions to this date will be granted. Reports not received by this data may be subject to enforcement actions.

Return this report to:

New York State Department of Environmental Conservation
P.O. Box 12820
Albany, New York 12212

To deliver completed reports via UPS or overnight mail:

New York State Department of Environmental Conservation
Data Assessment and Reporting Section
50 Wolf Road
Albany, New York 12233-7250

Fax Transmittal

from...

METCO DIVISION
PERKIN-ELMER CORPORATION

1101 Prospect Avenue
Westbury, NY 11590

Telephone: (516) 334-1300
Telex: 229913 METCO UR
Fax: (516) 334-6692

Date: OCTOBER 16, 1990

To:

COMPANY CIGNA

ATTENTION RUSS UMPLEBY

DEPT. OR MAIL STOP FAX 609-585-1291

From: MR. PATRICK TIGHE

516-334-1300 EXT. 495

8 **Pages to follow**

1101 Prospect Avenue
Westbury, NY 11590

METCO

a division of
PERKIN ELMER

Emergency Telephone Number
(516) 334-1300

MATERIAL SAFETY DATA SHEET

Product Name: METCO 610NS, 605NS, 604NS MSDS# 50-190

SECTION I

Trade Name: ALUMINUM BRONZE POLYESTER COMPOSITE POWDER

Date of Issue: September 7, 1987
Revision Date: January 18, 1988

SECTION II — COMPOSITION AND TOXICITY DATA

Composition	CAS#	OSHA PEL	ACGIH TLV	OTHER LIMITS RECOMMENDED
Copper (Fume)	7440-50-8	0.1 mg/m^3	0.2 mg/m^3	
(Dust and Mist)		1 mg/m^3	1 mg/m^3	
Aluminum (Metal & Oxide)	7429-90-5	N/A	10 mg/m^3	
Poly-P-Oxybenzate Polymer		N/A	N/A	
Organic Binder		10 mg/m^3	10 mg/m^3	

* * * ATTENTION * * *

THIS DATA SHEET IS IN THE PROCESS OF BEING REVISED TO MEET CURRENT REGULATIONS.

SECTION III — PHYSICAL DATA

Boiling Point:	N/A	Specific Gravity (H_2O=1):	N/A
Vapor Pressure (mmHg):	N/A	Melting Point:	1100-2000
Solubility in Water:	Neg.	Evaporation Rate:	N/A
Appearance and Odor:	Powder; no odor.	Vapor Density (AIR = 1):	N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point (Method Used):	Flammable Limits	LEL	UEL
None	N/A	N/A	N/A

Extinguishing Media: Dry sand.

Special Fire Fighting Procedures: N/A

Unusual Fire and Explosion Hazards: Will react violently with C_2H_2, NH_4NO_3, Bromates, Chlorates, Iodates, Cl_2, ClF_3, (Cl_2+OF_2), Ethylene Oxide, F_2, H_2 Hydrazine Mononitrate.

SECTION V	REACTIVITY DATA			50-190
Stability	Unstable		Chlorinated hydrocarbon vapors present near plasma flame may be decomposed to phosgene. An adequate exhaust system is required to avoid the effect of dust, fumes and mist which may be generated by thermal spraying. Do not permit spray dust to enter eyes, mouth, cuts, scratches or open wounds.	
	Stable	X		

Incompatibility (Materials to Avoid): N/A

Hazardous Decomposition Products: Ozone and nitric oxide are formed by plasma flame (independent of powder; similar to welding fumes).

Hazardous Polymerization	May Occur	X	Avoid exceeding the TLV Limit of 30 mg/m^3 and .2 mg/m^3 for nitric oxide and ozone respectively.
	Will Not Occur		

SECTION VI HEALTH HAZARD DATA

Summary of Risks:

COPPER: As a sublimed oxide, copper may cause a form of metal fume fever. Irritates mucous membranes, pharynx; nasal perforation; eye irritant; metal taste; dermatitis.

ALUMINUM: There has been some record of lung damage due to the inhalation of finely divided aluminum oxide particles. However, this effect (known as Shavers disease) is complicated by the presence in the inhaled air of silica and oxides of iron; a nuisance particulate. Aluminum alone is not generally regarded as an industrial poison. Inhalation of finely divided aluminum powder has been reported as a cause of preliminary fibrosis. May be implicated by Alzheimers disease.

POLY-P-OXYBENZATE

POLYMER: Not available.

ORGANIC BINDER: Not available.

Medical Conditions Which May be Aggravated by Contact: N/A

Primary Entry Route(s): Respiratory System, Skin, Liver, increased risk with Wilson's disease, Kidneys.

Signs and Symptoms of Overexposure:

Eye Contact: Possible irritation.

Skin Contact: Possible dermatitis.

Inhalation: Respiratory irritation. As a sublimed oxide, copper may cause a form of metal fume fever.

Ingestion: N/A

First Aid:

Eye Contact: Flood eye with water. If irritation persists, consult a physician.

Skin Contact: If skin irritation occurs, wash with soap and water to remove powder.

Inhalation: Expose to fresh air.

Ingestion: Consult a physician.

SECTION VII SPILL, LEAK AND DISPOSAL PROCEDURES

Spill/Leak Procedures: Material that is spilled onto the floor may become airborne by normal plant activity. Good housekeeping, by sweeping the area clean, is necessary to remove these materials from becoming a source of air contamination.

Waste Management/Disposal: Consult local and federal regulations.

Personal Protective Equipment:

Goggles: The following lens shades are recommended for the process indicated. Combustion spraying shade #5, plasma spraying up to 40 kW shade #9, 40 to 60 kW shade #10 and greater than 60 kW shade #11.

Gloves: Aluminized gloves are to be worn during plasma spray process.

Respirator: A respirator approved by NIOSH for dust/fumes/mists should be worn at all times during the thermal spray process to protect operator from dust and fumes.

Other Protective Clothing or Equipment: Ear protection must be worn when the operator is subjected to excessive noise levels. (See OSHA Requirements). Aluminized apron is to be worn during plasma spray process.

Workplace Considerations:

Ventilation: Ventilation equipment designed to create an air velocity of 200 FPM.

Safety Stations: Eye Wash Station is recommended.

Other: N/A

SECTION IX HANDLING AND STORAGE PRECAUTIONS

Precautions to be Taken in Handling and Storage: Avoid excessive skin contact and oral ingestion.

Other Precautions: N/A

The information contained herein is based on available data and tests and is believed to be accurate. It is presented solely for your consideration and verification since conditions of use, storage and handling may vary.

MATERIAL SAFETY DATA SHEET

EFFECTIVE DATE: November 1, 1983

Union Carbide Corporation urges the customer receiving this Material Safety Data Sheet to study it carefully to become aware of hazards, if any, of the product involved. In the interest of safety you should (1) notify your employees, agents, and contractors of the information on this sheet, (2) furnish a copy to each of your customers for the product, and (3) request your customers to inform their employees and customers as well.

PRODUCT NAME: UCAR® LATEX 879

CHEMICAL NAME:

CHEMICAL FAMILY: Styrene Acrylic Latex

DEPARTMENT OF TRANSPORTATION		
	Hazard Classification	None
	Shipping Name	None

CAS # CAS NAME Not Available (mixture)

BOILING POINT, 760 mm Hg	~100°C (212°F)	FREEZING POINT	~0°C
SPECIFIC GRAVITY (H_2O = 1)	~1.07	VAPOR PRESSURE at 20°C.	~17.5mm Hg
VAPOR DENSITY (air = 1)	<1 (Water)	SOLUBILITY IN WATER, % by wt.	Dilutable
PERCENT VOLATILES BY VOLUME	~54 wt.% (Water)	EVAPORATION RATE (Butyl Acetate = 1)	~1
APPEARANCE AND ODOR	White, milky fluid; mild odor.		

MATERIAL	%	TLV	HAZARD
See Page 4			

FLASH POINT [TEST METHOD(S)]	Closed Cup Not Determined (Aqueous System) None Open Cup			
FLAMMABLE LIMITS IN AIR, % by volume	LOWER	Not Determined (Aqueous System)	UPPER	Not Determined (Aqueous System)
EXTINGUISHING MEDIA	The latex will not burn until water has evaporated. For residual solids: use water spray, carbon dioxide, dry chemical, alcohol-type or universal-type foams applied by manufacturers recommended techniques.			
SPECIAL FIRE FIGHTING PROCEDURES	None			
UNUSUAL FIRE AND EXPLOSION HAZARDS	None			

See Section III. Values from ACGIH, 1982, Notice of Intended Changes; OSHA CFR 29, para, 1910.1045, exemption (a) 2 (ii) and para. 1910.1000, Table Z-2

SWALLOWING	None currently known. May cause some nausea.
SKIN ABSORPTION	None currently known.
INHALATION	None currently known.
SKIN CONTACT	May cause transient reddening of skin.
EYE CONTACT	None currently known.

None currently known.

None currently known.

This latex may contain small amounts (about 0.3%) of free formaldehyde, which has been shown to cause cancer in laboratory animals but for which there is no evidence that it may cause cancer in humans. There should be minimal risk when used with ventilation adequate to keep the atmospheric concentration of formaldehyde below the recommended exposure limit of 1 ppm.

SWALLOWING	No harmful effects expected.
SKIN	Wash with soap and water.
INHALATION	No emergency care anticipated.
EYES	Flush with water.

NOTES TO PHYSICIAN
Toxicology studies have shown similar material to be of very low acute toxicity. There is no specific antidote. Treatment of overexposure should be directed at the control of symptoms and the clinical condition.
ADDITIONAL COMMENTS: 1) Contains a maximum of 10 ppm acrylonitrile, classified by OSHA as a human carcinogen. Avoid breathing vapors in the top of the shipping container.

STABILITY			
UNSTABLE	STABLE	CONDITIONS TO AVOID	None
	X		

INCOMPATIBILITY (materials to avoid)	None
HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS	When water evaporates, polymer can burn and produce carbon monoxide, carbon dioxide and oxides of nitrogen.

HAZARDOUS POLYMERIZATION			
May Occur	Will Not Occur	CONDITIONS TO AVOID	None
	X		

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED	Major spills should be collected for disposal. Minor spills may be flushed to sewer if local regulations permit.
WASTE DISPOSAL METHOD	Bury in suitable landfill where permitted under appropriate government regulations.

RESPIRATORY PROTECTION	None required.
VENTILATION	General (mechanical) room ventilation is expected to be satisfactory.

PROTECTIVE GLOVES	Recommended	EYE PROTECTION	Safety glasses
OTHER PROTECTIVE EQUIPMENT	Eye Bath		

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Avoid breathing vapors, particularly those in the top of the shipping container.
Keep container closed.
Use with adequate ventilation.

FOR INDUSTRY USE ONLY

OTHER PRECAUTIONS

None

The opinions expressed herein are those of qualified experts within Union Carbide Corporation. We believe that the information contained herein is current as of the date of this Material Safety Data Sheet. Since the use of this information and these opinions and the conditions of use of the product are not within the control of Union Carbide Corporation, it is the user's obligation to determine the conditions of safe use of the product.

MATERIAL	%	TLV	HAZARD
Styrene-Acrylic Copolymer	~46	None Established	None Currently Known.
Formaldehyde	~0.3	1 ppm, ACGIH 3 ppm, OSHA	Toxic, irritant, animal carcinogen.
Acrylonitrile	<0.001	2 ppm (skin)	Carcinogen
Water	~54	--	--

Printed in U.S.A.

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-8

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD981558570 — NJ Manifest Document No. 10390
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
METCO
220 MILLER PLACE HICKSVILLE NY 11801
4. Generator's Phone (516) 334-1300

A. State Manifest Document Number **NJA 1010650**
B. State Generator's ID NYJA043 NJ XP20EE
HICKSVILLE NY 11801
C. NJDEPS6321 - 34038
D. Transporter's Phone (201 347-2215
E. State Trans. ID
F. Transporter's Phone ( )
G. State Facility ID N/A
H. Facility's Phone (201 347-1909

5. Transporter 1 Company Name: ENVIRON TRANSFER CORP — 6. US EPA ID Number: NJD991291584
7. Transporter 2 Company Name — 8. US EPA ID Number

9. Designated Facility Name and Site Address
A E T C
1 EDEN LANE
FLANDERS NJ 07836
US EPA ID Number: NJD980536593

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	Waste No.
a. WASTE CHEMICALS, NOS. DOT NON-REGULATED NONE	010	DM	04000	P	X900
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. +/- WATER, DIRT, DEBRIS
b. c. d.

K. Handling Codes for Wastes Listed Above
a. T
b. c. d.

15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION (TRANSIT ONLY)
(X900 REGULATED BY NJDEP ONLY)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.
If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert Haskin — Signature: Robert Haskin — Month Day Year: 09 17 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: WILLIAM F. TITANSKI — Signature: William F. Titanski — Month Day Year: 09 17 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

EPA Form 8700-22 (Rev. 3/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

1 — TSD MAIL TO - TSD'S STATE

VHW-001 (REV. 9/88)

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD981558570 Manifest Document No. 03

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
PERKIN ELMER CORP METCO DIVISION
1101 PROSPECT AVE WESTBURY N.Y. 11590

4. Generator's Phone (516) 334-1300

A. State Manifest Document Number **NJA 1010507**

B. State Generator's ID 220 MILLER PLACE HICKSVILLE, N.Y. 11801

C. State Transporter's ID 6321-34030

D. Transporter's Phone (201) 347-2215

E. State Trans. ID

F. Transporter's Phone ( )

G. State Facility's ID N/A

H. Facility's Phone (201) 347-1907

5. Transporter 1 Company Name: ENVIRONMENTAL TRANSFER CORP.
6. US EPA ID Number: NJD991291584

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
ADVANCED ENVIRONMENTAL TECHNOLOGY CORP
1 EDEN LANE
FLANDERS, N.J. 07836
10. US EPA ID Number: NJD980536593

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE, CHEMICALS, N.O.S. DOT NON-REGULATED NONE	910	DM	07000	P	X910
b. WASTE, CHEMICALS, N.O.S. DOT NON-REGULATED NONE	004	DF	00600	P	X910
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. S/A 99% SILICON DIOXIDE <10% MAGNESIUM OXIDE <10% ALUMINUM OXIDE
b. TRACE CHLORINE

K. Handling Codes for Wastes Listed Above
a. D
b.

15. Special Handling Instructions and Additional Information NJ LIC # XL 37EW NYSA 043
X910 REGULATED BY NJDEP ONLY (FOR TRANSPORTATION ONLY)
PACKING SLIPS ATTACHED FOR CLARIFICATION OF MATERIAL.

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: [illegible] Signature: [illegible] Month Day Year: 1 4 9 9 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: BRIAN F LUDWIG Signature: Brian F Ludwig Month Day Year: 1 4 9 9 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name Signature Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name Signature Month Day Year

GENERATOR

TRANSPORTER

FACILITY

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

6 — GENERATOR MAIL TO - TSD'S STATE

VHW-001 (Rev. 9/88)

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD991596570 — Manifest Document No. 10743
2. Page 1 of 1 — Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
PERKIN ELMER CORP — METCO DIVISION
1101 PROSPECT AVE — WESTBURY — NY 11590
4. Generator's Phone (516) 334-1300

A. State Manifest Document Number **NJA 1010674**
B. State Generator's ID 220 MILLER PLACE HICKSVILLE NY 11801

5. Transporter 1 Company Name: ENVIRON TRANSFER CORP
6. US EPA ID Number: NJD991291584
C. State Trans. ID: [illegible]-314031-2
7. Transporter 2 Company Name
8. US EPA ID Number
D. Transporter's Phone (201) 347-2215
E. State Trans. ID

9. Designated Facility Name and Site Address
AETC
1 EDEN LANE
FLANDERS NJ 07836
10. US EPA ID Number: NJD980536593
F. Transporter's Phone ( )
G. State Facility's ID N/A
H. Facility's Phone (201) 347-1500

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number)

	HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE, CHEMICALS, N.O.S. DOT NON-REGULATED NONE		024	DM	16800	P	X910
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a. SP-29340 SILICON DIOXIDE <10% MAGNESIUM OXIDE <10% ALUMINUM OXIDE
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. L — c. L2 LANDFILL
b.
d.

15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION (TRANSIT ONLY)
NJ LIC #XP2166 NYJA043
X910 REGULATED BY NJDEP ONLY

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Kelly Leissler — Signature: Kelly Leissler — Month Day Year: 1 9 9 9

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: PETER KARLSVITS — Signature: Peter Karlsvits — Month Day Year: 1 1 1 9 9 9

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

GENERATOR — TRANSPORTER — FACILITY

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

NJA 1010674

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

6 — GENERATOR MAIL TO - TSD'S STATE

VHW-001 (REV. 9/86)

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-91

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. N J D 9 8 1 5 5 8 5 7 0 — Manifest Document No. NJ11289

2. Page 1 of 1

Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
PERKIN ELMER CORP METCO DIVISION
1101 PROSPECT AVE WESTBURY NY 11590

4. Generator's Phone (516) 334-1300

5. Transporter 1 Company Name: ENVIRONMENTAL TRANSFER CORPORATION
6. US EPA ID Number: N J D 9 9 1 2 9 1 5 8 4

7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION
1 EDEN LANE
FLANDERS NJ 07836
10. US EPA ID Number: N J D 9 8 0 5 8 6 5 9 8

A. State Manifest Document Number: **NJA 0980751**
B. State Generator's ID: METCO 220 MILLER PLACE HICKSVILLE NY 11801
C. State Trans. ID: NJDEP86321-84032
D. Transporter's Phone (201) 347-2216
E. State Trans. ID
F. Transporter's Phone ( )
G. State Facility's ID: N/A
H. Facility's Phone (201) 347-1909

GENERATOR

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM		12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	X	HAZARDOUS WASTE LIQUID, NOS ORM-E NA9189	0003	DM	001200	P	D006
b.							
c.							
d.							

J. Additional Descriptions for Materials Listed Above
a. L/E WATER W/<.0001% CADMIUM & 0-5% DIRT
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. NY=T
b.
c.
d.

15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION (TRANSIT ONLY)
ADDITIONAL TRANSPORT INFO.-NYJA043 NJ-XP20EE

16. **GENERATOR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; **OR,** if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Kelly Leissler — Signature: Kelly Leissler — Month Day Year: 1/11/2/10

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: WALTER G. BUNNELL — Signature: [signature] — Month Day Year: 1/11/2/10

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

NJA 0980751

EPA Form 8700-22 (Rev. 9/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

6 — GENERATOR MAIL TO - TSD'S STATE

Newsday / Dick Yarwood

Firefighter in protective suit is hosed off after battling fire at Metco Co.

Fire Forces Evacuation Of 100, Disrupts LIRR

By Arnold Abrams

A small but smoky chemical fire in a Hicksville factory yesterday forced the evacuation of more than 100 people and disrupted midday service on a branch of the Long Island Rail Road.

The blaze, according to police and fire officials, started about 10:30 a.m. in an oven being used to heat a chemical compound at the Miller Place factory of the Metco Co., which manufactures thermal spray coating for jet engines.

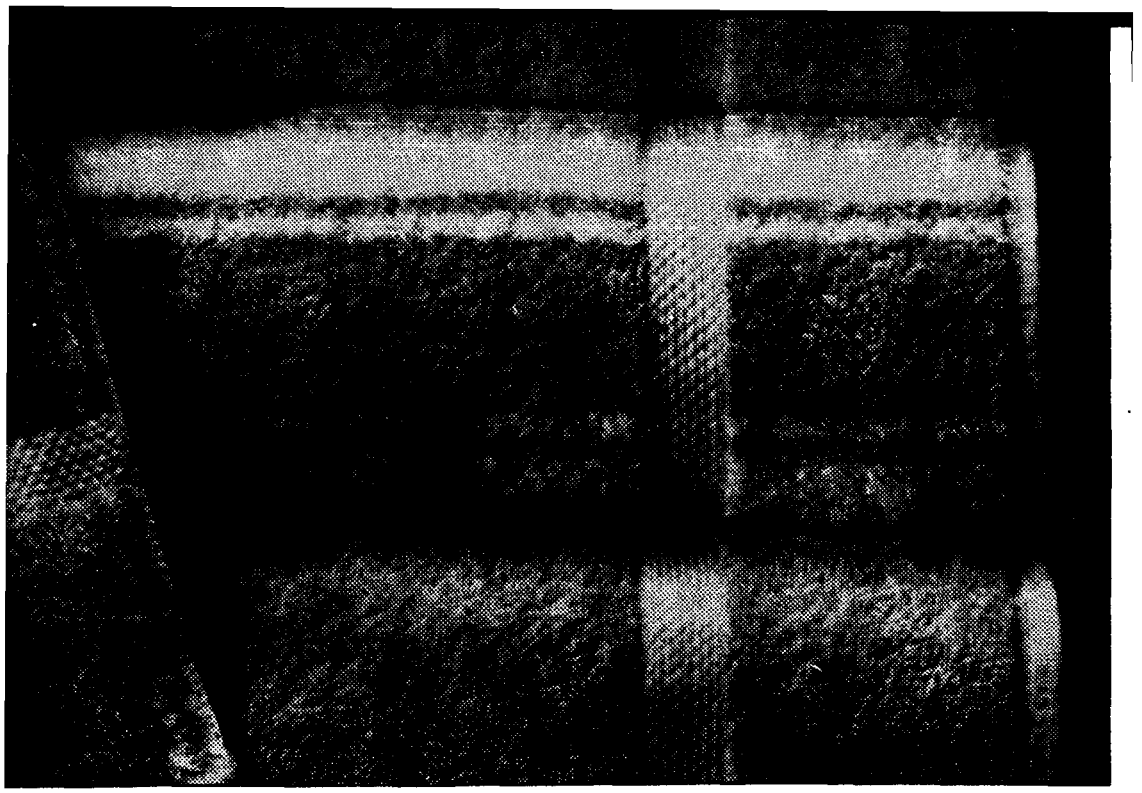
The blaze was brought under control in about one hour by firefighters from Syosset and other neighboring communities, who were aided by the hazardous material units of the Nassau County police department and fire marshal's office.

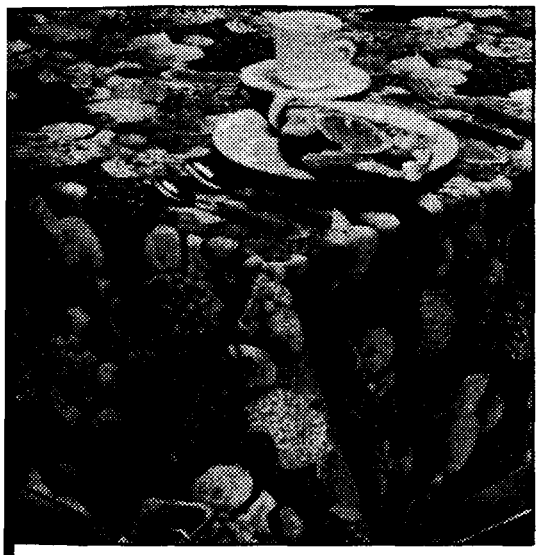
Before the fire was quenched, however, 40 plant employees and inhabitants of approximately 20 nearby homes were evacuated to a nearby school building and fire department headquarters in Jericho. The blaze also stopped service between Hicksville and Huntington on the Long Island Rail Road's Port Jefferson line for more than an hour. The tracks are near the site of the fire.

"There was minimal damage from the fire itself," said Syosset Fire Chief Roy Brouillard, who coordinated the firefighting efforts. "We were primarily concerned about the potential problem of smoke from a chemical fire. There was a good deal of it, and the evacuation of homes and stoppage of train service were essentially precautionary actions."

The smoke dissipated without affecting the surrounding area, and it was not immediately determined if the smoke was toxic. The blaze was serious enough to require medical attention for two plant employees and three firefighters. All were taken to Central General Hospital in Plainview, where they were treated for smoke inhalation or skin irritation and released.

The warehouse, according to police, contained an unknown amount of aluminum bronze polyester composite powder, which is used in the manufacture of aluminum. The aluminum is used in the thermal spray coating manufactured by Metco Co. Tom Fisher, the company's general manager, declined to discuss what chemicals actually were being heated and what might have caused the fire.





4.99 ALL SIZES
Save on a huge selection of table cloths in assorted prints including florals and geometrics. Find all cotton and easy-care polyester cotton. 52x52", 52x70", 60x84" ob./ov., 60x104" ob., 70" or 90" r. (D.001) Napkins. Reg. $3-$5 **Sale 1.99**

21.00 TWIN Reg. $35
Save. 40% on Fieldcrest cotton thermal blankets in assorted colors. Machine washable, non-allergenic. USA made. Colors vary by store. No phone orders. Full. Reg. $40 **Sale 24.00** Queen Reg. $45 **Sale 27.00** King. Reg. $60 **Sale 36.00**
Plus, save 30% on the ticketed prices of every blanket.

one day sale

se specified. Call any time: 1-800-44-MACYS. #HBK. Add $5 for delivery. Sent within delivery area only.
Sale ends 8/22.

LATE WEDNESDAY. 9 AM TO 11 PM

(Rev. 9/88)

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD981558570 — NJ Manifest Document No. 10390
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
METCO
220 MILLER PLACE HICKSVILLE NY 11801
4. Generator's Phone (516) 334-1300

A. State Manifest Document Number **NJA 1010650**
B. State Generator's ID NYJA043 NJ XP20EE
HICKSVILLE NY 11801
C. NJDEPS6321 — 34038
D. Transporter's Phone (201) 347-2215
E. State Trans. ID
F. Transporter's Phone ( )
G. State Facility ID N/A
H. Facility's Phone (201) 347-1909

5. Transporter 1 Company Name: ENVIRON TRANSFER CORP
6. US EPA ID Number: NJD991291584
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
A E T C
1 EDEN LANE
FLANDERS NJ 07836
10. US EPA ID Number: NJD980536593

	11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a.	WASTE CHEMICALS, NOS. DOT NON-REGULATED NONE	010	DM	04000	P	X900
b.						
c.						
d.						

J. Additional Descriptions for Materials Listed Above
a. L/- WATER, DIRT, DEBRIS
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T
b.
c.
d.

15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION (TRANSIT ONLY)
(X900 REGULATED BY NJDEP ONLY)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert Haskin — Signature: Robert Haskin — Month Day Year: 09 17 90

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: WILLIAM F. TITANSKI — Signature: William F. Titanski — Month Day Year: 09 17 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 3/88) Previous editions are obsolete.

SIGNATURE AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

1 — TSD MAIL TO - TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

State of New Jersey
Department of Environmental Protection
Division of Hazardous Waste Management
Manifest Section
CN 028, Trenton, NJ 08625

Please type or print in block letters. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039. Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No. NYD981558570 — NJ Manifest Document No. 10390
2. Page 1 of 1
Information in the shaded areas is not required by Federal law.

3. Generator's Name and Mailing Address
METCO
220 MILLER PLACE HICKSVILLE NY 11801
4. Generator's Phone (516) 334-1300

A. State Manifest Document Number **NJA 1010650**
B. State Generator's ID NYJA043 NJ XP20EE
HICKSVILLE NY 11801
C. NJDEPS6321 F 34038
D. Transporter's Phone (201 347-2215
E. State Trans. ID

5. Transporter 1 Company Name: ENVIRON TRANSFER CORP
6. US EPA ID Number: NJD991291584
7. Transporter 2 Company Name
8. US EPA ID Number

9. Designated Facility Name and Site Address
A E T C
1 EDEN LANE
FLANDERS NJ 07836
10. US EPA ID Number: NJD980536593

F. Transporter's Phone ( )
G. State Facility ID N/A
H. Facility's Phone (201 347-1909

11. US DOT Description (Including Proper Shipping Name, Hazard Class, and ID Number) HM	12. Containers No.	Type	13. Total Quantity	14. Unit Wt/Vol	I. Waste No.
a. WASTE CHEMICALS, NOS. DOT NON-REGULATED NONE	010	DM	04000	P	X900
b.					
c.					
d.					

J. Additional Descriptions for Materials Listed Above
a. L/- WATER, DIRT, DEBRIS
b.
c.
d.

K. Handling Codes for Wastes Listed Above
a. T
b.
c.
d.

15. Special Handling Instructions and Additional Information PACKING SLIPS ATTACHED FOR CLARIFICATION (TRANSIT ONLY)
(X900 REGULATED BY NJDEP ONLY)

16. GENERATOR'S CERTIFICATION: I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packed, marked, and labeled, and are in all respects in proper condition for transport by highway according to applicable international and national government regulations.

If I am a large quantity generator, I certify that I have a program in place to reduce the volume and toxicity of waste generated to the degree I have determined to be economically practicable and that I have selected the practicable method of treatment, storage, or disposal currently available to me which minimizes the present and future threat to human health and the environment; OR, if I am a small quantity generator, I have made a good faith effort to minimize my waste generation and select the best waste management method that is available to me and that I can afford.

Printed/Typed Name: Robert Haskin — Signature: Robert Haskin — Month Day Year: 09 17 90

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: WILLIAM F. TITANSKI — Signature: William F. Titanski — Month Day Year: 09 17 90

18. Transporter 2 Acknowledgement of Receipt of Materials
Printed/Typed Name — Signature — Month Day Year

FACILITY

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of hazardous materials covered by this manifest except as noted in Item 19.
Printed/Typed Name — Signature — Month Day Year

EPA Form 8700-22 (Rev. 5/88) Previous editions are obsolete.

SIGNATURES AND INFORMATION *MUST* BE LEGIBLE ON ALL COPIES

1 — TSD MAIL TO - TSD'S STATE

In case of an emergency or spill immediately call the state the emergency occurred in and the N.J. Dept. of Environmental Protection. (609) 292-5560 (Day) (609) 292-7172 (Night)

AETC ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION

EDEN LANE
FLANDERS, NEW JERSEY 07836
201-347-7111

WASTE INFORMATION PROFILE © 1986 AETC

AETC USE ONLY
DISP CODE OAKT 95855

WASTE NAME Silicone dioxide & metal oxides | WASTE ID X 910 | DATE 4/8/96

GENERATOR NAME Alcoa Cleaning | ADDRESS 320 Miller Pl
Hicksville, NY 11801

EPA ID NO. NYD 981558570

UNITS | PROD | CS | PC | COD | FOR AETC USE ONLY
SM2 | APP

SHIPPING NAME Waste Chemicals n.o.s.

HAZARD CLASS D.O.T. Non-Regulated | UN/NA | RQ

PROCESS GENERATING WASTE Consolidation After Clean Out

HALOGENS
- ☑ <2%
- ☐ 2-5%
- ☐ 5-10%
- ☐ 10-30%
- ☐ >30%
- ☐ CL
- ☐ F
- ☐ Br
- ☐ I
- EXACT 0

LAYERS
- ☐ MULTILAYERED
- ☐ BI-LAYERED
- ☑ SINGLE PHASE

SOLIDS
- ☐ SUSPENDED ___ %
- ☑ SETTLEABLE 100 %
- ☐ DISSOLVED ___ %

COLOR: Various

ODOR
- ☑ NONE
- ☐ MILD
- ☐ STRONG
- DESCRIBE:

PHYSICAL STATE
- ☑ SOLID
- ☐ SEMI SOLID
- ☐ LIQUID
- ☐ GAS
- ☐ FLOWABLE POWDER
- ☐ PUMPABLE SEMISOLID

PH
- ☐ <2
- ☐ 2-5
- ☑ 5-9
- ☐ 9-12.5
- ☐ >12.5
- ☐ EXACT ___

SPECIFIC GRAV.
- ☐ < .8
- ☐ .8 - 1.0
- ☐ 1.0
- ☐ 1.0-1.2
- ☑ > 1.2
- EXACT ___

FLASH POINT (°F)
- ☐ < 80
- ☐ 80-100
- ☐ 101-140
- ☐ 141-200
- ☐ > 200
- ☑ NO FLASH
- EXACT ___

BTU/LB. 0
% ASH 90-99
WATER SOLUBILITY <1

VISCOSITY
- ☐ HIGH (SYRUP)
- ☐ MEDIUM (OIL)
- ☐ LOW (WATER)
- N/A

HAZARDOUS CHARACTERISTICS
- ☐ REACTIVE
- SPECIFY N/A
- ☐ RADIOACTIVE
- ☐ EXPLOSIVE

CHEMICAL COMPOSITION — ACCOUNT FOR 100%

Name:	%
Silicone Dioxide	>90
Magnesium Oxide	<10
Aluminum Oxide	<10

METALS ☐ TOTAL (PPM) ☐ EPA EXTRACTION (MG/1)
- ARSENIC None Suspected
- BARIUM
- CADMIUM
- CHROMIUM
- MERCURY
- LEAD
- SELENIUM
- SILVER
- OTHER

FOR AETC USE ONLY

OTHER COMPONENTS
- CYANIDES None Suspected
- SULFIDES
- PCB'S
- PHENOLICS
- OTHER

PRESENT CONTAINER (TYPE/SIZE): ☑ 17H ☐ 17C ☐ 6D ☐ FIBER DR. ☐ BOX ☐ OTHER ___ SIZE 55 gal

SHIPPING CONTAINER (TYPE/SIZE): ☑ 17H ☐ 17C ☐ 6D ☐ FIBER DR. ☐ BOX ☐ OTHER ___ SIZE 55 gal

ANTICIPATED VOLUME: 34 ☐ GALS. ☑ DRUMS ☐ CU. YDS. ☐ OTHER ___ PER ☐ ONE TIME ☐ MONTH ☑ YEAR

ADDITIONAL INFORMATION:

CERTIFICATION:
I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed.

Kelly Lussier — SIGNATURE
516 292 2
PHONE
Kelly Lussier — NAME (PRINT OR TYPE)
Supervisor — TITLE

74338

W-19

AETC EDEN LANE FLANDERS, NEW JERSEY 07836 201-347-7111

ADVANCED ENVIRONMENTAL TECHNOLOGY CORPORATION

WASTE INFORMATION PROFILE © 1986 AETC

AETC USE ONLY
DISP CODE SF 7233

WASTE NAME Plant Scraps | WASTE ID X910 | DATE 10/3/

GENERATOR NAME Metro | ADDRESS 220 Mill Pl

EPA ID NO. NYD981555570 | Hamilton NJ 11501

UNITS | PROD | CS | PC | COD | FOR AETC USE ONLY

SHIPPING NAME Waste Chemical Mixture | SM2 | APP

HAZARD CLASS R.Q.L. Not Regulated | UN/NA None | RQ

PROCESS GENERATING WASTE Clean out projects

HALOGENS
- ☐ <2%
- ☐ 2-5%
- ☐ 5-10%
- ☐ 10-30%
- ☐ >30%
- ☐ CL
- ☐ F
- ☐ Br
- ☐ I
- EXACT

LAYERS
- ☑ MULTILAYERED
- ☐ BI-LAYERED
- ☐ SINGLE PHASE

SOLIDS
- ☐ SUSPENDED %
- ☑ SETTLEABLE 100 %
- ☐ DISSOLVED %

COLOR: VARIOUS

ODOR
- ☑ NONE
- ☐ MILD
- ☐ STRONG
- DESCRIBE:

PHYSICAL STATE
- ☑ SOLID
- ☐ SEMI SOLID
- ☐ LIQUID
- ☐ GAS
- ☐ FLOWABLE POWDER
- ☐ PUMPABLE SEMISOLID

PH
- ☐ <2
- ☐ 2-5
- ☑ 5-9
- ☐ 9-12.5
- ☐ >12.5
- ☐ EXACT

SPECIFIC GRAV.
- ☐ < .8
- ☐ .8 - 1.0
- ☐ 1.0
- ☐ 1.0-1.2
- ☐ > 1.2
- EXACT

FLASH POINT (°F)
- ☐ < 80
- ☐ 80-100
- ☐ 101-140
- ☐ 141-200
- ☐ > 200
- ☑ NO FLASH
- EXACT

BTU/LB.
% ASH
WATER SOLUBILITY

VISCOSITY
- ☐ HIGH (SYRUP)
- ☐ MEDIUM (OIL)
- ☐ LOW (WATER)

N/A

HAZARDOUS CHARACTERISTICS
- ☐ REACTIVE
- SPECIFY N/A
- ☐ RADIOACTIVE
- ☐ EXPLOSIVE

CHEMICAL COMPOSITION

Name:	ACCOUNT FOR 100%
Plant Scrap Inc.	95-100 %
Glove, coat, rags, paper etc	%
Tire cords	0-5 %
	%
	%
	%
	%
	%
	%
	%
	%

METALS
- ☐ TOTAL (PPM)
- ☐ EPA EXTRACTION (MG/1)

ARSENIC Non Suspected
BARIUM
CADMIUM
CHROMIUM
MERCURY
LEAD
SELENIUM
SILVER
OTHER

FOR AETC USE ONLY

OTHER COMPONENTS
CYANIDES Non Suspected
SULFIDES
PCB'S
PHENOLICS
OTHER

PRESENT CONTAINER (TYPE/SIZE): ☐ 17H ☐ 17E ☐ 6D ☑ FIBER DR. ☐ BOX ☐ OTHER SIZE 30 gal

SHIPPING CONTAINER (TYPE/SIZE): ☐ 17H ☐ 17E ☐ 6D ☑ FIBER DR. ☐ BOX ☐ OTHER SIZE 30 gal

ANTICIPATED VOLUME: 4 ☐ GALS. ☑ DRUMS ☐ CU. YDS. ☐ OTHER PER ☐ ONE TIME ☑ MONTH ☐ YEAR

ADDITIONAL INFORMATION:

CERTIFICATION:
I hereby certify that I have personally examined and am familiar with the information submitted in this and all attached documents. Based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete to the best of my knowledge and ability and that all known and suspected hazards have been disclosed.

SIGNATURE Kelly Lewis | PHONE 522 2922

NAME (PRINT OR TYPE) Kelly Lewis | TITLE Supervisor

74339

W-19

UNITED STATES EPA - NATIONAL SURVEY OF HAZARDOUS WASTE GENERATORS

MR. JOE LACOUNT

- INSTRUCTIONS
- APPENDIX A: PROCESS CODES AND AIR POLLUTION CONTROL DEVICE CODES
- APPENDIX B: STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODES
- APPENDIX C: RCRA AND OTHER WASTE CODES
- APPENDIX D: HAZARDOUS CONSTITUENT CODES

DEFINITIONS

The following definitions were developed for this survey and apply throughout all the questionnaires enclosed with this instruction booklet. If you have any questions about how these definitions apply to your facility, call the Survey Helpline (1-800-635-8850).

ACCUMULATION The holding of hazardous waste that was generated onsite in tanks or in container accumulation or storage areas for periods of 90 days or less in accordance with the accumulation rule (40 CFR 262.34).

CHARACTERISTIC WASTE RCRA "D" wastes that exhibit ignitable, corrosive, reactive, or toxic characteristics.

COMMERCIAL Any hazardous waste treatment, storage, disposal, or recovery unit, process, or operation is considered to be commercial if it is generally available to manage the waste of other facilities **not under the same ownership as this facility**. Units, processes, or operations that are offered commercially are usually made available for a fee or other remuneration. However, units, processes, or operations offered commercially **include** those used to reclaim, reuse, or recover materials from hazardous waste that has been purchased for that purpose. Any unit, process, or operation offered **only** to other facilities **under the same ownership as this facility** is not considered to be commercial. A hazardous waste treatment, storage, disposal, or recovery process or operation does not have to be the primary activity at a facility for it to be considered commercial.

DOWNGRADIENT The direction of groundwater flow.

KARST TERRAIN Irregular topography characterized by sink holes (abrupt, often circular depressions in the land surface), streamless valleys, and streams that disappear underground—all developed by action of surface and underground water in soluble rock, such as limestone.

MANAGEMENT Activities conducted onsite to treat, store, dispose, recover for reuse, or accumulate hazardous waste. For this survey, *management* **does not include** transportation or generation.

PROCESS One or more units of equipment acting together to perform a single operation on a waste stream.

RCRA The Resource Conservation and Recovery Act of 1976, the federal statute that regulates the treatment, accumulation, storage, disposal, and recycling of hazardous waste.

RECYCLING Any reuse, reclamation, or recovery activity to recover material or energy resources from hazardous waste.

SEASONAL HIGH WATER TABLE The upper surface of the saturated zone during the time of year when the groundwater level is closest to the ground surface.

STORAGE The temporary holding, OTHER THAN ACCUMULATION, of hazardous waste in tanks, containers, surface impoundments, or waste piles, after which it is treated, disposed, recovered for reuse, or stored elsewhere.

SURFACE IMPOUNDMENT A natural topographic depression, man-made excavation, or diked area formed primarily of earthern materials (although it may be lined with man-made materials), which is designed to hold an accumulation of liquid wastes or wastes containing free liquids, and which is not an underground injection well. Examples of surface impoundments are holding, storage, settling, and aeration pits, ponds, and lagoons.

SYSTEM One or more processes that work together to treat a waste stream.

TANK A stationary device, designed to contain hazardous waste and constructed primarily of nonearthen materials that provide structural support. FOR THIS SURVEY, a hazardous waste tank is a unit (other than incinerators, surface impoundments, boilers, and furnaces) that is used for the accumulation, treatment, recovery for reuse, or storage of hazardous waste. The following are examples of units that should be considered tanks: holding tanks, equalization tanks, clarifiers, filter presses, blending tanks, distillation towers, accumulation/storage tanks, and sumps.

DEFINITIONS (continued)

TANK SYSTEMS Tanks used to treat, store, recover for reuse, or accumulate hazardous waste, including ancillary equipment. Ancillary equipment includes any device such as piping, fittings, flanges, valves, pumps, or instrumentation that is used to distribute, meter, or control the flow of hazardous waste from its point of generation to a storage or treatment tank(s), between a hazardous waste storage and treatment tank(s) to a point of disposal onsite, or to a point of shipment for disposal offsite.

TREATMENT Any activity, including pretreatment, designed to change the character or composition of any hazardous waste so as to render it nonhazardous; safer to transport, store, or dispose; amenable for recovery; or reduced in volume.

UNIT A single piece of equipment used to treat, store, recover for reuse, or dispose of hazardous waste.

WASTE PILE Any non-containerized accumulation of solid, nonflowing hazardous waste that is used for treatment or storage.

WETLAND An area that is inundated or saturated by surface or ground water at a frequency and duration sufficient to support a prevalence of vegetation typically adapted for life in saturated soil conditions. A wetland generally includes swamps, marshes, bogs, and similar areas.

100-YEAR FLOODPLAIN Any land area that is subject to a one percent or greater chance of flooding in any given year from any source (or any land area that is subject to flooding once every 100 years).

The following list was developed specifically for this survey and is provided here to help you complete the schematics in Questionnaire GA, "General Facility Information" and several questions in Questionnaire GB, "Hazardous Waste Characterization" and Questionnaire GI, "Tank Systems." It should not be confused with the list of EPA waste handling codes (40 CFR 265, Appendix I, Table 2, July 1, 1984).

PROCESS CODES

TREATMENT AND RECYCLING

Incineration/thermal treatment

1I Liquid injection
2I Rotary (or rocking) kiln
3I Rotary kiln with a liquid injection unit
4I Two stage
5I Fixed hearth
6I Multiple hearth
7I Fluidized bed
8I Infra-red
9I Fume/vapor
10I Pyrolytic destructor *(See Note 1)*
11I Other incineration/thermal treatment

Reuse as fuel

1RF Cement kiln
2RF Aggregate kiln
3RF Asphalt kiln
4RF Other kiln
5RF Blast furnace
6RF Sulfur recovery furnace
7RF Smelting, melting, or refining furnace
8RF Coke oven
9RF Other industrial furnace
10RF Industrial boiler
11RF Utility boiler *(See Note 2)*
12RF Process heater
13RF Other reuse as fuel unit

Fuel blending

1FB Fuel blending

Solidification

1S Cement or cement/silicate processes
2S Pozzolanic processes
3S Asphaltic processes
4S Thermoplastic techniques
5S Organic polymer techniques
6S Jacketing (macro-encapsulation)
7S Other solidification

Recovery of solvents and liquid organics for reuse

1SR Fractionation
2SR Batch still distillation
3SR Solvent extraction
4SR Thin-film evaporation
5SR Filtration
6SR Phase separation
7SR Dessication
8SR Other solvent recovery (including pretreatment)

Recovery of metals

1MR Electrolytic
2MR Ion exchange
3MR Reverse osmosis
4MR Solvent extraction
5MR Secondary smelting
6MR Liming
7MR Evaporation
8MR Filtration
9MR Sodium borohydride
10MR Other metals recovery (including pretreatment)

Wastewater treatment

Equalization
1WT Equalization

Cyanide oxidation
2WT Alkaline chlorination
3WT Ozone
4WT Electrochemical
5WT Other cyanide oxidation

General oxidation (including disinfection)
6WT Chlorination
7WT Ozonation
8WT UV radiation
9WT Other general oxidation

Chemical precipitation *(See Note 3)*
10WT Lime
11WT Sodium hydroxide
12WT Soda ash
13WT Sulfide
14WT Other chemical precipitation

Chromium reduction
15WT Sodium bisulfite
16WT Sulfur dioxide
17WT Ferrous sulfate
18WT Other chromium reduction

Complexed metals treatment (other than chemical precipitation by pH adjustment)
19WT Complexed metals treatment

Emulsion breaking
20WT Thermal
21WT Chemical
22WT Other emulsion breaking

Adsorption
23WT Carbon adsorption
24WT Ion exchange
25WT Resin adsorption
26WT Other adsorption

Stripping
27WT Air stripping
28WT Steam stripping
29WT Other stripping

(continued)

TREATMENT AND RECYCLING (continued)

Evaporation
30WT Thermal
31WT Solar
32WT Vapor recompression
33WT Other evaporation

Filtration
34WT Diatomaceous earth
35WT Sand
36WT Multimedia
37WT Other filtration

Sludge dewatering
38WT Gravity thickening
39WT Vacuum filtration
40WT Pressure filtration (belt, plate and frame, or leaf)
41WT Centrifuge
42WT Other sludge dewatering

Air flotation
43WT Dissolved air flotation
44WT Partial aeration
45WT Air dispersion
46WT Other air flotation

Oil skimming
47WT Gravity separation
48WT Coalescing plate separation
49WT Other oil skimming

Other liquid phase separation
50WT Decanting
51WT Other liquid phase separation

Biological treatment
52WT Activated sludge
53WT Fixed film—trickling filter
54WT Fixed film—rotating contactor
55WT Lagoon or basin, aerated
56WT Lagoon, facultative
57WT Anaerobic
58WT Other biological treatment

Other wastewater treatment
59WT Wet air oxidation
60WT Neutralization
61WT Nitrification
62WT Denitrification
63WT Flocculation and/or coagulation
64WT Settling (clarification)
65WT Reverse osmosis
66WT Other wastewater treatment

OTHER PROCESSES (TREATMENT OR RECOVERY)

1TR Other treatment
2TR Other recovery for reuse

ACCUMULATION

1A Containers
2A Tanks

STORAGE

1ST Container (i.e., barrel, drum)
2ST Tank
3ST Waste pile
4ST Surface impoundment
5ST Other storage

DISPOSAL

1D Landfill
2D Land treatment
3D Surface impoundment (to be closed as a landfill)
4D Underground injection well

NOTES:

1. A pyrolytic destructor is not considered an incinerator but will be included in this questionnaire for data gathering purposes.
2. A utility boiler is a boiler operated by a company whose primary business is to produce electrical power and/or steam for public consumption.
3. Chemical precipitation is a treatment operation whereby the pH of a waste is adjusted to the range necessary for removal (precipitation) of contaminants. However, if the pH is adjusted *solely* to achieve a neutral pH, THE OPERATION SHOULD BE CONSIDERED NEUTRALIZATION (60WT).

AIR POLLUTION CONTROL DEVICE CODES

1AP	Cyclone	18AP	Earth cover
2AP	Quench	19AP	Wind screen
3AP	Boiler	20AP	Synthetic cover
4AP	Flare	21AP	Synthetic membrane
5AP	Baghouse	22AP	Floating synthetic membrane
6AP	Condenser	23AP	Internal floating roof
7AP	High impact scrubber	24AP	External floating roof
8AP	Venturi scrubber	25AP	Enclosure with control device
9AP	Packed bed scrubber	26AP	Enclosure without control device
10AP	Wet scrubber	27AP	Submerged loading
11AP	Wet ionizing scrubber	28AP	Non-vented tanks
12AP	Mist eliminator	29AP	Refrigeration/condensation emission device
13AP	Carbon adsorption device	30AP	Chemical stabilization
14AP	Vapor/fume incinerator	31AP	Vented gas collection
15AP	Electrostatic precipitator	32AP	Wetting
16AP	Wet electrostatic precipitator	33AP	Other
17AP	Daily earth cover		

The following list of Standard Industrial Classification (SIC) Codes should be used to complete several questions from Questionnaire GA, "General Facility Information" and Questionnaire GB, "Hazardous Waste Characterization."

SIC Code	Industry
Agricultural Production—Crops	
0111	Wheat
0112	Rice
0115	Corn
0116	Soybeans
0119	Cash grains, nec
0131	Cotton
0132	Tobacco
0133	Sugar crops
0134	Irish potatoes
0139	Field crops, except cash grains, nec
0161	Vegetables and melons
0171	Berry crops
0172	Grapes
0173	Tree nuts
0174	Citrus fruits
0175	Deciduous tree fruits
0179	Fruits and tree nuts, nec
0181	Ornamental nursery products
0182	Food crops grown under cover
0189	Horticultural specialties, nec
0191	General farms, primarily crops
Agricultural Production—Livestock	
0211	Beef cattle feedlots
0212	Beef cattle, except feedlots
0213	Hogs
0214	Sheep and goats
0219	General livestock, nec
0241	Dairy farms
0251	Broiler, fryer, and roaster chickens
0252	Chicken eggs
0253	Turkeys and turkey eggs
0254	Poultry hatcheries
0259	Poultry and eggs, nec
0271	Fur-bearing animals and rabbits
0272	Horses and other equines
0279	Animal specialties, nec
0291	General farms, primarily livestock
Agricultural Services	
0711	Soil preparation services
0721	Crop planting and protection
0722	Crop harvesting
0723	Crop preparation services for market
0724	Cotton ginning
0729	General crop services
0741	Veterinary services, farm livestock
0742	Veterinary services, specialties
0751	Livestock services, except specialties
0752	Animal specialty services
0761	Farm labor contractors
0762	Farm management services
0781	Landscape counseling and planning
0782	Lawn and garden services
0783	Ornamental shrub and tree services
Forestry	
0811	Timber tracts
0821	Forest nurseries and seed gathering
0843	Extraction of pine gum
0849	Gathering of forest products, nec
0851	Forestry services
Fishing, Hunting, and Trapping	
0912	Finfish
0913	Shellfish
0919	Miscellaneous marine products
0921	Fish hatcheries and preserves
0971	Hunting, trapping, game propagation
Mining	
1011	Iron ores
1021	Copper ores
1031	Lead and zinc ores
1041	Gold ores
1044	Silver ores
1051	Bauxite and other aluminum ores
1061	Ferroalloy ores, except vanadium
1081	Metal mining services
1092	Mercury ores
1094	Uranium, radium, vanadium ores
1099	Metal ores, nec
1111	Anthracite
1112	Anthracite mining services
1211	Bituminous coal and lignite
1213	Bituminous and lignite services
1311	Crude petroleum and natural gas
1321	Natural gas liquids
1381	Drilling oil and gas wells
1382	Oil and gas exploration services
1389	Oil and gas field services, nec
1411	Dimension stone
1422	Crushed and broken limestone
1423	Crushed and broken granite
1429	Crushed and broken stone, nec
1442	Construction sand and gravel
1446	Industrial sand
1452	Bentonite
1453	Fire clay
1454	Fuller's earth
1455	Kaolin and ball clay
1459	Clay and related minerals, nec
1472	Barite
1473	Fluorspar
1474	Potash, soda and borate minerals

Note: nec = not elsewhere classified.

SIC Code	Industry
1475	Phosphate rock
1476	Rock salt
1477	Sulfur
1479	Chemical and fertilizer mining, nec
1481	Nonmetallic minerals services
1492	Gypsum
1496	Talc, soapstone, and pyrophyllite
1499	Nonmetallic minerals, nec
Construction	
1521	Single-family housing construction
1522	Residential construction, nec
1531	Operative builders
1541	Industrial buildings and warehouses
1542	Nonresidential construction, nec
1611	Highway and street construction
1622	Bridge, tunnel, and elevated highway
1623	Water, sewer, and utility lines
1629	Heavy construction, nec
1711	Plumbing, heating, air conditioning
1721	Painting, paper hanging, decorating
1731	Electrical work
1741	Masonry and other stonework
1742	Plastering, drywall, and insulation
1743	Terrazzo, tile, marble, mosaic work
1751	Carpentering
1752	Floor laying and floor work, nec
1761	Roofing and sheet metal work
1771	Concrete work
1781	Water well drilling
1791	Structural metal erection
1793	Glass and glazing work
1794	Excavating and foundation work
1795	Wrecking and demolition work
1796	Installing building equipment, nec
1799	Special trade contractors, nec
Food Products	
2011	Meat packing plants
2013	Sausages and other prepared meats
2016	Poultry dressing plants
2017	Poultry and egg processing
2021	Creamery butter
2022	Cheese, natural and processed
2023	Condensed and evaporated milk
2024	Ice cream and frozen desserts
2026	Fluid milk
2032	Canned specialties
2033	Canned fruits and vegetables
2034	Dehydrated fruits, vegetables, soups
2035	Pickles, sauces, and salad dressings
2037	Frozen fruits and vegetables
2038	Frozen specialties
2041	Flour and other grain mill products
2043	Cereal breakfast foods
2044	Rice milling
2045	Blended and prepared flour
2046	Wet corn milling
2047	Dog, cat, and other pet food
2048	Prepared feeds, nec
2051	Bread, cake, and related products
2052	Cookies and crackers
2061	Raw cane sugar
2062	Cane sugar refining
2063	Beet sugar
2065	Confectionery products
2066	Chocolate and cocoa products
2067	Chewing gum
2074	Cottonseed oil mills
2075	Soybean oil mills
2076	Vegetable oil mills, nec
2077	Animal and marine fats and oils
2079	Shortening and cooking oils
2082	Malt beverages
2083	Malt
2084	Wines, brandy, and brandy spirits
2085	Distilled liquor, except brandy
2086	Bottled and canned soft drinks
2087	Flavoring extracts and syrups, nec
2091	Canned and cured seafoods
2092	Fresh or frozen packaged fish
2095	Roasted coffee
2097	Manufactured ice
2098	Macaroni and spaghetti
2099	Food preparations, nec
Tobacco	
2111	Cigarettes
2121	Cigars
2131	Chewing and smoking tobacco
2141	Tobacco stemming and redrying
Textile Mill Products	
2211	Weaving mills, cotton
2221	Weaving mills, synthetics
2231	Weaving and finishing mills, wool
2241	Narrow fabric mills
2251	Women's hosiery, except socks
2252	Hosiery, nec
2253	Knit outerwear mills
2254	Knit underwear mills
2257	Circular knit fabric mills
2258	Warp knit fabric mills
2259	Knitting mills, nec
2261	Finishing plants, cotton
2262	Finishing plants, synthetics

Note: nec = not elsewhere classified.

SIC Code	Industry
2269	Finishing plants, nec
2271	Woven carpets and rugs
2272	Tufted carpets and rugs
2279	Carpets and rugs, nec
2281	Yarn mills, except wool
2282	Throwing and winding mills
2283	Wool yarn mills
2284	Thread mills
2291	Felt goods, except woven felts and hats
2292	Lace goods
2293	Paddings and upholstery filling
2294	Processed textile waste
2295	Coated fabrics, not rubberized
2296	Tire cord and fabric
2297	Nonwoven fabrics
2298	Cordage and twine
2299	Textile goods, nec
Apparel and Related Textiles	
2311	Men's and boys' suits and coats
2321	Men's and boy's shirts and nightwear
2322	Men's and boys' underwear
2323	Men's and boys' neckwear
2327	Men's and boys' separate trousers
2328	Men's and boys' work clothing
2329	Men's and boys' clothing, nec
2331	Women's and misses' blouses and waists
2335	Women's and misses' dresses
2337	Women's and misses' suits and coats
2339	Women's and misses' outerwear, nec
2341	Women's and children's underwear
2342	Brassieres and allied garments
2351	Millinery
2352	Hats and caps, except millinery
2361	Children's dresses and blouses
2363	Children's coats and suits
2369	Children's outerwear, nec
2371	Fur goods
2381	Fabric dress and work gloves
2384	Robes and dressing gowns
2385	Waterproof outergarments
2386	Leather and sheep lined clothing
2387	Apparel belts
2389	Apparel and accessories, nec
2391	Curtains and draperies
2392	House furnishings, nec
2393	Textile bags
2394	Canvas and related products
2395	Pleating and stitching
2396	Automotive and apparel trimmings
2397	Schiffli machine embroideries
2399	Fabricated textile products, nec

SIC Code	Industry
Lumber and Wood Products	
2411	Logging camps and logging contractors
2421	Sawmills and planing mills, general
2426	Hardwood dimension and flooring
2429	Special product sawmills, nec
2431	Millwork
2434	Wood kitchen cabinets
2435	Hardwood veneer and plywood
2436	Softwood veneer and plywood
2439	Structural wood members, nec
2441	Nailed wood boxes and shook
2448	Wood pallets and skids
2449	Wood containers, nec
2451	Mobile homes
2452	Prefabricated wood buildings
2491	Wood preserving
2492	Particleboard
2499	Wood products, nec
Furniture and Fixtures	
2511	Wood household furniture
2512	Upholstered household furniture
2514	Metal household furniture
2515	Mattresses and bedsprings
2517	Wood TV and radio cabinets
2519	Household furniture, nec
2521	Wood office furniture
2522	Metal office furniture
2531	Public building and related furniture
2541	Wood partitions and fixtures
2542	Metal partitions and fixtures
2591	Drapery hardware and blinds and shades
2599	Furniture and fixtures, nec
Paper Products	
2611	Pulp mills
2621	Paper mills, except building paper
2631	Paperboard mills
2641	Paper coating and glazing
2642	Envelopes
2643	Bags, except textile bags
2645	Die-cut paper and board
2646	Pressed and molded pulp goods
2647	Sanitary paper products
2648	Stationery products
2649	Converted paper products, nec
2651	Folding paperboard boxes
2652	Set-up paperboard boxes
2653	Corrugated and solid fiber boxes
2654	Sanitary food containers
2655	Fiber cans, drums, and similar products
2661	Building paper and board mills

Note: nec = not elsewhere classified.

SIC Code	Industry
Printing and Publishing Industries	
2711	Newspapers
2721	Periodicals
2731	Book publishing
2732	Book printing
2741	Miscellaneous publishing
2751	Commercial printing, letterpress
2752	Commercial printing, lithographic
2753	Engraving and plate printing
2754	Commercial printing, gravure
2761	Manifold business forms
2771	Greeting card publishing
2782	Blankbooks and looseleaf binders
2789	Bookbinding and related work
2791	Typesetting
2793	Photoengraving
2794	Electrotyping and stereotyping
2795	Lithographic platemaking services
Chemical Products	
2800	General chemical manufacturing
2812	Alkalies and chlorine
2813	Industrial gases
2816	Inorganic pigments
2818	Organic pesticide products
2819	Industrial inorganic chemicals, nec
2821	Plastics materials and resins
2822	Synthetic rubber
2823	Cellulosic man-made fibers
2824	Organic fibers, noncellulosic
2831	Biological products
2833	Medicinals and botanicals
2834	Pharmaceutical preparations
2841	Soap and other detergents
2842	Polishes and sanitation goods
2843	Surface active agents
2844	Toilet preparations
2851	Paints and allied products
2861	Gum and wood chemicals
2865	Cyclic crudes and intermediates
2869	Industrial organic chemicals, nec
2873	Nitrogenous fertilizers
2874	Phosphatic fertilizers
2875	Fertilizers, mixing only
2879	Agricultural chemicals, nec
2891	Adhesives and sealants
2892	Explosives
2893	Printing ink
2895	Carbon black
2899	Chemical preparations, nec
Petroleum and Coal Products	
2911	Petroleum refining
2951	Paving mixtures and blocks
2952	Asphalt felts and coatings
2992	Lubricating oils and greases
2999	Petroleum and coal products, nec
Rubber and Plastic Products	
3011	Tires and inner tubes
3021	Rubber and plastics footwear
3031	Reclaimed rubber
3041	Rubber and plastics hose and belting
3069	Fabricated rubber products, nec
3079	Miscellaneous plastics products
Leather Products	
3111	Leather tanning and finishing
3131	Boot and shoe cut stock and findings
3142	House slippers
3143	Men's footwear, except athletic
3144	Women's footwear, except athletic
3149	Footwear, except rubber, nec
3151	Leather gloves and mittens
3161	Luggage
3171	Women's handbags and purses
3172	Personal leather goods, nec
3199	Leather goods, nec
Stone, Clay, and Glass Products	
3211	Flat glass
3221	Glass containers
3229	Pressed and blown glass, nec
3231	Products of purchased glass
3241	Cement, hydraulic
3251	Brick and structural clay tile
3253	Ceramic wall and floor tile
3255	Clay refractories
3259	Structural clay products, nec
3261	Vitreous plumbing fixtures
3262	Vitreous china food utensils
3263	Fine earthenware food utensils
3264	Porcelain electrical supplies
3269	Pottery products, nec
3271	Concrete block and brick
3272	Concrete products, nec
3273	Ready-mixed concrete
3274	Lime
3275	Gypsum products
3281	Cut stone and stone products
3291	Abrasive products
3292	Asbestos products
3293	Gaskets, packing, and sealing devices
3295	Minerals, ground or treated
3296	Mineral wool
3297	Nonclay refractories
3299	Nometallic mineral products, nec

Note: nec = not elsewhere classified.

SIC Code	Industry
Primary Metal Industries	
3312	Blast furnaces and steel mills
3313	Electrometallurgical products
3315	Steel wire and related products
3316	Cold finishing of steel shapes
3317	Steel pipe and tubes
3321	Gray iron foundries
3322	Malleable iron foundries
3324	Steel investment foundries
3325	Steel foundries, nec
3331	Primary copper
3332	Primary lead
3333	Primary zinc
3334	Primary aluminum
3339	Primary nonferrous metals, nec
3341	Secondary nonferrous metals
3351	Copper rolling and drawing
3353	Aluminum sheet, plate, and foil
3354	Aluminum extruded products
3355	Aluminum rolling and drawing, nec
3356	Nonferrous rolling and drawing, nec
3357	Nonferrous wire drawing and insulating
3361	Aluminum foundries
3362	Brass, bronze, and copper foundries
3369	Nonferrous foundries, nec
3398	Metal heat treating
3399	Primary metal products, nec
Metal Fabrications	
3411	Metal cans
3412	Metal barrels, drums, and pails
3421	Cutlery
3423	Hand and edge tools, nec
3425	Hand saws and saw blades
3429	Hardware, nec
3431	Metal sanitary ware
3432	Plumbing fittings and brass goods
3433	Heating equipment, except electric
3441	Fabricated structural metal
3442	Metal doors, sash, and trim
3443	Fabricated plate work (boiler shops)
3444	Sheet metal work
3446	Architectural metal work
3448	Prefabricated metal buildings
3449	Miscellaneous metal work
3451	Screw machine products
3452	Bolts, nuts, rivets, and washers
3462	Iron and steel forgings
3463	Nonferrous forgings
3465	Automotive stampings
3466	Crowns and closures
3469	Metal stampings, nec
3470	Coating, engraving, and allied services
3471	Plating and polishing
3479	Metal coating and allied services
3482	Small arms ammunition
3483	Ammunition, except for small arms, nec
3484	Small arms
3489	Ordnance and accessories, nec
3493	Steel springs, except wire
3494	Valves and pipe fittings
3495	Wire springs
3496	Miscellaneous fabricated wire products
3497	Metal foil and leaf
3498	Fabricated pipe and fittings
3499	Fabricated metal products, nec
Nonelectrical Machinery	
3511	Turbines and turbine generator sets
3519	Internal combustion engines, nec
3523	Farm machinery and equipment
3524	Lawn and garden equipment
3531	Construction machinery
3532	Mining machinery
3533	Oil field machinery
3534	Elevators and moving stairways
3535	Conveyors and conveying machinery
3536	Hoists, cranes, and monorails
3537	Industrial trucks and tractors
3541	Machine tools, metal cutting types
3542	Machine tools, metal forming types
3544	Special dies, tools, jigs, and fixture
3545	Machine tool accessories
3546	Power driven hand tools
3547	Rolling mill machinery
3549	Metalworking machinery, nec
3551	Food products machinery
3552	Textile machinery
3553	Woodworking machinery
3554	Paper industries machinery
3555	Printing trades machinery
3559	Special industry machinery, nec
3561	Pumps and pumping equipment
3562	Ball and roller bearings
3563	Air and gas compressors
3564	Blowers and fans
3565	Industrial patterns
3566	Speed changers, drives, and gears
3567	Industrial furnaces and ovens
3568	Power transmission equipment, nec
3569	General industrial machinery, nec
3572	Typewriters
3573	Electronic computing equipment
3574	Calculating and accounting machines
3576	Scales and balances, except laboratory
3579	Office machines, nec
3581	Automatic merchandising machines

Note: nec = not elsewhere classified.

SIC Code	Industry
3582	Commercial laundry equipment
3585	Refrigeration and heating equipment
3586	Measuring and dispensing pumps
3589	Service industry machinery, nec
3592	Carburetors, pistons, rings, valves
3599	Machinery, except electrical, nec
Electrical and Electronic Machinery, Equipment, and Supplies	
3612	Transformers
3613	Switchgear and switchboard apparatus
3621	Motors and generators
3622	Industrial controls
3623	Welding apparatus, electrical
3624	Carbon and graphite products
3629	Electrical industrial apparatus, nec
3631	Household cooking equipment
3632	Household refrigerators and freezers
3633	Household laundry equipment
3634	Electric housewares and fans
3635	Household vacuum cleaners
3636	Sewing machines
3639	Household appliances, nec
3641	Electric lamps
3643	Current-carrying wiring devices
3644	Noncurrent-carrying wiring devices
3645	Residential lighting fixtures
3646	Commerical lighting fixtures
3647	Vehicular lighting equipment
3648	Lighting equipment, nec
3651	Radio and TV receiving sets
3652	Phonograph records
3661	Telephone and telegraph apparatus
3662	Radio and TV communication equipment
3671	Electron tubes, receiving type
3672	Cathode ray television picture tubes
3673	Electron tubes, transmitting
3674	Semiconductors and related devices
3675	Electronic capacitors
3676	Electronic resistors
3677	Electronic coils and transformers
3678	Electronic connectors
3679	Electronic components, nec
3691	Storage batteries
3692	Primary batteries, dry and wet
3693	X-ray apparatus and tubes
3694	Engine electrical equipment
3699	Electrical equipment and supplies, nec
Transportation Equipment	
3711	Motor vehicles and car bodies
3713	Truck and bus bodies
3714	Motor vehicle parts and accessories
3715	Truck trailers
3716	Motor homes on purchased chassis
3721	Aircraft
3724	Aircraft engines and engine parts
3728	Aircraft equipment, nec
3731	Ship building and repairing
3732	Boat building and repairing
3743	Railroad equipment
3751	Motorcycles, bicycles, and parts
3761	Guided missiles and space vehicles
3764	Space propulsion units and parts
3769	Space vehicle equipment, nec
3792	Travel trailers and campers
3795	Tanks and tank components
3799	Transportation equipment, nec
Instruments	
3811	Engineering and scientific instruments
3822	Environmental controls
3823	Process control instruments
3824	Fluid meters and counting devices
3825	Instruments to measure electricity
3829	Measuring and controlling devices, nec
3832	Optical instruments and lenses
3841	Surgical and medical instruments
3842	Surgical appliances and supplies
3843	Dental equipment and supplies
3851	Ophthalmic goods
3861	Photographic equipment and supplies
3873	Watches, clocks, and watchcases
Miscellaneous Manufacturing	
3911	Jewelry, precious metal
3914	Silverware and plated ware
3915	Jewelers' materials and lapidary work
3931	Musical instruments
3942	Dolls
3944	Games, toys, and children's vehicles
3949	Sporting and athletic goods, nec
3951	Pens and mechanical pencils
3952	Lead pencils and art goods
3953	Marking devices
3955	Carbon paper and inked ribbons
3961	Costume jewelry
3962	Artificial flowers
3963	Buttons
3964	Needles, pins, and fasteners
3991	Brooms and brushes
3993	Signs and advertising displays
3995	Burial caskets
3996	Hard surface floor coverings
3999	Manufacturing industries, nec

Note: nec = not elsewhere classified.

SIC Code	Industry
Railroad Transportation	
4011	Railroads, line-haul operating
4013	Switching and terminal devices
4041	Railway express service
Local Passenger Transportation	
4111	Local and suburban transit
4119	Local passenger transportation, nec
4121	Taxicabs
4131	Intercity highway transportation
4141	Local passenger charter service
4142	Charter service, except local
4151	School buses
4171	Bus terminal facilities
4172	Bus service facilities
Trucking	
4212	Local trucking, without storage
4213	Trucking, except local
4214	Local trucking and storage
4221	Farm product warehousing and storage
4222	Refrigerated warehousing
4224	Household goods warehousing
4225	General warehousing and storage
4226	Special warehousing and storage, nec
4231	Trucking terminal facilities
4311	U.S. Postal Service
Water Transportation	
4411	Deep sea foreign transportation
4421	Noncontiguous area transportation
4422	Coastwise transportation
4423	Intercoastal transportation
4431	Great Lakes transportation
4441	Transportation on rivers and canals
4452	Ferries
4453	Lighterage
4454	Towing and tugboat service
4459	Local water transportation, nec
4463	Marine cargo handling
4464	Canal operation
4469	Water transportation services, nec
Air Transportation	
4511	Certified air transportation
4521	Noncertified air transportation
4582	Airports and flying fields
4583	Air terminal services
Pipelines	
4612	Crude petroleum pipelines
4613	Refined petroleum pipelines
4619	Pipelines, nec

SIC Code	Industry
Transportation Services	
4712	Freight forwarding
4722	Passenger transportation arrangement
4723	Freight transportation arrangement
4742	Railroad car rental with service
4743	Railroad car rental without service
4782	Inspection and weighing services
4783	Packing and crating
4784	Fixed facilities for vehicles, nec
4789	Transportation services, nec
Communications	
4811	Telephone communication
4821	Telegraph communication
4832	Radio broadcasting
4833	Television broadcasting
4899	Communication services, nec
Electrical, Gas, and Sanitary Services	
4911	Electric services
4922	Natural gas transmission
4923	Gas transmission and distribution
4924	Natural gas distribution
4925	Gas production and/or distribution
4931	Electric and other services combined
4932	Gas and other services combined
4939	Combination utility services, nec
4941	Water supply
4952	Sewerage systems
4953	Refuse systems
4959	Sanitary services, nec
4961	Steam supply
4971	Irrigation systems
Wholesale Trade	
5012	Automobiles and other motor vehicles
5013	Automotive parts and supplies
5014	Tires and tubes
5021	Furniture
5023	Home furnishings
5031	Lumber, plywood, and millwork
5039	Construction materials, nec
5041	Sporting and recreational goods
5042	Toys and hobby goods and supplies
5043	Photographic equipment and supplies
5051	Metals service centers and offices
5052	Coal and other minerals and ores
5063	Electrical apparatus and equipment
5064	Electrical appliances, TV and radios
5065	Electronic parts and equipment
5072	Hardware
5074	Plumbing and hydronic heating supplies
5075	Warm air heating and air conditioning

Note: nec = not elsewhere classified.

SIC Code	Industry
5078	Refrigeration equipment and supplies
5081	Commercial machines and equipment
5082	Construction and mining machinery
5083	Farm machinery and equipment
5084	Industrial machinery and equipment
5085	Industrial supplies
5086	Professional equipment and supplies
5087	Service establishment equipment
5088	Transportation equipment and supplies
5093	Scrap and waste materials
5094	Jewelry, watches, and precious stones
5099	Durable goods, nec
5111	Printing and writing paper
5112	Stationery supplies
5113	Industrial and personal service paper
5122	Drugs, proprietaries, and sundries
5133	Piece goods
5134	Notions and other dry goods
5136	Men's clothing and furnishings
5137	Women's and children's clothing
5139	Footwear
5141	Groceries, general line
5142	Frozen foods
5143	Dairy products
5144	Poultry and poultry products
5145	Confectionery
5146	Fish and seafoods
5147	Meats and meat products
5148	Fresh fruits and vegetables
5149	Groceries and related products, nec
5152	Cotton
5153	Grain
5154	Livestock
5159	Farm-product raw materials, nec
5161	Chemicals and allied products
5171	Petroleum bulk stations and terminals
5172	Petroleum products, nec
5181	Beer and ale
5182	Wines and distilled beverages
5191	Farm supplies
5194	Tobacco and tobacco products
5198	Paints, varnishes, and supplies
5199	Nondurable goods, nec
Retail Trade	
5211	Lumber and other building materials
5231	Paint, glass, and wallpaper stores
5251	Hardware stores
5261	Retail nurseries and gardens
5271	Mobile home dealers
5311	Department stores
5331	Variety stores
5399	Miscellaneous general merchandise stores
5411	Grocery stores
5422	Freezer and locker meat provisioners
5423	Meat and fish (seafood) markets
5431	Fruit stores and vegetable markets
5441	Candy, nut, and confectionery stores
5451	Dairy products stores
5462	Retail bakeries, baking and selling
5463	Retail bakeries, selling only
5499	Miscellaneous food stores
5511	New and used car dealers
5521	Used car dealers
5531	Auto and home supply stores
5541	Gasoline service stations
5551	Boat dealers
5561	Recreation and utility trailer dealers
5571	Motorcycle dealers
5599	Automotive dealers, nec
5611	Men's and boys' clothing and furnishings
5621	Women's ready-to-wear stores
5631	Women's accessory and specialty stores
5641	Children's and infants' wear stores
5651	Family clothing stores
5661	Shoe stores
5681	Furriers and fur shops
5699	Miscellaneous apparel and accessories
5712	Furniture stores
5713	Floor covering stores
5714	Drapery and upholstery stores
5719	Miscellaneous home furnishings stores
5722	Household appliance stores
5732	Radio and television stores
5733	Music stores
5812	Eating places
5813	Drinking places
5912	Drugstores and proprietary stores
5921	Liquor stores
5931	Used merchandise stores
5941	Sporting goods and bicycle shops
5942	Book stores
5943	Stationery stores
5944	Jewelry stores
5945	Hobby, toy, and game shops
5946	Camera and photographic supply stores
5947	Gift, novelty, and souvenir shops
5948	Luggage and leather goods stores
5949	Sewing, needlework, and piece goods
5961	Mail order houses
5962	Merchandising machine operators
5963	Direct selling organizations
5982	Fuel and ice dealers, nec
5983	Fuel oil dealers
5984	Liquefied petroleum gas dealers

Note: nec = not elsewhere classified.

SIC Code	Industry
5992	Florists
5993	Cigar stores and stands
5994	News dealers and newsstands
5999	Miscellaneous retail stores, nec
Financial	
6011	Federal Reserve banks
6022	State banks, Federal Reserve
6023	State banks, not Federal Reserve, FDIC
6024	State banks, not Federal Reserve, not FDIC
6025	National banks, Federal Reserve
6026	National banks, not Federal Reserve, FDIC
6027	National banks, not FDIC
6028	Private banks, not incorporated, not FDIC
6032	Mutual savings banks, Federal Reserve
6033	Mutual savings banks, nec
6034	Mutual savings banks, not FDIC
6042	Nondeposit trusts, Federal Reserve
6044	Nondeposit trusts, not FDIC
6052	Foreign exchange establishments
6054	Safe deposit companies
6055	Clearinghouse associations
6056	Corporations for banking abroad
6059	Functions related to banking, nec
6112	Rediscounting, not for agricultural
6113	Rediscounting, for agricultural
6122	Federal savings and loan associations
6123	State associations, insured
6124	State associations, noninsured, FHLB
6125	State associations, noninsured, nec
6131	Agricultural credit institutions
6142	Federal credit unions
6143	State credit unions
6144	Nondeposit industrial loan companies
6145	Licensed small loan lenders
6146	Installment sales finance companies
6149	Miscellaneous personal credit institutions
6153	Short-term business credit
6159	Miscellaneous business credit institutions
6162	Mortgage bankers and correspondents
6163	Loan brokers
6211	Security brokers and dealers
6221	Commodity contracts brokers, dealers
6231	Security and commodity exchanges
6281	Security and commodity services
Insurance	
6311	Life insurance
6321	Accident and health insurance
6324	Hospital and medical service plans
6331	Fire, marine, and casualty insurance
6351	Surety insurance
6361	Title insurance
6371	Pension, health, and welfare funds
6399	Insurance carriers, nec
6411	Insurance agents, brokers, and service
Real Estate	
6512	Nonresidential building operators
6513	Apartment building operators
6514	Dwelling operators, except apartments
6515	Mobile home site operators
6517	Railroad property lessors
6519	Real property lessors, nec
6531	Real estate agents and managers
6541	Title abstract offices
6552	Subdividers and developers, nec
6553	Cemetery subdividers and developers
6611	Combined real estate, insurance, etc.
Holding and Other Investment Offices	
6711	Holding offices
6722	Management investment, open-end
6723	Management investment, closed-end
6724	Unit investment trusts
6725	Face-amount certificate offices
6732	Educational, religious, etc. trusts
6733	Trusts, nec
6792	Oil royalty traders
6793	Commodity traders
6794	Patent owners and lessors
6798	Real estate investment trusts
6799	Investors, nec
Hotels and Personal Services	
7011	Hotels, motels, and tourist courts
7021	Rooming and boarding houses
7032	Sporting and recreational camps
7033	Trailering parks for transients
7041	Membership-basis organization hotels
7211	Power laundries, family and commercial
7212	Garment pressing and cleaners' agents
7213	Linen supply
7214	Diaper service
7215	Coin-operated laundries and cleaning
7216	Dry cleaning plants, except rug
7217	Carpet and upholstery cleaning
7218	Industrial launderers
7219	Laundry and garment services, nec
7221	Photographic studios, portrait
7231	Beauty shops
7241	Barber shops
7251	Shoe repair and hat cleaning shops
7261	Funeral service and crematories
7299	Miscellaneous personal services

Note: nec = not elsewhere classified.

SIC Code	Industry
Business Services	
7311	Advertising agencies
7312	Outdoor advertising services
7313	Radio, TV, publisher representatives
7319	Advertising, nec
7321	Credit reporting and collection
7331	Direct mail advertising services
7332	Blueprinting and photocopying
7333	Commerical photography and art
7339	Stenographic and reproduction, nec
7341	Window cleaning
7342	Disinfecting and exterminating
7349	Building maintenance services, nec
7351	News syndicates
7361	Employment agencies
7362	Temporary help supply services
7369	Personnel supply services, nec
7372	Computer programming and software
7374	Data processing services
7379	Computer related services, nec
7391	Research and development laboratories
7392	Management and public relations
7393	Detective and protective services
7394	Equipment rental and leasing
7395	Photofinishing laboratories
7396	Trading stamp services
7397	Commercial testing laboratories
7399	Business services, nec
Automotive Repair, Services, and Garages	
7512	Passenger car rental and leasing
7513	Truck rental and leasing
7519	Utility trailer rental
7523	Parking lots
7525	Parking structures
7531	Top and body repair shops
7534	Tire retreading and repair shops
7535	Paint shops
7538	General automotive repair shops
7539	Automotive repair shops, nec
7542	Car washes
7549	Automotive services, nec
Miscellaneous Repair Services	
7622	Radio and television repair
7623	Refrigeration service and repair
7629	Electrical repair shops, nec
7631	Watch, clock, and jewelry repair
7641	Reupholstery and furniture repair
7692	Welding repair
7694	Armature rewinding shops
7699	Repair services, nec

SIC Code	Industry
Entertainment	
7813	Motion picture production, except TV
7814	Motion picture production for TV
7819	Services allied to motion pictures
7823	Motion picture film exchanges
7824	Film or tape distribution for TV
7829	Motion picture distribution services
7832	Motion picture theaters except drive-in
7833	Drive-in motion picture theaters
7911	Dance halls, studios, and schools
7922	Theatrical producers and services
7929	Entertainers and entertainment groups
7932	Billiard and pool establishments
7933	Bowling alleys
7941	Sports clubs and promoters
7948	Racing, including track operation
7992	Public golf courses
7993	Coin-operated amusement devices
7996	Amusement parks
7997	Membership sports and recreation clubs
7999	Amusement and recreation, nec
Health Services	
8011	Offices of physicians
8021	Offices of dentists
8031	Offices of osteopathic physicians
8041	Offices of chiropractors
8042	Offices of optometrists
8049	Offices of health practitioners, nec
8051	Skilled nurse care facilities
8059	Nursing and personal care, nec
8062	General medical and surgical hospitals
8063	Psychiatric hospitals
8069	Specialty hospitals, except psychiatric
8071	Medical laboratories
8072	Dental laboratories
8081	Outpatient care facilities
8091	Health and allied services, nec
Legal, Educational, and Social Services	
8111	Legal services
8211	Elementary and secondary schools
8221	Colleges and universities, nec
8222	Junior colleges
8231	Libraries and information centers
8241	Correspondence schools
8243	Data processing schools
8244	Business and secretarial schools
8249	Vocational schools, nec
8299	Schools and educational services, nec
8321	Individual and family services
8331	Job training and related services
8351	Child day care services

Note: nec = not elsewhere classified.

SIC Code	Industry
8361	Residential care
8399	Social services, nec
8411	Museums and art galleries
8421	Botanical and zoological gardens
Professional Organizations	
8611	Business associations
8621	Professional organizations
8631	Labor organizations
8641	Civic and social associations
8651	Political organizations
8661	Religious organizations
8699	Membership organizations, nec
8811	Private households
Miscellaneous Services	
8911	Engineering and architectural services
8922	Noncommercial research organizations
8931	Accounting, auditing, and bookkeeping
8999	Services, nec
Government	
9111	Executive offices
9121	Legislative bodies
9131	Executive and legislative combined
9199	General government, nec

SIC Code	Industry
9211	Courts
9221	Police protection
9222	Legal counsel and prosecution
9223	Correctional institutions
9224	Fire protection
9229	Public order and safety, nec
9311	Finance, taxation, and monetary policy
9411	Administration of educational programs
9431	Administration of public health programs
9441	Administration of social and manpower programs
9451	Administration of veterans' affairs
9511	Air, water, and solid waste management
9512	Land, mineral, wildlife conservation
9531	Housing programs
9532	Urban and community development
9611	Administration of general economic programs
9621	Regulation, administration of transportation
9631	Regulation, administration of utilities
9641	Regulation of agricultural marketing
9651	Regulation miscellaneous commercial sectors
9661	Space research and technology
9711	National security
9721	International affairs
9999	Nonclassifiable establishment

Note: nec = not elsewhere classified.

The following list of codes is provided to assist you in completing the questions which ask about the types of hazardous waste generated and managed onsite at your facility. This list of codes has two parts:

- A list of **X waste codes** which was developed specifically for this survey to describe (1) Waste that is considered hazardous by some state or federal regulations, but not now considered hazardous by RCRA regulations and (2) Hazardous waste residuals from onsite hazardous waste management operations.
- A list of codes for the waste considered hazardous by federal RCRA regulations—**RCRA D, F, K, P, and U waste codes.**

If you generated or managed a type of waste that is considered hazardous by regulations in your state and a waste code is not provided or if you have any questions about this list of waste codes, please call the Survey Helpline (1-800-635-8850).

X WASTE CODES

This list of X waste codes was developed specifically for this survey. **These X codes are not official RCRA waste codes and should be used ONLY for this survey.**

Code	Waste description
Waste That Is Considered Hazardous by Some State and Federal Regulations, But Not by RCRA Regulations	
XPB1	Waste which has a concentration of polychlorinated biphenyls less than 50 parts per million
XPB2	Waste which has a concentration of polychlorinated biphenyls greater than or equal to 50 parts per million but less than 500 parts per million
XPB3	Waste which has a concentration of polychlorinated biphenyls greater than or equal to 500 parts per million
XASB	Waste containing asbestos
XOIL	Waste oil
XDXN	Waste containing dioxins/furans *(See Note 1)*
Hazardous Waste Residuals from Onsite Hazardous Waste Management Operations *(See Note 2)*	
XLEA	Leachate from hazardous waste landfills
XASH	Hazardous incinerator, boiler, or furnace ash
XSCR	Hazardous incinerator, boiler, or furnace scrubber water
XWWS	Hazardous wastewater treatment sludge *(See Note 3)*
XWWL	Hazardous wastewater treatment liquid *(See Note 3)*

NOTES:

1. Do not use XDXN to denote dioxin-containing wastes described by RCRA waste codes.
2. These waste codes were developed to describe hazardous waste **residuals** that result from the **onsite** management of many individual RCRA coded wastes which are no longer individually identifiable.
3. Do not use XWWS or XWWL to denote hazardous wastewater treatment sludges or liquids that contain wastes described by RCRA waste codes beginning with the letter F or K. Instead, list F or K waste codes separately and use XWWS and/or XWWL to denote all other constituents.

RCRA WASTE CODES

Code	Waste description
Characteristic Hazardous Waste *(A description of the characteristic hazardous wastes can be found at 40 CFR 261.21-261.24, July 1, 1986. Listed in the box below is the maximum concentration of contaminants for the characteristic of EP toxicity.)*	
D001	Ignitable waste
D002	Corrosive waste
D003	Reactive waste
D004	Arsenic
D005	Barium
D006	Cadmium
D007	Chromium
D008	Lead
D009	Mercury
D010	Selenium
D011	Silver
D012	Endrin(1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene)
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane,γ isomer)
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl]ethane)
D015	Toxaphene ($C_{10}H_{10}Cl_8$,technical chlorinated camphene,67-69% chlorine)
D016	2,4-D (2,4-dichlorophenoxyacetic acid)
D017	2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid)

MAXIMUM CONCENTRATION OF CONTAMINANTS FOR CHARACTERISTIC OF EP TOXICITY

A solid waste exhibits the characteristic of EP toxicity if, using EP toxicity test methods, the extract from a representative sample of the waste contains any of the contaminants listed below at a concentration equal to or greater than the value given.

RCRA Waste Code	Contaminant	Maximum concentration (milligrams per liter)
D004	Arsenic	5.0
D005	Barium	100.0
D006	Cadmium	1.0
D007	Chromium	5.0
D008	Lead	5.0
D009	Mercury	0.2
D010	Selenium	1.0
D011	Silver	5.0
D012	Endrin(1,2,3,4,10,10-hexachloro-1,7-epoxy-1,4,4a,5,6,7,8,8a-octahydro-1,4-endo, endo-5,8-dimethano-naphthalene)	0.02
D013	Lindane (1,2,3,4,5,6-hexa-chlorocyclohexane,γ isomer)	0.4
D014	Methoxychlor (1,1,1-trichloro-2,2-bis [p-methoxyphenyl]ethane)	10.0
D015	Toxaphene ($C_{10}H_{10}Cl_8$,technical chlorinated camphene,67-69% chlorine)	0.5
D016	2,4-D (2,4-dichlorophenoxyacetic acid)	10.0
D017	2,4,5-TP Silvex (2,4,5-trichlorophenoxypropionic acid)	1.0

Code	Waste description
Hazardous Waste from Nonspecific Sources	
F001	The following spent halogenated solvents used in degreasing: tetrachloroethylene, trichlorethylene, methylene chloride, 1,1,1-trichloroethane, carbon tetrachloride and chlorinated fluorocarbons and all spent solvent mixtures/blends used in degreasing containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F002	The following spent halogenated solvents: tetrachloroethylene, methylene chloride, trichloroethylene, 1,1,1-trichloroethane, chlorobenzene, 1,1,2-trichloro-1,2,2-trifluoroethane, ortho-dichlorobenzene, trichlorofluoromethane, and 1,1,2, trichloroethane, ortho-dichlorobenzene, and trichlorofluoromethane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above halogenated solvents or those solvents listed in F001, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F003	The following spent nonhalogenated solvents: xylene, acetone, ethyl acetate, ethyl benzene, ethyl ether, methyl isobutyl ketone, n-butyl alcohol, cyclohexanone, and methanol; all spent solvent mixtures/blends containing, before use, only the above spent nonhalogenated solvents; and all spent solvent mixtures/blends containing, before use, one or more of the above nonhalogenated solvents, and a total of 10 percent or more (by volume) of one or more of those solvents listed in F001, F002, F004, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F004	The following spent nonhalogenated solvents: cresols and cresylic acid, and nitrobenzene; and the still bottoms from the recovery of these solvents; all spent solvent mixtures/blends containing before use a total of 10% or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, and F005; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F005	The following spent nonhalogenated solvents: toluene, methyl ethyl ketone, carbon disulfide, isobutanol, pyridine, benzene, 2-ethoxyethanol, and 2-nitropropane; all spent solvent mixtures/blends containing, before use, a total of 10 percent or more (by volume) of one or more of the above nonhalogenated solvents or those solvents listed in F001, F002, or F004; and still bottoms from the recovery of these spent solvents and spent solvent mixtures
F006	Wastewater treatment sludges from certain electroplating operations except from the following processes: (1) Sulfuric acid anodizing of aluminum; (2) tin plating on carbon steel; (3) zinc plating (segregated basis) on carbon steel; (4) aluminum or zinc-aluminum plating on carbon steel; (5) cleaning/stripping associated with tin, zinc, and aluminum plating on carbon steel; and (6) chemical etching and milling of aluminum
F007	Spent cyanide plating bath solutions from electroplating operations
F008	Residues from electroplating operations where cyanides are used in the process
F009	Spent stripping and cleaning bath solutions from electroplating operations where cyanides are used in the process
F010	Quenching bath residues and sludges from oil baths from metal heat treating operations where cyanides are used in the process
F011	Spent cyanide solutions from salt bath pot cleaning from metal heat treating operations (except for precious metals heat treating spent cyanide solutions from salt bath pot cleaning)
F012	Quenching wastewater treatment sludges from metal heat treating operations where cyanides are used in the process (except for precious metals heat treating quenching wastewater treatment sludges)
F019	Wastes from the chemical conversion coating of aluminum
F020	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- or tetrachlorophenol or of intermediates used to produce their pesticide derivatives. (This listing does not include wastes from the production of hexachlorophene from highly purified 2,4,5-trichlorophenol.)
F021	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of pentachlorophenol, or of intermediates used to produce derivatives
F022	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta- or hexachlorobenzenes under alkaline conditions
F023	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the production or manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tri- and tetrachlorophenols. (This listing does not include wastes from equipment used only for the production or use of hexachlorophene from highly purified 2,4,5-trichlorophenol.)

(continued)

Code	Waste description
F024	Wastes, including but not limited to, distillation residues, heavy ends, tars, and reactor clean-out wastes from the production of chlorinated aliphatic hydrocarbons, having a carbon content from one to five, utilizing free radical catalyzed processes. (This listing does not include light ends, spent filters and filter aids, spent dessicants, wastewater, wastewater treatment sludges, spent catalysts, and wastes listed in § 261.32.)
F026	Wastes (except wastewater and spent carbon from hydrogen chloride purification) from the production of materials on equipment previously used for the manufacturing use (as a reactant, chemical intermediate, or component in a formulating process) of tetra-, penta-, or hexachlorobenzene under alkaline conditions.
F027	Discarded unused formulations containing tri-, tetra-, or pentachlorophenol or discarded unused formulations containing compounds derived from these chlorophenols. (This listing does not include formulations containing hexachlorophene synthesized from prepurified 2,4,5-trichlorophenol as the sole component.)
F027	2,4,6-Trichlorophenol
F027	2,3,4,6-Tetrachlorophenol
F027	Pentachlorophenol
F027	Phenol,2,4,5-trichloro
F027	2,4,5-T
F027	Phenol,pentachloro
F027	Silvex
F027	Phenol,2,3,4,5-tetrachloro
F027	Phenol,2,4,6-trichloro
F027	Propionic acid, 2-(2,4,5-trichlorophenoxy)
F027	2,4,5-Trichlorophenol
F027	2,4,5-Trichlorophenoxyacetic acid
F028	Residues resulting from the incineration or thermal treatment of soil contaminated with EPA hazardous waste nos. F020, F021, F022, F023, F026, and F027

Hazardous Waste from Specific Sources

K001	Bottom sediment sludge from the treatment of wastewater from wood preserving processes that use creosote and/or pentachlorophenol
K002	Wastewater treatment sludge from the production of chrome yellow and orange pigments
K003	Wastewater treatment sludge from the production of molybdate orange pigments
K004	Wastewater treatment sludge from the production of zinc yellow pigments
K005	Wastewater treatment sludge from the production of chrome green pigments
K006	Wastewater treatment sludge from the production of chrome oxide green pigments (anhydrous and hydrated)
K007	Wastewater treatment sludge from the production of iron blue pigments
K008	Oven residue from the production of chrome oxide green pigments
K009	Distillation bottoms from the production of acetaldehyde from ethylene
K010	Distillation side cuts from the production of acetaldehyde from ethylene
K011	Bottom stream from the wastewater stripper in the production of acrylonitrile
K013	Bottom stream from the acetonitrile column in the production of acrylonitrile
K014	Bottoms from the acetonitrile purification column in the production of acrylonitrile
K015	Still bottoms from the distillation of benzyl chloride
K016	Heavy ends or distillation residues from the production of carbon tetrachloride
K017	Heavy ends (still bottoms) from the purification column in the production of epichlorohydrin
K018	Heavy ends from the fractionation column in ethyl chloride production

(continu

Code	Waste description
Hazardous Waste from Specific Sources	
K019	Heavy ends from the distillation of ethylene dichloride in ethylene dichloride production
K020	Heavy ends from the distillation of vinyl chloride in vinyl chloride monomer production
K021	Aqueous spent antimony catalyst waste from fluoromethanes production
K022	Distillation bottom tars from the production of phenol/acetone from cumene
K023	Distillation light ends from the production of phthalic anhydride from naphthalene
K024	Distillation bottoms from the production of phthalic anhydride from naphthalene
K025	Distillation bottoms from the production of nitrobenzene by the nitration of benzene
K026	Stripping still tails from the production of methyl ethyl pyridines
K027	Centrifuge and distillation residues from toluene diisocyanate production
K028	Spent catalyst from the hydrochlorinator reactor in the production of 1,1,1-trichloroethane
K029	Waste from the product steam stripper in the production of 1,1,1-trichloroethane
K030	Column bottoms or heavy ends from the combined production of trichloroethylene and perchloroethylene
K031	By-product salts generated in the production of MSMA and cacodylic acid
K032	Wastewater treatment sludge from the production of chlordane
K033	Wastewater and scrub water from the chlorination of cyclopentadiene in the production of chlordane
K034	Filter solids from the filtration of hexachlorocyclopentadiene in the production of chlordane
K035	Wastewater treatment sludges generated in the production of creosote
K036	Still bottoms from toluene reclamation distillation in the production of disulfoton
K037	Wastewater treatment sludges from the production of disulfoton
K038	Wastewater from the washing and stripping of phorate production
K039	Filter cake from the filtration of diethylphosphorodithioic acid in the production of phorate.
K040	Wastewater treatment sludge from the production of phorate
K041	Wastewater treatment sludge from the production of toxaphene
K042	Heavy ends or distillation residues from the distillation of tetrachlorobenzene in the production of 2,4,5-T
K043	2,6-Dichlorophenol waste from the production of 2,4-D
K044	Wastewater treatment sludges from the manufacturing and processing of explosives
K045	Spent carbon from the treatment of wastewater containing explosives
K046	Wastewater treatment sludges from the manufacturing, formulation, and loading of lead-based initiating compounds
K047	Pink/red water from TNT operations
K048	Dissolved air flotation (DAF) float from the petroleum refining industry
K049	Slop oil emulsion solids from the petroleum refining industry
K050	Heat exchanger bundle cleaning sludge from the petroleum refining industry
K051	API separator sludge from the petroleum refining industry
K052	Tank bottoms (leaded) from the petroleum refining industry
K060	Ammonia still lime sludge from coking operations
K061	Emission control dust/sludge from the primary production of steel in electric furnaces.
K062	Spent pickle liquor from steel finishing operations of plants that produce iron or steel
K069	Emission control dust/sludge from secondary lead smelting
K071	Brine purification muds from the mercury cell process in chlorine production, where separately prepurified brine is not used
K073	Chlorinated hydrocarbon waste from the purification step of the diaphragm cell process using graphite anodes in chlorine production
K083	Distillation bottoms from aniline production
K084	Wastewater treatment sludges generated during the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds

(continued)

Code	Waste description
K085	Distillation or fractionation column bottoms from the production of chlorobenzenes
K086	Solvent washes and sludges, caustic washes and sludges, or water washes and sludges from cleaning tubs and equipment used in the formulation of ink from pigments, driers, soaps, and stabilizers containing chromium and lead
K087	Decanter tank tar sludge from coking operations
K093	Distillation light ends from the production of phthalic anhydride from ortho-xylene
K094	Distillation bottoms from the production of phthalic anhydride from ortho-xylene
K095	Distillation bottoms from the production of 1,1,1-trichloroethane
K096	Heavy ends from the heavy ends column from the production of 1,1,1-trichloroethane
K097	Vacuum stripper discharge from the chlordane chlorinator in the production of chlordane
K098	Untreated process wastewater from the production of toxaphene
K099	Untreated wastewater from the production of 2,4-D
K100	Waste leaching solution from acid leaching of emission control dust/sludge from secondary lead smelting
K101	Distillation tar residues from the distillation of aniline-based compounds in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K102	Residue from the use of activated carbon for decolorization in the production of veterinary pharmaceuticals from arsenic or organo-arsenic compounds
K103	Process residues from aniline extraction from the production of aniline
K104	Combined wastewater streams generated from nitrobenzene/aniline production
K105	Separated aqueous stream from the reactor product washing step in the production of chlorobenzenes
K106	Wastewater treatment sludge from the mercury cell process in chlorine production
K111	Product washwaters from the production of dinitrotoluene via nitration of toluene
K112	Reaction byproduct water from the drying column in the production of toluenediamine via hydrogenation of dinitrotoluene
K113	Condensed liquid light ends from purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene.
K114	Vicinals from the purification of toluenediamine in production of toluenediamine via hydrogenation of dinitrotoluene
K115	Heavy ends from purification of toluenediamine in the production of toluenediamine via hydrogenation of dinitrotoluene
K116	Organic condensate from the solvent recovery column in the production of toluene diisocyanate via phosgenation of toluenediamine
K117	Wastewater from the reactor vent gas scrubber in the production of ethylene dibromide via bromination of ethene
K118	Spent adsorbent solids from purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene.
K136	Still bottoms from the purification of ethylene dibromide in the production of ethylene dibromide via bromination of ethene1

Discarded Commercial Chemical Products, Off-Specification Species, Container Residuals, and Spill Residues Thereof—Acute Hazardous Waste *(An alphabetized listing can be found at 40 CFR 261.33, July 1, 1986.)*

P001	Warfarin, when present at concentrations greater than or equal to 0.3%
P001	3-(α-Acetonyl-benzyl)-4-hydroxycoumarin and salts, when present at concentrations greater than 0.3%
P002	Acetamide, N-(aminothioxomethyl)
P002	1-Acetyl-2-thiourea
P003	2-Propenal
P003	Acrolein
P004	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo,exo-dimethanonaphthalene
P004	Aldrin

(continued)

Code	Waste description
P005	2-Propen-1-ol
P005	Allyl alcohol
P006	Aluminum phosphide (r,t)
P007	3(2H)-Isoxazolone,5-(aminomethyl)-
P007	5-(Aminomethyl)-3-isoxazolol
P008	4-α-Aminopyridine
P008	4-Pyridinamine
P008	4-Aminopyridine
P009	Phenol,2,4,6-trinitro-,ammonium salt (r)
P009	Ammonium picrate (r)
P010	Arsenic acid (t)
P011	Arsenic pentoxide (t)
P011	Arsenic (V) oxide (t)
P012	Arsenic (III) oxide (t)
P012	Arsenic trioxide (t)
P013	Barium cyanide
P014	Thiophenol
P014	Benzenethiol
P015	Beryllium dust (t)
P016	Methane,oxybis(chloro-
P016	Bis(chloromethyl) ether
P017	2-Propanone,1-bromo- (t)
P017	Bromoacetone (t)
P018	Strychnidin-10-one,2,3-dimethoxy-
P018	Brucine
P020	Dinoseb
P020	Phenol,2,4-dinitro-6-(1-methylpropyl)-
P021	Calcium cyanide
P022	Carbon bisulfide (t)
P022	Carbon disulfide (t)
P023	Acetaldehyde, chloro-
P023	Chloroacetaldehyde
P024	Benzenamine, 4-chloro-
P024	p-Chloroaniline
P026	Thiourea, (2-chlorophenyl)-
P026	1-(o-Chlorophenyl)thiourea
P027	Propanenitrile,3-chloro-
P027	3-Chloropropionitrile
P028	Benzene, (chloromethyl)-
P028	Benzyl chloride
P029	Copper cyanides
P030	Cyanides (soluble cyanide salts), not elsewhere specified (t)
P031	Cyanogen
P033	Cyanogen chloride
P033	Chlorine cyanide

(continued)

Code	Waste description
P034	4,6-Dinitro-o-cyclohexylphenol (t)
P034	Phenol,2-cyclohexyl-4,6-dinitro- (t)
P036	Dichlorophenylarsine
P036	Phenyl dichloroarsine
P037	Dieldrin
P037	1,2,3,4,10,10-Hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-octahydro-endo,exo-1,4:5,8-dimethanonaphthalene
P038	Diethylarsine (t)
P038	Arsine, diethyl- (t)
P039	0,0-Diethyl S-[2-(ethylthio)ethyl] phosphorodithioate (t)
P039	Disulfoton (t)
P040	0,0-Diethyl 0-pyrazinyl phosphorothioate
P040	Phosphorothioic acid, 0,0-diethyl 0- pyrazinyl ester
P041	Diethyl-p-nitrophenyl phosphate
P041	Phosphoric acid, diethyl p-nitrophenyl ester
P042	Epinephrine
P042	1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-
P043	Diisopropyl fluorophosphate
P043	Fluoridic acid, bis(1-methylethyl) ester
P043	Phosphorofluoridic acid, bis(1-methylethyl) ester
P044	Dimethoate (t)
P044	Phosphorodithioic acid, 0,0-dimethyl S-[2-(methylamino)-2-oxoethyl]ester (t)
P045	3,3-Dimethyl-1-(methylthio)-2-butanone, 0-[(methylamino)carbonyl]oxime
P045	Thiofanox
P046	α,α-Dimethylphenethylamine (t)
P046	Ethanamine,1,1-dimethyl-2-phenyl- (t)
P047	4,6-Dinitro-o-cresol and salts
P047	Phenol, 2-methyl-4,6-dinitro- and salts
P047	Phenol,2'4-dinitro-6-methyl-, and salts
P048	2,4-Dinitrophenol
P048	Phenol,2,4-dinitro-
P049	2,4-Dithiobiuret
P049	Thioimidodicarbonic diamide
P050	Endosulfan
P050	5-Norbornene-2,3-dimethanol,1,4,5,6,7,7-hexachloro,cyclic sulfite
P051	1,2,3,4,10,10-Hexachloro-6,7-expoxy-1,4,4a,5,6,7,8,8a-oxtahydro-endo,endo-1,4:5,8-dimethanonaphthalene
P051	Endrin
P054	Ethylenimine
P054	Aziridine
P056	Fluorine
P057	Fluoroacetamide
P057	Acetamide,2-fluor-
P058	Fluoroacetic acid, sodium salt
P058	Acetic acid, fluoro-, sodium salt
P059	Heptachlor
P059	4,7-Methano-1H-indene,1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-

(continued

Code	Waste description
*P060	Hexachlorohexahydro-endo,endo-dimethanonapthalene
P060	1,2,3,4,10,10-Hexachloro-1,4,4a,5,8,8a-hexahydro-1,4:5,8-endo, endo-dimethanonaphthalene
P062	Hexaethyl tetraphosphate
P062	Tetraphosphoric acid, hexaethyl ester
P063	Hydrocyanic acid
P063	Hydrogen cyanide
P064	Methyl isocyanate
P064	Isocyanic acid, methyl ester
P065	Fulminic acid, mercury(II) salt (r,t)
P065	Mercury fulminate (r,t)
P066	Methomyl
P066	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester
P067	2-Methylaziridine
P067	1,2-Propylenimine
P068	Hydrazine,methyl-
P068	Methyl hydrazine
P069	2-Methyllactonitrile
P069	Propanenitrile,2-hydroxy-2-methyl-
P070	Propanal, 2-methyl-2-(methylthio)-, 0[(methylamino)carbonyl]oxime
P070	Aldicarb
P071	0,0-Dimethyl 0-p-nitrophenyl phosphorothioate
P071	Methyl parathion
P072	α-Naphthylthiourea
P072	Thiourea, 1-naphthalenyl-
P073	Nickel tetracarbonyl
P073	Nickel carbonyl
P074	Nickel(II)cyanide
P074	Nickel cyanide
P075	Nicotine and salts (t)
P075	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts
P076	Nitrogen (II) oxide (t)
P076	Nitric oxide (t)
P077	p-Nitroaniline (t)
P077	Benzenamine, 4-nitro-
P078	Nitrogen (IV) oxide
P078	Nitrogen dioxide
P081	Nitroglycerine (r,t)
P081	1,2,3-Propanetriol,trinitrate-(r)
P082	Dimethylnitrosamine
P082	N-Nitrosodimethylamine
P084	Ethenamine,N-methyl-N-nitroso-
P084	N-Nitrosomethylvinylamine
P085	Diphosphoramide,octamethyl-
P085	Octamethylpyrophosphoramide

(continued)

Code	Waste description
P087	Osmium tetroxide
P087	Osmium oxide
P088	Endothall
P088	7-Oxabicyclo[2.2.1]heptane-2,3-dicarboxylic acid
P089	Parathion (t)
P089	Phosphorothioic acid,0,0-diethyl 0-(p-nitrophenyl) ester (t)
P092	Mercury,(acetato-0)phenyl-
P092	Phenylmercuric acetate
P093	N-Phenylthiourea
P093	Thiourea, phenyl-
P094	Phosphorothioic acid, 0,0-diethyl S-(ethylthio)methyl ester (t)
P094	Phorate (t)
P095	Phosgene (t)
P095	Carbonyl chloride
P096	Hydrogen phosphide
P096	Phosphine
P097	Famphur
P097	Phosphorothioic acid, 0,0-dimethyl 0-[p-((dimethylamino)-sulfonyl)phenyl]ester
P098	Potassium cyanide
P099	Potassium silver cyanide
P101	Ethyl cyanide
P101	Propanenitrile
P102	Propargyl alcohol
P102	2-Propyn-1-ol
P103	Selenourea
P103	Carbamimidoselenoic acid
P104	Silver cyanide
P105	Sodium azide
P106	Sodium cyanide
P107	Strontium sulfide (t)
P108	Strychnidin-10-one, and salts (t)
P108	Strychnine and salts (t)
P109	Dithiopyrophosphoric acid, tetraethyl ester
P109	Tetraethyldithiopyrophosphate
P110	Plumbane,tetraethyl-
P110	Tetraethyl lead
P111	Tetraethylpyrophosphate
P111	Pyrophosphoric acid, tetraethyl ester
P112	Methane,tetranitro- (r)
P112	Tetranitromethane (r)
P113	Thallium(III) oxide
P113	Thallic oxide
P114	Thallium(I) selenide
P115	Sulfuric acid, thallium(I) salt
P115	Thallium(I)sulfate

(continued

Code	Waste description
P116	Hydrazinecarbothioamide
P116	Thiosemicarbazide
P118	Methanethiol,trichloro-
P118	Trichloromethanethiol
P119	Vanadic acid, ammonium salt
P119	Ammonium vanadate
P120	Vanadium pentoxide
P120	Vanadium(V) oxide
P121	Zinc cyanide
P122	Zinc phosphide (r,t)
P122	Zinc phosphide, when present at concentrations greater than 10%
P123	Toxaphene
P123	Camphene, octachloro-

Discarded Commercial Chemical Products, Off-Specification Species, Container Residues, and Spill Residues Thereof—Toxic Waste *(An alphabetized listing can be found at 40 CFR 261.33, July 1, 1986.)*

U001	Ethanal (i)
U001	Acetaldehyde (i)
U002	2-Propanone (i)
U002	Acetone (i)
U003	Ethanenitrile (i,t)
U003	Acetonitrile (i,t)
U004	Ethanone,1-phenyl-
U004	Acetophenone
U005	2-Acetylaminofluorene
U005	Acetamide, N-9H-fluoren-2-yl-
U006	Ethanoyl chloride (c,r,t)
U006	Acetyl chloride (c,r,t)
U007	2-Propenamide
U007	Acrylamide
U008	2-Propenoic acid (i)
U008	Acrylic acid (i)
U009	2-Propenenitrile
U009	Acrylonitrile
U010	Mitomycin C
U010	Azirino(2′3′:3,4)pyrrolo(1,2-a)indole-4,7-dione, 6-amino-8-[((aminocarbonyl) oxy)methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-,
U011	1H-1,2,4-Triazol-3-amine
U011	Amitrole
U012	Benzenamine (i,t)
U012	Aniline (i,t)
U014	Auramine
U014	Benzenamine, 4,4′-carbonimidoylbis(N,N-dimethyl-

(continued)

Code	Waste description
U015	L-Serine, diazoacetate (ester)
U015	Azaserine
U016	Benz[c]acridine
U016	3,4-Benzacridine
U017	Benzal chloride
U017	Benezene, (dichloromethyl)-
U018	Benz[a]anthracene
U018	1,2-Benzanthracene
U019	Benzene (i,t)
U020	Benzenesulfonyl chloride (c,r)
U020	Benzenesulfonic acid chloride (c,r)
U021	Benzidine
U021	(1,1′-Biphenyl)-4,4′-diamine
U022	Benzo[a]pyrene
U022	3,4-Benzopyrene
U023	Benzotrichloride (c,r,t)
U023	Benzene, (trichloromethyl)-(c,r,t)
U024	Bis(2-chloroethoxy) methane
U024	Ethane,1,1′-[methylenebis(oxy)]bis[2-chloro-
U025	Dichloroethyl ether
U025	Ethane,1,1′-oxybis[2-chloro-
U026	2-Naphthylamine,N,N-bis(2-chloromethyl)-
U026	Chlornaphazine
U027	Propane,2,2′-oxybis[2-chloro-
U027	Bis(2-chloroisopropyl) ether
U028	Bis(2-ethylhexyl) phthalate
U028	1,2-Benzenedicarboxylic acid, [bis(2-ethylhexyl)]ester
U029	Methane, bromo-
U029	Methyl bromide
U030	4-Bromophenyl phenyl ether
U030	Benzene, 1-bromo-4-phenoxy-
U031	1-Butanol (i)
U031	N-Butyl alchohol (i)
U032	Calcium chromate
U032	Chromic acid, calcium salt
U033	Carbonyl fluoride (r,t)
U033	Carbon oxyfluoride (r,t)
U034	Chloral
U034	Acetaldehyde, trichloro-
U035	Butanoic acid, 4-[bis(2-chloroethyl)amino]benzene-
U035	Chlorambucil
U036	4,7-Methanoindan, 1,2,4,5,6,7,8,8-octa-chloro-3a,4,7,7a-tetrahydro-
U036	Chlordane, technical
U037	Chlorobenzene
U037	Benzene, chloro-

(continued)

Code	Waste description
U038	Ethyl 4,4′-dichlorobenzilate
U038	Benzeneacetic acid, 4-chloro-α-(4-chloro-phenyl)-α-hydroxy, ethyl ester
U039	Phenol,4-chloro-3-methyl-
U039	4-Chloro-m-cresol
U041	Oxirane,2-(chloromethyl)-
U041	1-Chloro-2,3-expoxypropane
U042	Ethene,2-chloroethoxy-
U042	2-Chloroethyl vinyl ether
U043	Ethene,chloro
U043	Vinyl chloride
U044	Methane, trichloro-
U044	Chloroform
U045	Methane, chloro-(i,t)
U045	Methyl chloride (i,t)
U046	Methane, chloromethoxy-
U046	Chloromethyl methyl ether
U047	Naphthalene, 2-chloro-
U047	β-Chloronaphthalene
U048	Phenol,2-chloro-
U048	o-Chlorophenol
U049	4-Chloro-o-toluidine,hydrochloride
U049	Benzenamine, 4-chloro-2-methyl-
U050	1,2-Benzphenanthrene
U050	Chrysene
U051	Creosote
U052	Cresylic acid
U052	Cresols
U053	2-Butenal
U053	Crotonaldehyde
U055	Cumene (i)
U055	Benzene, (1-methylethyl)-(i)
U056	Cyclohexane (i)
U056	Benzene, hexahydro- (i)
U057	Cyclohexanone (i)
U058	2H-1,3,2-Oxazaphosphorine, 2-[bis(2-chloroethyl)amino]-tetrahydro-2 oxide
U058	Cyclophosphamide
U059	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy-α-L-lyxohexopyranosyl)oxyl]-7,8,9,10--tetrahydro-6,8,11-trihydroxy-1-methoxy-
U059	Daunomycin
U060	Dichloro diphenyl dichloroethane
U060	DDD
U061	DDT
U061	Dichloro diphenyl trichloroethane
U062	Diallate
U062	S-(2,3-Dichloroallyl) diisopropylthiocarbamate

(continued)

Code	Waste description
U063	Dibenz[a,h]anthracene
U063	1,2:5,6-Dibenzanthracene
U064	Dibenz[a,i]pyrene
U064	1,2:7,8-Dibenzopyrene
U066	Propane,1-2-dibromo-3-chloro-
U066	1,2-Dibromo-3-chloropropane
U067	Ethylene dibromide
U067	Ethane, 1,2-dibromo-
U068	Methane, dibromo-
U068	Methylene bromide
U069	Dibutyl phthalate
U069	1,2-Benzenedicarboxylic acid, dibutyl ester
U070	o-Dichlorobenzene
U070	Benzene, 1,2-dichloro-
U071	m-Dichlorobenzene
U071	Benzene, 1,3-dichloro-
U072	p-Dichlorobenzene
U072	Benzene, 1,4-dichloro
U073	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dichloro
U073	3,3′-Dichlorobenzidine
U074	2-Butene,1,4-dichloro-(i,t)
U074	1,4-Dichloro-2-butene (i,t)
U075	Methane, dichlorodifluoro-
U075	Dichlorodifluoromethane
U076	Ethylidene dichloride
U076	Ethane,1,1-dichloro-
U077	Ethylene dichloride
U077	Ethane,1,2-dichloro-
U078	Ethene,1-1-dichloro-
U078	1,1-Dichloroethylene
U079	Ethene, trans-1,2-dichloro-
U079	1,2-Dichloroethylene
U080	Methane, dichloro-
U080	Methylene chloride
U081	Phenol,2,4-dichloro-
U081	2,4-Dichlorophenol
U082	Phenol,2,6-dichloro-
U082	2,6-Dichlorophenol
U083	Propylene dichloride
U083	1,2-Dichloropropane
U084	Propene,1,3-dichloro-
U084	1,3-Dichloropropene
U085	2,2′-Bioxirane (i,t)
U085	1,2:3,4-Diepoxybutane (i,t)

(continued)

Code	Waste description
U086	Hydrazine, 1,2-diethyl-
U086	N,N-Diethylhydrazine
U087	Phosphorodithioic acid,0,0-diethyl-, S-methyl-ester
U087	0,0-Diethyl-S-methyl-dithiophosphate
U088	Diethyl phthalate
U088	1,2-Benzenedicarboxylic acid, diethyl ester
U089	4,4′-Stilbenediol,α,α′-diethyl-
U089	Diethylstilbestrol
U090	Dihydrosafrole
U090	Benzene,1,2-methylenedioxy-4-propyl-
U091	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethoxy-
U091	3,3′-Dimethoxybenzidine
U092	Methanamine, N-methyl-(i)
U092	Dimethylamine (i)
U093	Dimethylaminoazobenzene
U093	Benzenamine, N,N-dimethyl-4-phenylazo-
U094	7,12-Dimethylbenz[a]anthracene
U094	1,2-Benzanthracene,7,12-dimethyl-
U095	(1,1′-Biphenyl)-4,4′-diamine,3,3′-dimethyl-
U095	3,3′-Dimethylbenzidine
U096	Hydroperoxide, 1-methyl-phenylethyl-(r)
U096	α,α-Dimethylbenzylhydroperoxide (r)
U097	Carbamoyl chloride,dimethyl-
U097	Dimethylcarbamoyl chloride
U098	Hydrazine,1,1-dimethyl-
U098	1,1-Dimethylhydrazine
U099	Hydrazine, 1,2-dimethyl-
U099	1,2-Dimethylhydrazine
U101	Phenol,2,4-dimethyl-
U101	2,4-Dimethylphenol
U102	Dimethyl phthalate
U102	1-2-Benzenedicarboxylic acid, dimethyl ester
U103	Sulfuric acid, dimethyl ester
U103	Dimethyl sulfate
U105	2,4-Dinitrotoluene
U105	Benzene, 1-methyl-2,4-dinitro-
U106	2,6-Dinitrotoluene
U106	Benzene, 1-methyl-2,6-dinitro
U107	Di-n-octyl phthalate
U107	1-2-Benzenedicarboxylic acid, di-n-octyl ester
U108	1,4-Diethylene dioxide
U108	1,4-Dioxane
U109	Hydrazine, 1,2-diphenyl-
U109	1,2-Diphenylhydrazine

(continued)

Code	Waste description
U110	1-Propanamine,N-propyl-(i)
U110	Dipropylamine (i)
U111	N-Nitroso-N-propylamine
U111	Di-N-propylnitrosamine
U112	Ethyl acetate (i)
U112	Acetic acid, ethyl ester (i)
U113	2-Propenoic acid, ethyl ester (i)
U113	Ethyl acrylate (i)
U114	Ethylenebis(dithiocarbamic acid), salts and esters
U114	1,2-Ethanediylbiscarbamodithioic acid
U115	Oxirane (i,t)
U115	Ethylene oxide (i,t)
U116	Ethylene thiourea
U116	2-Imidazolidinethione
U117	Ethyl ether (1)
U117	Ethane,1,1′-oxybis- (i)
U118	2-Propenoic acid, 2-methyl-, ethyl ester
U118	Ethyl methacrylate
U119	Ethyl methanesulfonate
U119	Methanesulfonic acid, ethyl ester
U120	Fluoranthene
U120	Benzo[j,k]fluorene
U121	Trichloromonofluoromethane
U121	Methane, trichlorofluoro-
U122	Formaldehyde
U122	Methylene oxide
U123	Formic acid (c,t)
U123	Methanoic acid (c,t)
U124	Furan (i)
U124	Furfuran (i)
U125	Furfural (i)
U125	2-Furancarboxaldehyde (i)
U126	1-Propanol,2,3-epoxy-
U126	Glycidylaldehyde
U127	Hexachlorobenzene
U127	Benzene, hexachloro-
U128	Hexachlorobutadine
U128	1,3-Butadiene,1,1,2,3,4,4-hexachloro-
U129	Hexachlorocyclohexane (γ isomer)
U129	Lindane
U130	Hexachlorocyclopentadine
U130	1,3-Cyclopentadiene,1,2,3,4,5,5-hexa- chloro-
U131	Hexachloroethane
U131	Ethane,1,1,1,2,2,2-hexachloro-

(continu

Code	Waste description
U132	Hexachlorophene
U132	2,2-Methylenebis(3,4,6-trichlorophenol)
U133	Hydrazine (r,t)
U133	Diamine (r,t)
U134	Hydrogen fluoride (c,t)
U134	Hydrofluoric acid (c,t)
U135	Sulfur hydride
U135	Hydrogen sulfide
U136	Hydroxydimethylarsine oxide
U136	Cacodylic acid
U137	1,10-(1,2-Phenylene)pyrene
U137	Ideno[1,2,3-cd]pyrene
U138	Methane, iodo-
U138	Methyl iodide
U139	Ferric dextran
U139	Iron dextran
U140	1-Propanol,2-methyl- (i,t)
U140	Isobutyl alcohol (i,t)
U141	Isosafrole
U141	Benzene, 1,2-methylenedioxy-4-propenyl-
U142	Kepone
U142	Decachlorooctahydro-1,3,4-metheno-2H-cyclobuta[c,d]-pentalen-2-one
U143	Lasiocarpine
U144	Lead acetate
U144	Acetic acid, lead salt
U145	Phosphoric acid, lead salt
U145	Lead phosphate
U146	Lead subacetate
U147	2,5-Furandione
U147	Maleic anhydride
U148	Maleic hydrazide
U148	1,2-Dihydro-3,6-pyradizinedione
U149	Propanedinitrile
U149	Malononitrile
U150	Melphalan
U150	Alanine, 3-[p-bis(2-chloroethyl)amino] phenyl-,L-
U151	Mercury
U152	Propenenitrile,2-methyl- (i,t)
U152	Methacrylonitrile (i,t)
U153	Thiomethanol (i,t)
U153	Methanethiol (i,t)
U154	Methanol (i)
U154	Methyl alcohol (i)
U155	Pyridine, 2-[(2-dimethylamino)ethyl]-2-phenylamino-
U155	Methapyrilene

(continued)

Code	Waste description
U156	Methyl chlorocarbonate (i,t)
U156	Carbonochloridic acid, methyl ester (i,t)
U157	3-Methylcholanthrene
U157	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-
U158	4,4′-Methylenebis(2-chloroaniline)
U158	Benzenamine,4,4′-methylenebis(2-chloro-
U159	Methyl ethyl ketone (i,t)
U159	2-Butanone (i,t)
U160	Methyl ethyl ketone peroxide (r,t)
U160	2-Butanone peroxide (r,t)
U161	4-Methyl-2-pentanone (i)
U161	Methyl isobutyl ketone (i)
U162	2-Propenoic acid, 2-methyl-, methyl ester (i,t)
U162	Methyl methacrylate (i,t)
U163	Guanidine, N-nitroso-N-methyl-N′-nitro-
U163	N-methyl-N′-nitro-N-nitrosoguanidine
U164	4(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-
U164	Methylthiouracil
U165	Naphthalene
U166	1,4,Naphthoquinone
U166	1,4-Naphthalenedione
U167	1-Naphthylamine
U167	α-Naphthylamine
U168	2-Naphthylamine
U168	β-Naphthylamine
U169	Nitrobenzene (i,t)
U169	Benzene, nitro- (i,t)
U170	Phenol,4-nitro-
U170	p-Nitrophenol
U171	Propane,2-nitro-(i,t)
U171	2-Nitropropane (i,t)
U172	N-Nitrosodi-N-butylamine
U172	1-Butanamine, N-butyl-N-nitroso-
U173	Ethanol,2,2-(nitrosoimino)bis-
U173	N-Nitrosodiethanolamine
U174	N-Nitrosodiethylamine
U174	Ethanamine, N-ethyl-N-nitroso-
U176	N-Nitroso-N-ethylurea
U176	Carbamide,N-ethyl-N-nitroso-
U177	N-Nitroso-N-methylurea
U177	Carbamide,N-methyl-N-nitroso-
U178	N-Nitroso-N-methylurethane
U178	Carbamic acid, methylnitroso-, ethyl ester
U179	N-Nitrosopiperidine
U179	Pyridine,hexahydro-N-nitroso-

(continued)

Code	Waste description
U180	Nitrosopyrrolidine
U180	Pyrrole, tetrahydro-N-nitroso-
U181	5-Nitro-o-toluidine
U181	Benzenamine,2-methyl-5-nitro
U182	Paraldehyde
U182	1,3,5-Trioxane,2,4,6-trimethyl-
U183	Pentachlorobenzene
U183	Benzene, pentachloro-
U184	Pentachloroethane
U184	Ethane, pentachloro-
U185	Pentachloronitrobenzene
U185	Benzene, pentachloronitro-
U186	1,3-Pentadiene (i)
U186	1-Methylbutadiene (i)
U187	Phenacetin
U187	Acetamide, N-(4-ethoxyphenyl)-
U188	Phenol
U188	Benzene, hydroxy-
U189	Phosphorus sulfide (r)
U189	Sulfur phosphide (r)
U190	Phthalic anhydride
U190	1,2-Benzenedicarboxylic acid anhydride
U191	2-Picoline
U191	Pyridine, 2-methyl-
U192	Pronamide
U192	3,5-Dichloro-N-(1,1-dimethyl-2-propynyl) benzamide
U193	1,2-Oxathiolane, 2,2-dioxide
U193	1,3-Propane sultone
U194	1-Propanamine (i,t)
U194	N-Propylamine (i,t)
U196	Pyridine
U197	p-Benzoquinone
U197	1,4-Cyclohexadienedione
U200	Reserpine
U200	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxy-benzoyl)oxy]-, methyl ester
U201	Resorcinol
U201	1,3-Benzenediol
U202	Saccharin and salts
U202	1,2-Benzisothiazolin-3-one,1,1-dioxide, and salts
U203	Safrole
U203	Benzene, 1,2-methylenedioxy-4-allyl-
U204	Selenious acid
U204	Selenium dioxide
U205	Selenium disulfide (r,t)
U205	Sulfur selenide (r,t)

(continued)

Code	Waste description
U206	Streptozotocin
U206	D-Glucopyranose, 2-deoxy-2(3-methyl-3-nitrosoureido)-
U207	1,2,4,5-Tetrachlorobenzene
U207	Benzene, 1,2,4,5-tetrachloro-
U208	1,1,1,2-Tetrachloroethane
U208	Ethane,1,1,1,2-tetrachloro-
U209	1,1,2,2-Tetrachloroethane
U209	Ethane,1-1-2-2-tetrachloro-
U210	Tetrachloroethylene
U210	Ethene,1,1,2,2-tetrachloro
U211	Methane, tetrachloro-
U211	Carbon tetrachloride
U213	Tetrahydrofuran (i)
U213	Furan, tetrahydro- (i)
U214	Thallium(I) acetate
U214	Acetic acid, thallium(I) salt
U215	Thallium(I) carbonate
U215	Carbonic acid, dithallium(I) salt
U216	Thallium(I) chloride
U217	Thallium(I) nitrate
U218	Thioacetamide
U218	Ethanethioamide
U219	Thiourea
U219	Carbamide, thio-
U220	Toluene
U220	Benzene, methyl-
U221	Toluenediamine
U221	Diaminotoluene
U222	o-Toluidine hydrochloride
U222	Benzenamine, 2-methyl-, hydrochloride
U223	Toluene diisocyanate (r,t)
U223	Benzene, 1,3-diisocyanatomethyl- (r,t)
U225	Methane, tribromo-
U225	Bromoform
U226	1,1,1-Trichloroethane
U226	Methylchloroform
U227	1,1,2-Trichloroethane
U227	Ethane,1,1,2-trichloro-
U228	Trichloroethylene
U228	Trichloroethene
U232	2,4,5-Trichloracetic acid, salts, and esters
U233	2,4,5-Trichlorophenoxypropionic acid, salts, and esters
U234	sym-Trinitrobenzene (r,t)
U234	Benzene,1,3,5-trinitro- (r,t)

(continued

Code	Waste description
U235	1-Propanol,2,3-dibromo-,phosphate (3:1)
U235	Tris(2,3-dibromopropyl) phosphate
U236	Trypan blue
U236	2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl-(1,1′-biphenyl)-4,4′-diyl)]-bis(azo)bis(5-amino-4-hydroxy), tetrasodium salt
U237	Uracil mustard
U237	Uracil, 5-[bis(2-chloroethyl)-amino]-
U238	Ethyl carbarmate (urethan)
U238	Carbamic acid, ethyl ester
U239	Xylene (i)
U239	Benzene, dimethyl- (i,t)
U240	2,4-D, salts and esters
U240	2,4-Dichlorophenoxyacetic acid, salts, and esters
U243	1-Propene,1,1,2,3,3,3-hexachloro-
U243	Hexachloropropene
U244	Thiram
U244	Bis(dimethylthiocarbamoyl) disulfide
U246	Bromine cyanide
U246	Cyanogen bromide
U247	Ethane, 1,1,1,-trichloro-2-2-bis(p-methoxyphenyl)
U247	Methoxychlor
U248	Warfarin, when present at concentrations of 0.3% or less
U248	3-(α-Acetonylbenzyl)-4-hydroxycoumarin and salts, when present at concentrations of 0.3% or less
U249	Zinc phosphide, when present at concentrations of 10% or less
U328	2-Amino-L-methylbenzene
U328	o-Toluidine
U353	4-Amino-L-methylbenzene
U353	p-Toluidine
U359	2-Ethoxyethanol
U359	Ethylene glycol monoethyl ether

The following list of codes should be used to complete Question 26 from Questionnaire GB, "Hazardous Waste Characterization." The hazardous constituents listed are from 40 CFR §261, Appendix VIII, with several additions for hazardous constituents of listed wastes. Hazardous constituents labeled as N.O.S. (not otherwise specified) should only be used if the member of the general class is unknown.

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y001	Acenaphthalene	Acenaphthylene	208-96-8
Y002	Acenaphthene	Acenaphthylene, 1,2-dihydro	83-32-9
Y003	Acetone	2-Propanone	67-64-1
Y004	Acetonitrile	Same	75-05-8
Y005	Acetophenone	Ethanone, 1-phenyl	98-86-2
Y006	2-Acetylaminofluorene	Acetamide, N-9H-fluoren-2-yl-	53-96-3
Y007	Acetyl chloride	Same	75-36-5
Y008	1-Acetyl-2-thiourea	Acetamide, N-(aminothioxymethyl)-	591-08-2
Y009	Acrolein	2-Propenal	107-02-8
Y010	Acrylamide	2-Propenamide	79-06-1
Y011	Acrylonitrile	2-Propenenitrile	107-13-1
Y012	Aflatoxins	Aflatoxin	1402-68-2
Y013	Aldicarb	Propanal, 2-methyl-2-(methylthio)-,O-[(methylamino)carbonyl]oxime	116-06-3
Y014	Aldrin	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydro-,(1α,4α,4aβ,5α,8α,8aβ)-	309-00-2
Y015	Allyl alcohol	2-Propen-1-ol	107-18-6
Y016	Allyl chloride	1-Propane, 3-chloro-	107-05-1
Y017	Aluminum phosphide	Same	20859-73-8
Y018	4-Aminobiphenyl	(1,1'-Biphenyl)-4-amine	92-67-1
Y019	5-(Aminomethyl)-3-isoxazolol	3(2H)-Isoxazolone, 5-(aminomethyl)-	2763-96-4
Y020	4-Aminopyridine	4-Pyridineamine	504-24-5
Y021	Amitrole	1H-1,2,4-Triazol-3-amine	61-82-5
Y022	Ammonium vanadate	Vanadic acid, ammonium salt	7803-55-6
Y023	Aniline	Benzenamine	62-53-3
Y024	Anthracene	Same	120-12-7
Y025	Antimony and compounds, N.O.S.	Antimony	7440-36-0
Y026	Aramite	Sulfurous acid, 2-chloroethyl-2-[4-(1,1-dimethylethyl) phenoxy]-1-methylethyl ester)	140-57-8
Y027	Arsenic and compounds, N.O.S.	Arsenic	7440-38-2
Y028	Arsenic acid	Arsenic acid AsH_3O_4	7778-39-4
Y029	Arsenic pentoxide	Arsenic oxide As_2O_5	1303-28-2
Y030	Arsenic trioxide	Arsenic oxide As_2O_3	1327-53-3
Y031	Auramine	Benzamine, 4,4'-carbonimidoylbis[N,N-dimethyl-	492-80-8
Y032	Azaserine	L-Serine, diazoacetate (ester)	115-02-5
Y033	Barium and compounds, N.O.S.	Barium	7440-39-3
Y034	Barium cyanide	Same	542-62-1
Y035	Benz[c]acridine	Same	225-51-4
Y036	Benz[a]anthracene	Same	56-55-3
Y037	Benzal chloride	Benzene, (dichloromethyl)-	98-87-3
Y038	Benzene	Same	71-43-2
Y039	Benzenearsonic acid	Arsonic acid, phenyl-	98-05-5
Y040	Benzidine	[1,1'-Biphenyl]-4,4'-diamine	92-87-5
Y041	Benzo[b]fluoranthene	Benz[e]acephenanthrylene	205-99-2
Y042	Benzo[j]fluoranthene	Same	205-82-3
Y043	Benzo[k]fluoranthene	Benzo[k]fluorathene	207-08-9
Y044	Benzo[ghi]perylene	Same	191-24-2
Y045	Benzo[a]pyrene	Same	50-32-8
Y046	p-Benzoquinone	2,5-Cyclohexadiene-1,4-dione	106-51-4
Y047	Benzotrichloride	Benzene, (trichloromethyl)-	98-07-7
Y048	Benzyl chloride	Benzene, (chloromethyl)-	100-44-7
Y049	Beryllium and compounds, N.O.S.	Beryllium	7440-41-7
Y050	Bis(2-chloromethoxy)ethane	Ethane, 1,1'-[methylenebis(oxy)]bis[2-chloro-	111-91-1
Y051	Bis(2-chloroethyl) ether	Ethane, 1,1'-oxybis[2-chloro-	111-44-4
Y052	Bis(2-chloroisopropyl) ether	Propane, 2,2'-oxybis[2-chloro-	39638-32-9
Y053	Bis(chloromethyl) ether	Methane, oxybis[chloro-	542-88-1
Y054	Bis(2-ethylhexyl phthalate	1,2-Benzenedicarboxylic acid, bis(2-ethylhexyl) ester	117-81-7
Y055	Bromoacetone	2-Propanone, 1-bromo-	598-31-2
Y056	Bromoform	Methane, tribromo-	75-25-2
Y057	4-Bromophenyl phenyl ether	Benzene, 1-bromo-4-phenoxy-	101-55-3
Y058	Brucine	Strychnidin-10-one, 2,3-dimethoxy	357-57-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continue

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y059	Butyl benzyl phthalate	1,2-Benzenedicarboxylic acid, butyl phenylmethyl ester	85-68-7
Y060	n-Butyl alcohol	1-Butanol	71-36-3
Y061	Cacodylic acid	Arsenic acid, dimethyl-	75-60-5
Y062	Cadmium and compounds, N.O.S.	Cadmium	7440-43-9
Y063	Calcium chromate	Chromic acid, calcium salt	13765-19-0
Y064	Calcium cyanide	Same	592-01-8
Y065	Carbon disulfide	Carbon bisulfide	75-15-0
Y066	Carbon oxyfluoride	Carbonic difluoride	353-50-4
Y067	Carbon tetrachloride	Methane, tetrachloro-	56-23-5
Y068	Chloral	Acetaldehyde, trichloro-	75-87-6
Y069	Chlorambucil	Benzenebutanoic acid, 4-[bis(2-chloroethyl)amino-	305-03-3
Y070	Chlordane, α and γ isomers	4,7-Methano-1H-indene, 1,2,4,5,6,7,8,8-octachloro-2,3,3a,4,7,7a-hexahydro-	57-74-9
Y071	Chlorinated benzenes, N.O.S.	—	—
Y072	Chlorinated ethane, N.O.S.	—	—
Y073	Chlorinated fluorocarbons, N.O.S.	—	—
Y074	Chlorinated naphthalene, N.O.S.	—	—
Y075	Chlorinated phenol, N.O.S.	—	—
Y076	Chlornaphazine	2-Naphthalenamine, N,N-bis(2-chloroethyl)-	494-03-1
Y077	Chloroacetaldehyde	Acetaldehyde, chloro-	107-20-0
Y078	Chloroalkyl ethers, N.O.S.	—	—
Y079	p-Chloroaniline	Benzenamine, 4-chloro-	106-47-8
Y080	Chlorobenzene	Benzene, chloro-	108-90-7
Y081	Chlorobenzilate	Benzeneacetic acid, 4-chloro-α-(4-chlorophenyl)-α-hydroxy-, ethyl ester	510-15-6
Y082	p-Chloro-m-cresol	Phenol, 4-chloro-3-methyl-	59-50-7
Y083	1-Chloro-2,3-epoxypropane	Oxirane, (chloromethyl)-	106-89-8
Y084	2-Chloroethyl vinyl ether	Ethene, (2-chloroethoxy)-	110-75-8
Y085	Chloroform	Methane, trichloro-	67-66-3
Y086	Chloromethyl methyl ether	Methane, chlormethoxy-	107-30-2
Y087	β-Chloronaphthalene	Naphthalene, 2-chloro-	91-58-7
Y088	o-Chlorophenol	Phenol, 2-chloro-	95-57-8
Y089	1-(o-Chlorophenyl) thiourea	Thiourea, (2-chlorophenyl)-	5344-82-1
Y090	Chloroprene	2-Chloro-1,3-butadiene	126-99-8
Y091	3-Chloropropionitrile	Propanenitrile, 3-chloro-	542-76-7
Y092	Chromium and compounds, N.O.S.	Chromium	7440-47-3
Y093	Chrysene	Same	218-01-9
Y094	Citrus red No. 2	2-Naphthalenol, 1-[(2,5-dimethoxyphenyl)azo]-	6358-53-8
Y095	Coal tars	—	8005-45-2
Y096	Copper cyanide	Copper cyanide CuCN	544-92-3
Y097	Creosote	Same	8001-58-9
Y098	Cresols (Cresylic acid)	Phenol, methyl-	1319-77-3
Y099	Crotonaldehyde	2-Butenal	4170-30-3
Y100	Cyanides (soluble salts and complexes), N.O.S.	—	57-12-5
Y101	Cyanogen	Ethanedinitrile	460-19-5
Y102	Cyanogen bromide	Same	506-68-3
Y103	Cyanogen chloride	Same	506-77-4
Y104	Cycasin	β-D-Glucopyranoside, (methyl-ONN-azoxy)methyl	14901-08-7
Y105	Cyclohexanone	Same	108-94-1
Y106	2-Cyclohexyl-4,6-dinitrophenol	Phenol, 2-cyclohexyl-4,6-dinitro-	131-89-5
Y107	Cyclophosphamide	2H-1,3,2,-Oxazaphosphorin-2-amine, N,N-bis(2-chloroethyl)tetrahydro-,2-oxide	50-18-0
Y108	2,4-D, salts and esters	Acetic acid, (2,4-dichlorophenoxy)-, salts and esters	94-75-7
Y109	Daunomycin	5,12-Naphthacenedione, (8S-cis)-8-acetyl-10-[(3-amino-2,3,6-trideoxy)-α-L-lyxohexopyranosyl)oxy]-7,8,9,10-tetrahydro-6,8,11-trihydroxy-1-methoxy-	20830-81-3
Y110	DDD	Benzene 1,1′-(2,2-dichloroethylidene)bis[4-chloro-	72-54-8
Y111	DDE	Benzene 1,1′-(dichloroethenylindene)bis[4-chloro-	72-55-9
Y112	DDT	Benzene, 1,1′-(2,2,2-trichloroethylidene)bis[4-chloro-	50-29-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts N
Y113	Diallate	Carbamothioic acid, bis(1-methylethyl)-S-(2,3-dichloro-2-propenyl) ester	2303-16-
Y114	Dibenz[a,h]acridine	Same	226-36-
Y115	Dibenz[a,j]acridine	Same	224-42-
Y116	Dibenz[a,h]anthracene	Same	53-70-
Y117	7H-Dibenzo[c,g]-carbazole	Same	194-59-
Y118	Dibenzo[a,e]pyrene	Naphtho[1,2,3,4-def]chrysene	194-65-
Y119	Dibenzo[a,h]pyrene	Dibenzo[b,def]chrysene	189-64-
Y120	Dibenzo[a,i]pyrene	Benzo[rst]pentaphene	189-55-
Y121	1,2-Dibromo-3-chloropropane	Propane, 1,2-dibromo-3-chloro-	96-12-
Y122	Dibutylphthalate	1,2-Benzenedicarboxylic acid, dibutyl ester	84-74-
Y123	o-Dichlorobenzene	Benzene, 1,2-dichloro-	95-50-
Y124	m-Dichlorobenzene	Benzene, 1,3-dichloro-	541-73-
Y125	p-Dichlorobenzene	Benzene, 1,4-dichloro-	106-46-
Y126	Dichlorobenzene, N.O.S.	Benzene, dichloro-	25321-22-
Y127	3,3′-Dichlorobenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dichloro-	91-94-
Y128	1,4-Dichloro-2-butene	2-Butene, 1,4-dichloro-	764-41-
Y129	Dichlorodifluoromethane	Methane, dichlorodifluoro-	75-71-
Y130	1,2-Dichloroethylene	Ethene, 1,2-dichloro-, (E)-	156-60-
Y131	Dichloroethylene, N.O.S.	Dichloroethylene	25323-30-
Y132	1,1-Dichloroethylene	Ethene, 1,1-dichloro-	75-35-
Y133	2,4-Dichlorophenol	Phenol, 2,4-dichloro-	120-83-
Y134	2,6-Dichlorophenol	Phenol, 2,6-dichloro-	87-65-
Y135	Dichlorophenylarsine	Arsonous dichloride, phenyl-	696-28-
Y136	Dichloropropane, N.O.S.	Propane, dichloro-	26638-19-
Y137	Dichloropropanol, N.O.S.	Propanol, dichloro-	26545-73-
Y138	Dichloropropene, N.O.S.	1-Propene, dichloro-	26952-23-
Y139	1,3-Dichloropropene	1-Propene, 1,3-dichloro-	542-75-
Y140	Dieldrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro- 1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aα,3β,6β,6aα,7β,7aα)-	60-57-
Y141	1,2:3,4-Diepoxybutane	2,2′-Bioxirane	1464-53-
Y142	Diethylarsine	Arsine, diethyl-	692-42-
Y143	1,4-Diethyleneoxide	1,4-Dioxane	123-91
Y144	N,N′-Diethylhydrazine	Hydrazine, 1,2-diethyl	1615-80
Y145	O,O-Diethyl S-methyldithiophosphate	Phosphorodithioic acid, O,O-diethyl S-methyl ester	3288-58
Y146	Diethyl-p-nitro phenyl phosphate	Phosphoric acid, diethyl-4-nitrophenyl ester	311-45
Y147	Diethylphthalate	1,2-Benzenedicarboxylic acid, diethyl ester	84-66
Y148	O,O-Diethyl O-pyrazinyl phosphorothioate	Phosphorothioic acid, O,O-diethyl O-pyrazinyl ester	297-97
Y149	Diethylstilbesterol	Phenol, 4,4′-(1,2-diethyl-1,2-ethenediyl)bis,(E)-	56-53
Y150	Dihydrosafrole	1,3-Benzodioxole, 5-propyl-	94-58-
Y151	3,4-Dihydroxy-α-(methylamino) methyl benzyl alcohol	(+ −)-1,2-Benzenediol, 4-[1-hydroxy-2-(methylamino)ethyl]-	329-65-
Y152	Diisopropylfluorophosphate (DFP)	Phosphorofluoridic acid, bis(1-methylethyl) ester	55-91-
Y153	Dimethoate	Phosphorodithioic acid, O,O-dimethyl S-[2-	60-51-
Y154	3,3′-Dimethoxybenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3-3′-dimethoxy-	119-90-
Y155	p-Dimethylaminoazobenzene	Benzenamine, N,N-dimethyl-4-(phenylazo)-	60-11-
Y156	7,12-Dimethylbenz[a]anthracene	Benz[a]anthracene, 7,12-dimethyl-	57-97-
Y157	3,3′-Dimethylbenzidine	[1,1′-Biphenyl]-4,4′-diamine, 3,3′-dimethyl-	119-93-
Y158	Dimethylcarbamoyl chloride	Carbamic chloride, dimethyl-	79-44-
Y159	1,1-Dimethylhydrazine	Hydrazine, 1,1-dimethyl-	57-14-
Y160	1,2-Dimethylhydrazine	Hydrazine, 1,2-dimethyl-	540-73-
Y161	α,α-Dimethylphenethylamine	Benzeneethanamine, α,α-dimethyl-	122-09-
Y162	2,4-Dimethylphenol	Phenol, 2,4-dimethyl-	105-67-
Y163	Dimethylphthalate	1,2-Benzenedicarboxylic acid, dimethyl ester	131-11-
Y164	Dimethyl sulfate	Sulfuric acid, dimethyl ester	77-78-
Y165	Dinitrobenzene, N.O.S.	Benzene, dinitro-	25154-54-
Y166	4,6-Dinitro-o-cresol and salts	Phenol, 2-methyl-4,6-dinitro- and salts	534-52-
Y167	2,4-Dinitrophenol	Phenol, 2,4-dinitro-	51-28-
Y168	2,4-Dinitrotoluene	Benzene, 1-methyl-2,4-dinitro-	121-14-

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(contin

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y169	2,6-Dinitrotoluene	Benzene, 2-methyl-1,3-dinitro-	606-20-2
Y170	Dinoseb	Phenol,2-(1-methylpropyl)-4,6-dinitro-	88-85-7
Y171	Di-n-octylphthalate	1,2-Benzenedicarboxylic acid, dioctyl ester	117-84-0
Y172	Diphenylamine	Benzenamine, N-phenyl-	122-39-4
Y173	1,2-Diphenylhydrazine	Hydrazine, 1,2-diphenyl-	122-66-7
Y174	Di-n-propylnitrosamine	1-Propanamine, N-nitroso-N-propyl-	621-64-7
Y175	Disulfoton	Phosphorodithioic acid, O,O-diethyl S-[2-[ethylthio)ethyl] ester	298-04-4
Y176	Dithiobiuret	Thioimidodicarbonic diamide	541-53-7
Y177	Endosulfan	6,9-Methano-2,4,3-benzodioxathiepen, 6,7,8,9,10,10-hexachloro-1,5,5a,6,9,9a-hexahydro-,3-oxide	115-29-7
Y178	Endothal	7-Oxabicyclo[2,2,1]heptane-2,3-dicarboxylic acid	145-73-3
Y179	Endrin	2,7:3,6-Dimethanonaphth[2,3-b]oxirene, 3,4,5,6,9,9-hexachloro-1a,2,2a,3,6,6a,7,7a-octahydro-, (1aα,2β,2aβ,3α,6α,6aβ,7β,7aα)-	72-20-8
Y180	Ethyl acetate	Acetic acid ethyl ester	141-78-6
Y181	Ethyl benzene	Benzene, ethyl	100-41-4
Y182	Ethyl carbamate (urethane)	Carbamic acid, ethyl ester	51-79-6
Y183	Ethyl cyanide	Propanenitrile	107-12-0
Y184	Ethyl ether	Ethane,1,1'-oxybis	60-29-7
Y185	Ethylenebisdithiocarbamic acid, salts and esters	Carbamodithioic acid, 1,2-ethanediylbis, salts and esters	111-54-6
Y186	Ethylene dibromide	Ethane, 1,2-dibromo-	106-93-4
Y187	Ethylene dichloride	Ethane, 1,2-dichloro-	107-06-2
Y188	Ethylene glycol monoethyl ether	Ethanol, 2-ethoxy	110-80-5
Y189	Ethyleneimine	Aziridine	151-56-4
Y190	Ethylene oxide	Oxirane	75-21-8
Y191	Ethylenethiourea	2-Imidazolidinethione	96-45-7
Y192	Ethylidene dichloride	Ethane, 1,1-dichloro-	75-34-3
Y193	Ethyl methacrylate	2-Propenoic acid, 2-methyl-,ethyl ester	97-63-2
Y194	Ethylmethane sulfonate	Methanesulfonic acid, ethyl ester	62-50-0
Y195	Famphur	Phosphorothioic acid, O-[4-[(dimethylamino)sulfonyl] phenyl] O,O-dimethyl ester	52-85-7
Y196	Fluoranthene	Same	206-44-0
Y197	Fluorene	9H-Fluorene	86-73-7
Y198	Fluorine	Same	7782-41-4
Y199	Fluoroacetamide	Acetamide, 2-fluoro-	640-19-7
Y200	Fluoroacetic acid, sodium salt	Acetic acid, fluoro-, sodium salt	62-74-8
Y201	Formaldehyde	Same	50-00-0
Y202	Glycidylaldehyde	Oxiranecarboxyaldehyde	765-34-4
Y203	Halomethane, N.O.S.	—	—
Y204	Heptachlor	4,7-Methano-1H-indene, 1,4,5,6,7,8,8-heptachloro-3a,4,7,7a-tetrahydro-	76-44-8
Y205	Heptachlor epoxide	2,5-Methano-2H-indeno[1,2b]oxirene,2,3,4,5,6,7,7-heptachloro-1a,1b,5,5a,6,6a-hexahydro-α,β and γ isomers	1024-57-3
Y206	Hexachlorobenzene	Benzene, hexachloro-	118-74-1
Y207	Hexachlorobutadiene	1,3-Butadiene, hexachloro-	87-68-3
Y208	Hexachlorocyclopentadiene	1,3-Cyclopentadiene,1,2,3,4,5,5-hexachloro-	77-47-4
Y209	Hexachlorodibenzo-p-dioxins	—	—
Y210	Hexachlorodibenzofurans	—	—
Y211	Hexachloroethane	Ethane, hexachloro-	67-72-1
Y212	Hexachlorophene	Phenol, 2,2'-methylenebis[3,4,6-trichloro-	70-30-4
Y213	Hexachloropropene	1-Propene, hexachloro-	1888-71-7
Y214	Hexaethyltetraphosphate	Tetraphosphoric acid, hexaethylester	757-58-4
Y215	Hydrazine	Same	302-01-2
Y216	Hydrogen cyanide	Hydrocyanic acid	74-90-8
Y217	Hydrogen fluoride	Hydrofluoric acid	7664-39-3
Y218	Hydrogen sulfide	Same	7783-06-4
Y219	Indeno[1,2,3-cd]pyrene	Same	193-39-5
Y220	Iron dextran	Same	9004-66-4

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y221	Isobutyl alcohol	1-Propanol, 2-methyl-	78-83-1
Y222	Isodrin	1,4:5,8-Dimethanonaphthalene, 1,2,3,4,10,10-hexachloro-1,4,4a,5,8,8a-hexahydrol-1α,4α,4aβ,5β,8β,8aβ	465-73-6
Y223	Isosafrole	1,3-Benzodioxole,5-(1-propenyl)-	120-58-1
Y224	Kepone	1,3,4-Metheno-2H-cyclobuta[cd]pentalen-2-one, 1,1a,3,3a,4,5,5,5a,5b,6-decachlorooctahydro-	143-50-0
Y225	Lasiocarpine	2-Butenoic acid, 2-methyl-, 7-[(2,3-dihydroxy-2-(1-methoxyethyl)-3-methyl-1-oxobutoxy)methyl]-2,3,5,7a-tetrahydro-1H-pyrrolizin-1-yl ester, [1S- (1α(Z), 7(2s,3R),7aα]]-	303-34-4
Y226	Lead and compounds, N.O.S.	—	7439-92-1
Y227	Lead acetate	Acetic acid, lead(2+) salt	301-04-2
Y228	Lead phosphate	Phosphoric acid, lead(2+) salt	7446-27-7
Y229	Lead subacetate	Lead, bis(acetato-O)tetrahydroxytri-	1335-32-6
Y230	Lindane	Cyclohexane, 1,2,3,4,5,6-Hexachloro-	58-89-9
Y231	Maleic anhydride	2,5-Furandione	108-31-6
Y232	Maleic hydrazide	3,6-Pyridazinedione, 1,2-dihydro-	123-33-1
Y233	Malononitrile	Propanedinitrile	109-77-3
Y234	Melphalan	L-Phenylalanine, 4-[bis(2-chloroethyl)amino]-	148-82-3
Y235	Mercury fulminate	Fulminic acid, mercury(2+) salt	628-86-4
Y236	Mercury and compounds, N.O.S.	Same	7439-97-6
Y237	Methacrylonitrile	2-Propanenitrile, 2-methyl-	126-98-7
Y238	Methanol	Same	67-56-1
Y239	Methapyrilene	1,2-Ethanediamine, N,N-dimethyl-N′-2-pyridinyl-N′-(2-thienylmethyl)-	91-80-5
Y240	Methomyl	Acetimidic acid, N-[(methylcarbamoyl)oxy]thio-, methyl ester	16752-77-5
Y241	Methoxychlor	Benzene, 1,1′-(2,2,2-trichloroethylidene)[4-methoxy-	72-43-5
Y242	Methyl bromide	Methane, bromo-	74-83-9
Y243	Methyl chloride	Methane, chloro-	74-87-3
Y244	Methyl chlorocarbonate	Carbonchloridic acid, methyl ester	79-22-1
Y245	Methyl chloroform	Ethane, 1,1,1-trichloro-	71-55-6
Y246	3-Methylcholanthrene	Benz[j]aceanthrylene, 1,2-dihydro-3-methyl-	56-49-5
Y247	4,4-Methylenebis(2-chloroaniline)	Benzenamine, 4,4′-methylenebis(2-chloro-	101-14-4
Y248	Methylene bromide	Methane, dibromo-	74-95-3
Y249	Methylene chloride	Methane, dichloro-	75-09-2
Y250	Methyl ethyl ketone (MEK)	2-Butanone	78-93-3
Y251	Methyl ethyl ketone peroxide	2-Butanone, peroxide	1338-23-4
Y252	Methyl hydrazine	Hydrazine, methyl-	60-34-4
Y253	Methyl iodide	Methane, iodo-	74-88-4
Y254	Methyl isobutyl ketone	2-Pentanone, 4-methyl	108-10-1
Y255	Methyl isocyanate	Methane, isocyanato-	624-83-9
Y256	2-Methyllactonitrile	Propanenitrile, 2-hydroxy-2-methyl-	75-86-5
Y257	Methyl methacrylate	2-Propenoic acid, 2-methyl-, methyl ester	80-62-6
Y258	Methyl methanesulfonate	Methanesulfonic acid, methyl ester	66-27-3
Y259	Methyl parathion	Phosphorothioic acid, O,O-dimethyl O-(4-nitrophenyl) ester	298-00-0
Y260	Methylthiouracil	4-(1H)-Pyrimidinone, 2,3-dihydro-6-methyl-2-thioxo-	56-04-2
Y261	Mitomycin C	Azirino[2′,3′:3,4]pyrrolo[1,2-a]indole-4,7-dione, 6-amino-8-[[(aminocarbonyl)oxy]methyl]-1,1a,2,8,8a,8b-hexahydro-8a-methoxy-5-methyl-[1aR-(1aα,8β,8aα,8bα)]-	50-07-7
Y262	MNNG	Guanidine, N-methyl-N′-nitro-N-nitroso-	70-25-7
Y263	Mustard gas	Ethane, 1,1′-thiobis[2-chloro-	505-60-2
Y264	Naphthalene	Same	91-20-3
Y265	1,4-Naphthoquinone	1,4-Naphthalenedione	130-15-4
Y266	α-Naphthylamine	1-Naphthalenamine	134-32-7
Y267	β-Naphthylamine	2-Naphthalenamine	91-59-8
Y268	α-Naphthylthiourea	Thiourea, 1-naphthalenyl-	86-88-4
Y269	Nickel and compounds, N.O.S.	Same	7440-02-0
Y270	Nickel carbonyl	Nickel carbonyl, (T-4)-	13463-39-3

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y271	Nickel cyanide	Same	557-19-7
Y272	Nicotine and salts	Pyridine, (S)-3-(1-methyl-2-pyrrolidinyl)-, and salts	54-11-5
Y273	Nitric oxide	Nitrogen oxide NO	10102-43-9
Y274	p-Nitroaniline	Benzenamine, 4-nitro-	100-01-6
Y275	Nitrobenzene	Benzene, nitro-	98-95-3
Y276	Nitrogen dioxide	Nitrogen oxide NO_2	10102-44-0
Y277	Nitrogen mustard and hydrochloride salt	Ethanamine, 2-chloro-,N-(2-chloroethyl)-N-methyl-, and hydrochloride salt	51-75-2
Y278	Nitrogen mustard N-oxide and hydrochloride salt	Ethanamine, 2-chloro-, N-(2-chloroethyl)-N-methyl-, N-oxide, and hydrochloride salt	126-85-2
Y279	Nitroglycerin	1,2,3-Propanetriol, trinitrate	55-63-0
Y280	p-Nitrophenol	Phenol, 4-nitro-	100-02-7
Y281	2-Nitropropane	Propane, 2-nitro-	79-46-9
Y282	4-Nitroquinoline-1-oxide	Quinoline, 4-nitro-1-oxide	56-57-5
Y283	Nitrosamine, N.O.S.	—	35576-91-1
Y284	N-Nitrosodi-n-butylamine	1-Butanamine, N-butyl-N-nitroso-	924-16-3
Y285	N-Nitrosodiethanolamine	Ethanol, 2,2'-(nitrosoimino)bis-	1116-54-7
Y286	N-Nitrosodiethylamine	Ethanamine, N-ethyl-N-nitroso-	55-18-5
Y287	N-Nitrosodimethylamine	Methamine, N-methyl-N-nitroso-	62-75-9
Y288	N-Nitroso-N-ethyl urea	Urea, N-ethyl-N-nitroso-	759-73-9
Y289	N-Nitrosomethylethylamine	Ethanamine, N-methyl-N-nitroso-	10595-95-6
Y290	N-Nitroso-N-methylurea	Urea, N-methyl-N-nitroso-	684-93-5
Y291	N-Nitroso-N-methylurethane	Carbamic acid, methylnitroso-,ethyl ester	615-53-2
Y292	N-Nitrosomethylvinylamine	Vinylamine, N-methyl-N-nitroso-	4549-40-0
Y293	N-Nitrosomorpholine	Morpholine, N-nitroso-	59-89-2
Y294	N-Nitrosonornicotine	Pyridine, 3-(1-nitroso-2-pyrrolidinyl)-, (S)-	16543-55-8
Y295	N-Nitrosopiperidine	Piperidine, 1-nitroso-	100-75-4
Y296	Nitrosopyrrolidine	Pyrrolidine, 1-nitroso-	930-55-2
Y297	N-Nitrososarcosine	Glycine, N-methyl-N-nitroso-	13256-22-9
Y298	5-Nitro-o-toluidine	Benzenamine, 2-methyl-5-nitro-	99-55-8
Y299	Octamethylpyrophosphoramide	Diphosphoramide, octamethyl-	152-16-9
Y300	Osmium tetroxide	Osmium oxide (OsO_4)	20816-12-0
Y301	Paraldehyde	1,3,5-Trioxane,2,4,6-trimethyl-	123-63-7
Y302	Parathion	Phosphorothioic acid, O,O-diethyl O-(4-nitrophenyl) ester	56-38-2
Y303	Pentachlorobenzene	Benzene, pentachloro-	608-93-5
Y304	Pentachlorodibenzo-p-dioxins	—	—
Y305	Pentachlorodibenzofurans	—	—
Y306	Pentachloroethane	Ethane, pentachloro-	76-01-7
Y307	Pentachloronitrobenzene (PCNB)	Benzene, pentachloronitro-	82-68-8
Y308	Pentachlorophenol	Phenol, pentachloro-	87-86-5
Y309	Phenacetin	Acetamide, N-(4-ethoxyphenyl)-	62-44-2
Y310	Phenanthrene	Same	85-01-8
Y311	Phenol	Same	108-95-2
Y312	Phenylenediamine	Benzenediamine	25265-76-3
Y313	Phenylmercury acetate	Mercury, (acetato-O)phenyl-	62-38-4
Y314	Phenylthiourea	Thiourea, phenyl-	103-85-5
Y315	Phosgene	Carbonic dichloride	75-44-5
Y316	Phosphine	Same	7803-51-2
Y317	Phorate	Phosphorodithioic acid, O,O-diethyl S-[(ethylthio) methyl] ester	298-02-2
Y318	Phthalic acid esters, N.O.S.	—	—
Y319	Phthalic anhydride	1,3-Isobenzofurandione	85-44-9
Y320	2-Picoline	Pyridine, 2-methyl-	109-06-8
Y321	Polychlorinated biphenyls, N.O.S.	—	1336-36-3
Y322	Potassium cyanide	Same	151-50-8
Y323	Potassium silver cyanide	Argentate(1-), bis(cyano-C)-,potassium	506-61-6
Y324	Pronamide	Benzamide,3,5-Dichloro-N-(1,1-dimethyl-2-propynyl)-	23950-58-5
Y325	1,3-Propane sultone	1,2-Oxathiolane, 2,2-dioxide	1120-71-4
Y326	n-Propylamine	1-Propanamine	107-10-8
Y327	Propargyl alcohol	2-Propyn-1-ol	107-19-7

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y328	Propylene dichloride	Propane, 1,2-dichloro-	78-87-5
Y329	1,2-Propylenimine	Aziridine, 2-methyl-	75-55-8
Y330	Propylthiouracil	4(1H)-Pyrimidinone,2,3-dihydro-6-propyl-2-thioxo-	51-52-5
Y331	Pyrene	Same	129-00-0
Y332	Pyridine	Same	110-86-1
Y333	Reserpinen	Yohimban-16-carboxylic acid, 11,17-dimethoxy-18-[(3,4,5-trimethoxybenzoyl)oxy]-, methyl ester	50-55-5
Y334	Resorcinol	1,3-Benzenediol	108-46-3
Y335	Saccharin and salts	1,2-Benzisothiazol-3(2H)-one, 1,1-dioxide, and salts	81-07-2
Y336	Safrole	1,3-Benzodioxole, 5-(2-propenyl)-	94-59-7
Y337	Selenium dioxide	Selenious acid	7783-00-8
Y338	Selenium and compounds, N.O.S.	Selenium	7782-49-2
Y339	Selenium sulfide	Same	7446-34-6
Y340	Selenourea	Same	630-10-4
Y341	Silver and compounds, N.O.S.	Silver	7440-22-4
Y342	Silver cyanide	Same	506-64-9
Y343	Silvex (2,4,5-TP)	Propanoic acid, 2-(2,4,5-trichlorophenoxy)-	93-72-1
Y344	Sodium cyanide	Same	143-33-9
Y345	Streptozotocin	D-Glucopyranose, 2-deoxy-2-(3-methyl-3-nitrosoureido)-	18883-66-4
Y346	Strontium sulfide	Same	1314-96-1
Y347	Strychnine and salts	Strychnidin-10-one, and salts	57-24-9
Y348	Styrene	Benzene,ethenyl-	100-42-5
Y349	TCDD	Dibenzo[b,e][1,4]dioxin, 2,3,7,8-tetrachloro-	1746-01-6
Y350	1,2,4,5-Tetrachlorobenzene	Benzene, 1,2,4,5-tetrachloro-	95-94-3
Y351	Tetrachlorodibenzo-p-dioxins	—	—
Y352	Tetrachlorodibenzofurans	—	—
Y353	Tetrachloroethane, N.O.S.	Ethane, tetrachloro-, N.O.S.	25322-20-7
Y354	1,1,1,2-Tetrachloroethane	Ethane, 1,1,1,2-tetrachloro-	630-20-6
Y355	1,1,2,2-Tetrachloroethane	Ethane, 1,1,2,2-tetrachloro-	79-34-5
Y356	Tetrachloroethylene	Ethene, tetrachloro-	127-18-4
Y357	2,3,4,6-Tetrachlorophenol	Phenol, 2,3,4,6-tetrachloro-	58-90-2
Y358	Tetraethyldithiopyrophosphate	Thiodiphosphoric acid, tetraethyl ester	3689-24-5
Y359	Tetraethyl lead	Plumbane, tetraethyl-	78-00-2
Y360	Tetraethylpyrophosphate	Diphosphoric acid, tetraethyl ester	107-49-3
Y361	Tetranitromethane	Methane, tetranitro-	509-14-8
Y362	Thallium and compounds, N.O.S.	Thallium	7440-28-0
Y363	Thallic oxide	Thallium (III) oxide	1314-32-5
Y364	Thallium (I) acetate	Acetic acid, thallium(1+) salt	563-68-8
Y365	Thallium (I) carbonate	Carbonic acid, dithallium(1+) salt	6533-73-9
Y366	Thallium (I) chloride	Thallium chloride	7791-12-0
Y367	Thallium (I) nitrate	Nitric acid, thallium(1+) salt	10102-45-1
Y368	Thallium selenite	Thallium selenide	12039-52-0
Y369	Thallium (I) sulfate	Sulfuric acid, thallium salt	10031-59-1
Y370	Thioacetamide	Ethanethioamide	62-55-5
Y371	Thiofanox	2-Butanone, 3,3-dimethyl-1-(methylthio)-,O-[(methylamino)carbonyl]oxime	39196-18-4
Y372	Thiomethanol	Methanethiol	74-93-1
Y373	Thiophenol	Benzenethiol	108-98-5
Y374	Thiosemicarbazide	Hydrazinecarbothioamide	79-19-6
Y375	Thiourea	Same	62-56-6
Y376	Thiram	Thioperoxydicarbonic diamide, Tetramethyl-	137-26-8
Y377	Toluene	Benzene, methyl-	108-88-3
Y378	Toluenediamine	Benzenediamine, ar-methyl-	25376-45-8
Y379	2,4-Toluenediamine	1,3-Benzenediamine, 4-methyl-	95-80-7
Y380	2,6-Toluenediamine	1,3-Benzenediamine, 2-methyl-	823-40-5
Y381	3,4-Toluenediamine	1,2-Benzenediamine, 4-methyl-	496-72-0
Y382	Toluene diisocyanate	Benzene, 2,4-diisocyanato-1-methyl-	584-84-9
Y383	p-Toluidine	Benzenamine, 4-methyl-	106-49-0
Y384	o-Toluidine hydrochloride	Benzenamine, 2-methyl-, hydrochloride	636-21-5
Y385	Toxaphene	Same	8001-35-2
Y386	Trans-1,4-Dichloro-2-butene	2-Butene,1,4-dichloro-, (E)	110-57-6

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

(continued)

Code	Common Name	Chemical Abstracts Name	Chemical Abstracts No.
Y387	1,2,4-Trichlorobenzene	Benzene, 1,2,4-trichloro-	120-82-1
Y388	1,1,2-Trichloroethane	Ethane, 1,1,2-trichloro-	79-00-5
Y389	Trichloroethylene	Ethene, trichloro	79-01-6
Y390	Trichloromethanethiol	Methanethiol, trichloro-	75-70-7
Y391	Trichloromonofluoromethane	Methane, trichlorofluoro-	75-69-4
Y392	1,1,2-Trichloro-1,2,2-Trifluoroethane	Ethane,1,1,2-trichloro-1,2,2-trifluoro-	76-13-1
Y393	2,4,5-Trichlorophenol	Phenol,2,4,5-trichloro-	95-95-4
Y394	2,4,6-Trichlorophenol	Phenol,2,4,6-trichloro-	88-06-2
Y395	2,4,5-T	Acetic acid, (2,4,5-trichlorophenoxy)-	93-76-5
Y396	Trichloropropane, N.O.S.	—	—
Y397	1,2,3-Trichloropropane	Propane, 1,2,3-trichloro-	96-18-4
Y398	O,O,O-Triethylphosphorothioate	Phosphorothioic acid, O,O,O-triethyl ester	126-68-1
Y399	sym-Trinitrobenzene	Benzene, 1,3,5-trinitro-	99-35-4
Y400	Trinitrotoluene	Benzene, 2-methyl-1,3,5-trinitro	118-96-7
Y401	Tris(1-aziridinyl)phosphine sulfide	Aziridine, 1,1′,1″-phosphinothioylidynetris-	52-24-4
Y402	Tris(2,3-dibromopropyl)phosphate	1-Propanol, 2,3-dibromo-, phosphate (3:1)	126-72-7
Y403	Trypan blue	2,7-Naphthalenedisulfonic acid, 3,3′-[(3,3′-dimethyl[1,1′-biphenyl]-4,4′-diyl)bis (azo)]bis[5-amino-4-hydroxy-, tetrasodium salt	72-57-1
Y404	Uracil mustard	2,4(1H,3H)-Pyrimidinedione, 5-[bis(2-chloroethyl)amino]-	66-75-1
Y405	Same as CAS name	Undecamethylenediamine,N,N′-bis(2-chlorobenzyl)-, dihydrochloride	2056-25-9
Y406	Vanadium pentoxide	Vanadium oxide V_2O_5	1314-62-1
Y407	Vinyl chloride	Ethene, chloro-	75-01-4
Y408	Warfarin	2H-1 Benzopyran-2-one, 4-hydroxy-3-(3-oxo-1-phenyl-butyl)-	81-81-2
Y409	Xylene, N.O.S.	Benzene, dimethyl-	1330-20-7
Y410	Zinc cyanide	Same	557-21-1
Y411	Zinc phosphide	Zinc phosphide P_2Zn_3	1314-84-7

N.O.S. = Not otherwise specified, members of the general class not specifically listed by name

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name PERKIN-ELMER CORPORATION METCO DIVISION
Street 220 NILLER PLACE
City HICKSVILLE County NASSAU State NY Zip 11801
SIC Code 3399 Dun & Brad Number 05-773-1663

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name JOSEPH MACRI Phone (516) 334-1300
Mail Address 1101 PROSPECT AVENUE WESTBURY NY 11590

Emergency Contact
Name JOSEPH MACRI Title MANAGER FACILITIES
Phone (516) 334-1300 EXT. 2374 24 Hr. Phone (800) 424-9300 CHEMTREC
Name ____ Title ____
Phone ( ) 24 Hr. Phone ( )

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 91

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS ____ Trade Secret ☐ Chem. Name ____ Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name ____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)	Container Type / Pressure / Temperature Storage Locations	☐
CAS ____ Trade Secret ☐ Chem. Name ____ Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name ____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)	Container Type / Pressure / Temperature Storage Locations	☐
CAS ____ Trade Secret ☐ Chem. Name ____ Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name ____	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code) Avg. Daily Amount (code) No. of Days On-site (days)	Container Type / Pressure / Temperature Storage Locations	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through ____ and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete

JOSEPH MACRI MANAGER FACILITIES
Name and official title of owner operator OR owner operator's authorized representative

Signature

FEBRUARY 28, 1992
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

PERKIN ELMER

METCO DIVISION

220 MILLER PLACE
HICKSVILLE, NY
11801

FAX NUMBER: (516) 822-8006

TO: Ms. Conroy LOCATION: Westbury

FROM: Kelly LOCATION: Miller

DATE: 02/28/92

PAGES TO FOLLOW 01

MATERIAL SAFETY DATA SHEET

[illegible] 1910.1200
[illegible] OSHA [illegible]
[illegible] standard, [illegible]

NFPA HAZARD RATING
HEALTH = 1
FLAMMABILITY = 2
REACTIVITY = 0

IDENTITY: Super Agitene - Cleaning compound. Combustible liquid.

SECTION I

MANUFACTURER'S NAME: Graymills Corporation

ADDRESS: 3705 N. Lincoln Avenue, Chicago, Illinois 60613

EMERGENCY #: 1-800-526-9300

INFORMATION #: (312) 477-6100

DATE PREPARED: February 5, 1991

PREPARER'S SIGNATURE: [illegible]

SECTION II - HAZARDOUS INGREDIENTS/IDENTITY INFORMATION

HAZARDOUS INGREDIENTS (SPECIFIC CHEMICAL IDENTITY/COMMON NAME(S))	OSHA PEL	ACGIH TLV	CAS#
Aliphatic Petroleum Distillate	300 PPM	100 PPM	64742-47-8
Dipropylene Glycol Methyl Ether	100 PPM	100 PPM	36590-96-8

SECTION III - PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT (°F)	338°-388°	SPECIFIC GRAVITY (H2O=1)	.78
VAPOR PRESSURE (mm Hg) @25°C	10.0	MELTING POINT:	None
VAPOR DENSITY (AIR=1)	6.3	EVAPORATION RATE (BU-ACETATE=1)	<0.1

SOLUBILITY IN WATER: None

APPEARANCE & ODOR: [illegible] green - mild mineral spirits od[illegible]

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD)	FLAMMABLE LIMITS	LEL	UEL
110°F Tag [illegible]		0.6%	7.0%

EXTINGUISHING MEDIA: CO(2) foam, dry chem[illegible], water spray (fog).

SPECIAL FIRE FIGHTING PROCEDURES: Cool sealed drums with water to lessen chance of rupture. [illegible] self-contained breathing gear. Minimize breathing of gases, vapors and decomposition products.

UNUSUAL FIRE AND EXPLOSION HAZARDS: Combustible liquid. [illegible] mild fracture if heated. Autoignition temperature approximately [illegible]

SECTION V - REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE		Heating strictly forbidden
	STABLE	X	

INCOMPATIBILITY (MATERIAL TO AVOID): Acids, strong oxidizers such as liquid chlorine, concentrated oxygen, sodium hypochlorite, calcium hypochlorite.

HAZARDOUS DECOMPOSITION OR BYPRODUCTS: Carbon dioxide, carbon monoxide, fumes, smoke, aldehydes upon incomplete combustion.

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		None
	WILL NOT OCCUR	X	

SECTION VI - HEALTH HAZARD DATA

ROUTES OF ENTRY	INHALATION	X	SKIN	X	INGESTION	X

HEALTH HAZARDS (ACUTE & CHRONIC): Skin irritation.
Oral: LD 50 >6000 mg/kg - Rat Dermal: LD 50 >2200 mg/kg - Rabbit
Inhalation: LD 50 >5000 ppm - Rat

CARCINOGENICITY	NTP	No	IARC MONOGRAPHS	No	OSHA REGULATED	No

SIGNS & SYMPTOMS OF EXPOSURE:
Skin or eye irritation, dizzyness, headache.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:
Skin allergies; respiratory allergies.

EMERGENCY & FIRST AID PROCEDURES:
Skin contact: Flush with water. Use lanolin cream.
Inhalation: Get oxygen or fresh air, call doctor.
Ingestion: Do not induce vomiting, call doctor.

SECTION VII - PRECAUTIONS FOR SAFE HANDLING AND USE

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: Use absorbent material or sand. S[illegible]val into waste container. Dispose of properly.

WASTE DISPOSAL METHOD: Reclaim by distillation or have disposal performed by a licensed waste hauler. Waste disposal 0D001.

PRECAUTIONS TO BE TAKEN IN HANDLING & STORAGE:
Store in cool area away from heat or open flames.

OTHER PRECAUTIONS:
Not biodegradable.

SECTION VIII - CONTROL MEASURES

RESPIRATORY PROTECTION (SPECIFY TYPE): None

VENTILATION	LOCAL EXHAUST: None	SPECIAL: None
	MECHANICAL (GENERAL): General room ventilation	OTHER: None

PROTECTIVE GLOVES: Rubber or Buna	EYE PROTECTION: Chemical splash goggles

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:
For constant use, rubber gloves and solvent resistant apron are recommended.

WORK/HYGIENIC PRACTICES:
Use lanolin cream if gloves are not worn.

786-08103

FEB 28 '92 16:33 METCO

10. Surface radiation levels will be recorded using a portable radiation monitor at five (5) locations on the subject equipment and five (5) locations throughout the facility, including the floor surface in the immediate area of the subject equipment. All radiation monitoring will be performed according to manufacturer guidelines. Decontamination will be repeated until all parameters meet the closure performance guidelines of Section 2.2.

2.9 Underground Sump Closure

All drainage structures within the building are routed through three in-line underground sumps located beneath the maintenance department floor. Due to the nature of these sumps and the fact that contaminants accumulate at the bottom, the closure of the sumps is addressed in this report. Closure of the sumps will be defined by removal of bottom sediments and underlying contaminated soils from all three sumps, followed by construction of solid, non-permeable bottoms on all three chambers.

An environmental investigation of two of the sumps was conducted by Arcadis Geraghty & Miller in February of 1998 and was summarized in an April 14, 1998 letter to Michael Lydon of Sulzer Metco (copy included as Appendix A). As indicated by the letter, the investigation included subsurface soil sampling around the perimeter of each of two sumps. Laboratory analysis indicated that volatile organic compounds were non-detect in all samples, and heavy metals were present in all samples at depths of up to 6 feet below the bottom of the sumps. An integrity test was performed on one sump, which was determined to be leaking at 0.32 gallons per hour, indicating failure of the containment integrity of the sump. Recommendations were made by Arcadis Geraghty & Miller to replace each sump and remediate the underlying soils. After additional investigation, a third sump was identified in line with the two sumps which were addressed in the Arcadis Geraghty & Miller letter.

Decontamination of the three underground sumps and facility discharge piping will be performed by a qualified outside contractor. At a minimum, personnel will be equipped with head protection, gloves, and boots. If the area of remediation meets the definition of a confined

ene oxide which would otherwise be applicable by virtue of those sections.

(i) *Benzene.* Section 1910.1028 shall apply to the exposure of every employee to benzene in every employment and place of employment covered by §§ 1910.12, 1910.13, 1910.14, 1910.15 or 1910.16 in lieu of any different standard on exposures to benzene which would otherwise be applicable by virtue of those sections.

(j) *Formaldehyde.* Section 1910.1048 shall apply to the exposure of every employee to formaldehyde in every employment and place of employment covered by § 1910.12, 1910.13, 1910.14, 1910.15 or 1910.16 in lieu of any different standard on exposure to formaldehyde which would otherwise be applicable by virtue of those sections.

[43 FR 28473, June 30, 1978, as amended at 43 FR 45809, Oct. 3, 1978; 43 FR 53007, Nov. 14, 1978; 44 FR 5447, Jan. 26, 1979; 46 FR 32022, June 19, 1981; 49 FR 25796, June 22, 1984; 50 FR 51173, Dec. 13, 1985; 51 FR 22733, June 20, 1986; 51 FR 37004, Oct. 17, 1986; 52 FR 34562, Sept. 11, 1987; 52 FR 46291, Dec. 4, 1987]

Subpart C—General Safety and Health Provisions

AUTHORITY: Section 8 of the Occupational Safety and Health Act, 29 U.S.C. 657; Secretary of Labor's Order No. 9-83 (48 FR 35736) and 29 CFR Part 1911.

§ 1910.20 Access to employee exposure and medical records.

(a) *Purpose.* The purpose of this section is to provide employees and their designated representatives a right of access to relevant exposure and medical records; and to provide representatives of the Assistant Secretary a right of access to these records in order to fulfill responsibilities under the Occupational Safety and Health Act. Access by employees, their representatives, and the Assistant Secretary is necessary to yield both direct and indirect improvements in the detection, treatment, and prevention of occupational disease. Each employer is responsible for assuring compliance with this section, but the activities involved in complying with the access to medical records provisions can be carried out, on behalf of the employer, by the physician or other health care personnel in charge of employee medical records. Except as expressly provided, nothing in this section is intended to affect existing legal and ethical obligations concerning the maintenance and confidentiality of employee medical information, the duty to disclose information to a patient/employee or any other aspect of the medical-care relationship, or affect existing legal obligations concerning the protection of trade secret information.

(b) *Scope and application.* (1) This section applies to each general industry, maritime, and construction employer who makes, maintains, contracts for, or has access to employee exposure or medical records, or analyses thereof, pertaining to employees exposed to toxic substances or harmful physical agents.

(2) This section applies to all employee exposure and medical records, and analyses thereof, of such employees, whether or not the records are mandated by specific occupational safety and health standards.

(3) This section applies to all employee exposure and medical records, and analyses thereof, made or maintained in any manner, including on an in-house of contractual (e.g., fee-for-service) basis. Each employer shall assure that the preservation and access requirements of this section are complied with regardless of the manner in which the records are made or maintained.

(c) *Definitions.* (1) "Access" means the right and opportunity to examine and copy.

(2) "Analysis using exposure or medical records" means any compilation of data or any statistical study based at least in part on information collected from individual employee exposure or medical records or information collected from health insurance claims records, provided that either the analysis has been reported to the employer or no further work is currently being done by the person responsible for preparing the analysis.

(3) "Designated representative" means any individual or organization to whom an employee gives written authorization to exercise a right of access. For the purposes of access to employee exposure records and analyses using exposure or medical records, a recognized or certified collective bargaining agent shall be treated automatically as a designated representative without regard to written employee authorization.

(4) "Employee" means a current employee, a former employee, or an employee being assigned or transferred to work where there will be exposure to toxic substances or harmful physical agents. In the case of a deceased or legally incapacitated employee, the employee's legal representative may directly exercise all the employee's rights under this section.

(5) "Employee exposure record" means a record containing any of the following kinds of information:

(i) Environmental (workplace) monitoring or measuring of a toxic substance or harmful physical agent, including personal, area, grab, wipe, or other form of sampling, as well as related collection and analytical methodologies, calculations, and other background data relevant to interpretation of the results obtained;

(ii) Biological monitoring results which directly assess the absorption of a toxic substance or harmful physical agent by body systems (e.g., the level of a chemical in the blood, urine, breath, hair, fingernails, etc) but not including results which assess the biological effect of a substance or agent or which assess an employee's use of alcohol or drugs;

(iii) Material safety data sheets indicating that the material may pose a hazard to human health; or

(iv) In the absence of the above, a chemcial inventory or any other record which reveals where and when used and the identity (e.g., chemical, common, or trade name) of a toxic substance or harmful physical agent.

(6)(i) "Employee medical record" means a record concerning the health status of an employee which is made or maintained by a physician, nurse, or other health care personnel or technician, including:

(A) Medical and employment questionnaires or histories (including job description and occupational exposures),

(B) The results of medical examinations (pre-employment, pre-assignment, periodic, or episodic) and laboratory tests (including chest and other X-ray examinations taken for the purposes of establishing a base-line or detecting occupational illness, and all biological monitoring not defined as an "employee exposure record"),

(C) Medical opinions, diagnoses, progress notes, and recommendations,

(D) First aid records,

(E) Descriptions of treatments and prescriptions, and

(F) Employee medical complaints.

(ii) "Employee medical record" does not include medical information in the form of:

(A) Physical specimens (e.g., blood or urine samples) which are routinely discarded as a part of normal medical practice; or

(B) Records concerning health insurance claims if maintained separately from the employer's medical program and its records, and not accessible to the employer by employee name or other direct personal identifier (e.g., social security number, payroll number, etc.); or

(C) Records created solely in preparation for litigation which are privileged from discovery under the applicable rules of procedure or evidence; or

(D) Records concerning voluntary employee assistance programs (alcohol, drug abuse, or personal counseling programs) if maintained separately from the employer's medical program and its records.

(7) "Employer" means a current employer, a former employer, or a successor employer.

(8) "Exposure" or "exposed" means that an employee is subjected to a toxic substance or harmful physical agent in the course of employment through any route of entry (inhalation, ingestion, skin contact or absorption, etc.), and includes past exposure and potential (e.g., accidental or possible) exposure, but does not include situations where the employer can demonstrate that the toxic substance or harmful physical agent is not used, handled, stored, generated, or present in the workplace in any manner differ-

ent from typical non-occupational situations.

(9) "Health Professional" means a physician, occupational health nurse, industrial hygienist, toxicologist, or epidemiologist, providing medical or other occupational health services to exposed employees.

(10) "Record" means any item, collection, or grouping of information regardless of the form or process by which it is maintained (e.g., paper document, microfiche, microfilm, X-ray film, or automated data processing).

(11) "Specific chemical identity" means the chemical name, Chemical Abstracts Service (CAS) Registry Number, or any other information that reveals the precise chemical designation of the substance.

(12)(i) "Specific written consent" means a written authorization containing the following:

(A) The name and signature of the employee authorizing the release of medical information,

(B) The date of the written authorization,

(C) The name of the individual or organization that is authorized to release the medical information,

(D) The name of the designated representative (individual or organization) that is authorized to receive the released information,

(E) A general description of the medical information that is authorized to be released,

(F) A general description of the purpose for the release of the medical information, and

(G) A date or condition upon which the written authorization will expire (if less than one year).

(ii) A written authorization does not operate to authorize the release of medical information not in existence on the date of written authorization, unless the release of future information is expressly authorized, and does not operate for more than one year from the date of written authorization.

(iii) A written authorization may be revoked in writing prospectively at any time.

(13) "Toxic substance or harmful physical agent" means any chemical substance, biological agent (bacteria, virus, fungus, etc.), or physical stress (noise, heat, cold, vibration, repetitive motion, ionizing and non-ionizing radiation, hypo—or hyperbaric pressure, etc.) which:

(i) Is listed in the least printed edition of the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS); or

(ii) Has yielded positive evidence of an acute or chronic health hazard in testing conducted by, or known to, the employer; or

(iii) Is the subject of a material safety data sheet kept by or known to the employer indicating that the material may pose a hazard to human health.

(14) "Trade secret" means any confidential formula, pattern, process, device, or information or compilation of information that is used in an employer's business and that gives the employer an opportunity to obtain an advantage over competitors who do not know or use it.

(d) *Preservation of records.* (1) Unless a specific occupational safety and health standard provides a different period of time, each employer shall assure the preservation and retention of records as follows:

(i) *Employee medical records.* The medical record for each employee shall be preserved and maintained for at least the duration of employment plus thirty (30) years, except that the following types of records need not be retained for any specified period:

(A) Health insurance claims records maintained separately from the employer's medical program and its records,

(B) First aid records (not including medical histories) of one-time treatment and subsequent observation of minor scratches, cuts, burns, splinters, and the like which do not involve medical treatment, loss of consciousness, restriction of work or motion, or transfer to another job, if made on-site by a non-physician and if maintained separately from the employer's medical program and its records, and

(C) The medical records of employees who have worked for less than (1) year for the employer need not be retained beyond the term of employment if they are provided to the employee upon the termination of employment.

(ii) *Employee exposure records.* Each employee exposure record shall be preserved and maintained for at least thirty (30) years, except that:

(A) Background data to environmental (workplace) monitoring or measuring, such as laboratory reports and worksheets, need only be retained for one (1) year as long as the sampling results, the collection methodology (sampling plan), a description of the analytical and mathematical methods used, and a summary of other background data relevant to interpretation of the results obtained, are retained for at least thirty (30) years; and

(B) Material safety data sheets and paragraph (c)(5)(iv) records concerning the identity of a substance or agent need not be retained for any specified period as long as some record of the identity (chemical name if known) of the substance or agent, where it was used, and when it was used is retained for at least thirty (30) years;[1] and

(C) Biological monitoring results designated as exposure records by specific occupational safety and health standards shall be preserved and maintained as required by the specific standard.

(iii) *Analyses using exposure or medical records.* Each analysis using exposure or medial records shall be preserved and maintained for at least thirty (30) years.

(2) Nothing in this section is intended to mandate the form, manner, or process by which an employer preserves a record as long as the information contained in the record is preserved and retrievable, except that chest X-ray films shall be preserved in their original state.

(e) *Access to records*—(1) *General.* (i) Whenever an employee or designated representative requests access to a record, the employer shall assure that access is provided in a reasonable time, place, and manner. If the employer cannot reasonably provide access to the record within fifteen (15) working days, the employer shall within the fifteen (15) working days apprise the employee or designated representative requesting the record of the reason for the delay and the earliest date when the record can be made available.

(ii) The employer may require of the requester only such information as should be readily known to the requester and which may be necessary to locate or identify the records being requested (e.g. dates and locations where the employee worked during the time period in question).

(iii) Whenever an employee or designated representative requests a copy of a record, the employer shall assure that either:

(A) A copy of the record is provided without cost to the employee or representative,

(B) The necessary mechanical copying facilities (e.g., photocopying) are made available without cost to the employee or representative for copying the record, or

(C) The record is loaned to the employee or representative for a reasonable time to enable a copy to be made.

(iv) In the case of an original X-ray, the employer may restrict access to on-site examination or make other suitable arrangements for the temporary loan of the X-ray.

(v) Whenever a record has been previously provided without cost to an employee or designated representative, the employer may charge reasonable, non-discriminatory administrative costs (i.e., search and copying expenses but not including overhead expenses) for a request by the employee or designated representative for additional copies of the record, except that

(A) An employer shall not charge for an initial request for a copy of new information that has been added to a record which was previously provided; and

(B) An employer shall not charge for an initial request by a recognized or certified collective bargaining agent for a copy of an employee exposure record or an analysis using exposure or medical records.

[1] Material safety data sheets must be kept for those chemicals currently in use that are effected by the Hazard Communication Standard in accordance with 29 CFR 1910.1200(g).

(vi) Nothing in this section is intended to preclude employees and collective bargaining agents from collectively bargaining to obtain access to information in addition to that available under this section.

(2) *Employee and designated representative access*—(i) *Employee exposure records.* (A) Except as limited by paragraph (f) of this section, each employer shall, upon request, assure the access to each employee and designated representative to employee exposure records relevant to the employee. For the purpose of this section, an exposure record relevant to the employee consists of:

(*1*) A record which measures or monitors the amount of a toxic substance or harmful physical agent to which the employee is or has been exposed;

(*2*) In the absence of such directly relevant records, such records of other employees with past or present job duties or working conditions related to or similar to those of the employee to the extent necessary to reasonably indicate the amount and nature of the toxic substances or harmful physical agents to which the employee is or has been subjected, and

(*3*) Exposure records to the extent necessary to reasonably indicate the amount and nature of the toxic substances or harmful physical agents at workplaces or under working conditions to which the employee is being assigned or transferred.

(B) Requests by designated representatives for unconsented access to employee exposure records shall be in writing and shall specify with reasonable particularity:

(*1*) The records requested to be disclosed; and

(*2*) The occupational health need for gaining access to these records.

(ii) *Employee medical records.* (A) Each employer shall, upon request, assure the access of each employee to employee medical records of which the employee is the subject, except as provided in paragraph (e)(2)(ii)(D) of this section.

(B) Each employer shall, upon request, assure the access of each designated representative to the employee medical records of any employee who has given the designated representative specific written consent. Appendix A to this section contains a sample form which may be used to establish specific written consent for access to employee medical records.

(C) Whenever access to employee medical records is requested, a physician representing the employer may recommend that the employee or designated representative:

(*1*) Consult with the physician for the purposes of reviewing and discussing the records requested,

(*2*) Accept a summary of material facts and opinions in lieu of the records requested, or

(*3*) Accept release of the requested records only to a physician or other designated representative.

(D) Whenever an employee requests access to his or her employee medical records, and a physician representing the employer believes that direct employee access to information contained in the records regarding a specific diagnosis of a terminal illness or a psychiatric condition could be detrimental to the employee's health, the employer may inform the employee that access will only be provided to a designated representative of the employee having specific written consent, and deny the employee's request for direct access to this information only. Where a designated representative with specific written consent requests access to information so withheld, the employer shall assure the access of the designated representative to this information, even when it is known that the designated representative will give the information to the employee.

(E) A physician, nurse, or other responsible health care personnel maintaining medical records may delete from requested medical records the identity of a family member, personal friend, or fellow employee who has provided confidential information concerning an employee's health status.

(iii) *Analyses using exposure or medical records.* (A) Each employee shall, upon request, assure the access of each employee and designated representative to each analysis using exposure or medical records concerning the employee's working conditions or workplace.

(B) Whenever access is requested to an analysis which reports the contents of employee medical records by either direct identifier (name, address, social security number, payroll number, etc.) or by information which could reasonably be used under the circumstances indirectly to identify specific employees (exact age, height, weight, race, sex, date of initial employment, job title, etc.), the employer shall assure that personal identifiers are removed before access is provided. If the employer can demonstrate that removal of personal identifiers from an analysis is not feasible, access to the personally identifiable portions of the analysis need not be provided.

(3) *OSHA access.* (i) Each employer shall, upon request, and without derogation of any rights under the Constitution or the Occupational Safety and Health Act of 1970, 29 U.S.C. 651 *et seq.*, that the employer chooses to exercise, assure the prompt access of representatives of the Assistant Secretary of Labor for Occupational Safety and Health to employee exposure and medical records and to analyses using exposure or medical records. Rules of agency practice and procedure governing OSHA access to employee medical records are contained in 29 CFR 1913.10.

(ii) Whenever OSHA seeks access to personally identifiable employee medical information by presenting to the employer a written access order pursuant to 29 CFR 1913.10(d), the employer shall prominently post a copy of the written access order and its accompanying cover letter for at least fifteen (15) working days.

(f) *Trade secrets.* (1) Except as provided in paragraph (f)(2) of this section, nothing in this section precludes an employer from deleting from records requested by a health professional, employee, or designated representative any trade secret data which discloses manufacturing processes, or discloses the percentage of a chemical substance in mixture, as long as the health professional, employee, or designated representative is notified that information has been deleted. Whenever deletion of trade secret information substantially impairs evaluation of the place where or the time when exposure to a toxic substance or harmful physical agent occurred, the employer shall provide alternative information which is sufficient to permit the requesting party to identify where and when exposure occurred.

(2) The employer may withhold the specific chemical identity, including the chemical name and other specific identification of a toxic substance from a disclosable record provided that:

(i) The claim that the information withheld is a trade secret can be supported;

(ii) All other available information on the properties and effects of the toxic substance is disclosed;

(iii) The employer informs the requesting party that the specific chemical identity is being withheld as a trade secret; and

(iv) The specific chemical identity is made available to health professionals, employees and designated representatives in accordance with the specific applicable provisions of this paragraph.

(3) Where a treating physician or nurse determines that a medical emergency exists and the specific chemical identity of a toxic substance is necessary for emergency or first-aid treatment, the employer shall immediately disclose the specific chemical identity of a trade secret chemical to the treating physician or nurse, regardless of the existence of a written statement of need or a confidentiality agreement. The employer may require a written statement of need and confidentiality agreement, in accordance with the provisions of paragraphs (f)(4) and (f)(5), as soon as circumstances permit.

(4) In non-emergency situations, an employer shall, upon request, disclose a specific chemical identity, otherwise permitted to be withheld under paragraph (f)(2) of this section, to a health professional, employee, or designated representative if:

(i) The request is in writing;

(ii) The request describes with reasonable detail one or more of the following occupational health needs for the information:

(A) To assess the hazards of the chemicals to which employees will be exposed;

30-108 O—89——4

(B) To conduct or assess sampling of the workplace atmosphere to determine employee exposure levels;

(C) To conduct pre-assignment or periodic medical surveillance of exposed employees;

(D) To provide medical treatment to exposed employees;

(E) To select or assess appropriate personal protective equipment for exposed employees;

(F) To design or assess engineering controls or other protective measures for exposed employees; and

(G) To conduct studies to determine the health effects of exposure.

(iii) The request explains in detail why the disclosure of the specific chemical identity is essential and that, in lieu thereof, the disclosure of the following information would not enable the health professional, employee or designated representative to provide the occupational health services described in paragraph (f)(4)(ii) of this section:

(A) The properties and effects of the chemical;

(B) Measures for controlling workers' exposure to the chemical;

(C) Methods of monitoring and analyzing worker exposure to the chemical; and,

(D) Methods of diagnosing and treating harmful exposures to the chemical;

(iv) The request includes a description of the procedures to be used to maintain the confidentiality of the disclosed information; and,

(v) The health professional, employee, or designated representative and the employer or contractor of the services of the health professional or designated representative agree in a written confidentiality agreement that the health professional, employee or designated representative will not use the trade secret information for any purpose other than the health need(s) asserted and agree not to release the information under any circumstances other than to OSHA, as provided in paragraph (f)(9) of this section, except as authorized by the terms of the agreement or by the employer.

(5) The confidentiality agreement authorized by paragraph (f)(4)(iv) of this section:

(i) May restrict the use of the information to the health purposes indicated in the written statement of need;

(ii) May provide for appropriate legal remedies in the event of a breach of the agreement, including stipulation of a reasonable pre-estimate of likely damages; and,

(iii) May not include requirements for the posting of a penalty bond.

(6) Nothing in this section is meant to preclude the parties from pursuing non-contractual remedies to the extent permitted by law.

(7) If the health professional, employee or designated representative receiving the trade secret information decides that there is a need to disclose it to OSHA, the employer who provided the information shall be informed by the health professional prior to, or at the same time as, such disclosure.

(8) If the employer denies a written request for disclosure of a specific chemical identity, the denial must:

(i) Be provided to the health professional, employee or designated representative within thirty days of the request;

(ii) Be in writing;

(iii) Include evidence to support the claim that the specific chemical identity is a trade secret;

(iv) State the specific reasons why the request is being denied; and,

(v) Explain in detail how alternative information may satisfy the specific medical or occupational health need without revealing the specific chemical identity.

(9) The health professional, employee, or designated representative whose request for information is denied under paragraph (f)(4) of this section may refer the request and the written denial of the request to OSHA for consideration.

(10) When a heath professional employee, or designated representative refers a denial to OSHA under paragraph (f)(9) of this section, OSHA shall consider the evidence to determine if:

(i) The employer has supported the claim that the specific chemical identity is a trade secret;

(ii) The health professional employee, or designated representative has supported the claim that there is a medical or occupational health need for the information; and

(iii) The health professional, employee or designated representative has demonstrated adequate means to protect the confidentiality.

(11)(i) If OSHA determines that the specific chemical identity requested under paragraph (f)(4) of this section is not a *bona fide* trade secret, or that it is a trade secret but the requesting health professional, employee or designated representatives has a legitimate medical or occupational health need for the information, has executed a written confidentiality agreement, and has shown adequate means for complying with the terms of such agreement, the employer will be subject to citation by OSHA.

(ii) If an employer demonstrates to OSHA that the execution of a confidentiality agreement would not provide sufficient protection against the potential harm from the unauthorized disclosure of a trade secret specific chemical identity, the Assistant Secretary may issue such orders or impose such additional limitations or conditions upon the disclosure of the requested chemical information as may be appropriate to assure that the occupational health needs are met without an undue risk of harm to the employer.

(12) Notwithstanding the existence of a trade secret claim, an employer shall, upon request, disclose to the Assistant Secretary any information which this section requires the employer to make available. Where there is a trade secret claim, such claim shall be made no later than at the time the information is provided to the Assistant Secretary so that suitable determinations of trade secret status can be made and the necessary protections can be implemented.

(13) Nothing in this paragraph shall be construed as requiring the disclosure under any circumstances of process or percentage of mixture information which is trade secret.

(g) *Employee information.* (1) Upon an employee's first entering into employment, and at least annually thereafter, each employer shall inform current employees covered by this section of the following:

(i) The existence, location, and availability of any records covered by this section;

(ii) The person responsible for maintaining and providing access to records; and

(iii) Each employee's rights of access to these records.

(2) Each employer shall keep a copy of this section and its appendices, and make copies readily available, upon request, to employees. The employer shall also distribute to current employees any informational materials concerning this section which are made available to the employer by the Assistant Secretary of Labor for Occupational Safety and Health.

(h) *Transfer of records.* (1) Whenever an employer is ceasing to do business, the employer shall transfer all records subject to this section to the successor employer. The successor employer shall receive and maintain these records.

(2) Whenever an employer is ceasing to do business and there is no successor employer to receive and maintain the records subject to this standard, the employer shall notify affected current employees of their rights of access to records at least three (3) months prior to the cessation of the employer's business.

(3) Whenever an employer either is ceasing to do business and there is no successor employer to receive and maintain the records, or intends to dispose of any records required to be preserved for at least thirty (30) years, the employer shall:

(i) Transfer the records to the Director of the National Institute for Occupational Safety and Health (NIOSH) if so required by a specific occupational safety and health standard; or

(ii) Notify the Director of NIOSH in writing of the impending disposal of records at least three (3) months prior to the disposal of the records.

(4) Where an employer regularly disposes of records required to be preserved for at least thirty (30) years, the employer may, with at least (3) months notice, notify the Director of NIOSH on an annual basis of the records intended to be disposed of in the coming year.

(l) *Appendices.* The information contained in appendices A and B to this section is not intended, by itself, to create any additional obligations not otherwise imposed by this section nor detract from any existing obligation.

(Approved by the Office of Management and Budget under control number 1218-0065)

Appendix A to § 1910.20—Sample Authorization Letter for the Release of Employee Medical Record Information to a Designated Representative (Non-Mandatory)

I, ———— (full name of worker/patient), hereby authorize ———— (individual or organization holding the medical records) to release to ———— (individual or organization authorized to receive the medical information), the following medical information from my personal medical records:

_____

_____

(Describe generally the information desired to be released)

I give my permission for this medical information to be used for the following purpose:

_____

_____

but I do not give permission for any other use or re-disclosure of this information.

(Note: Several extra lines are provided below so that you can place additional restrictions on this authorization letter if you want to. You may, however, leave these lines blank. On the other hand, you may want to (1) specify a particular expiration date for this letter (if less than one year); (2) describe medical information to be created in the future that you intend to be covered by this authorization letter; or (3) describe portions of the medical information in your records which you do not intend to be released as a result of this letter.)

_____

_____

_____

_____

Full name of Employee or Legal Representative

_____

Signature of Employee or Legal Representative

_____

Date of Signature

Appendix B to § 1910.20—Availability of NIOSH Registry of Toxic Effects of Chemical Substances (RTECS) (Non-Mandatory)

The final regulation, 29 CFR 1910.20, applies to all employee exposure and medical records, and analyses thereof, of employees exposed to toxic substances or harmful physical agents (paragraph (b)(2)). The term "toxic substance or harmful physical agent" is defined by paragraph (c)(13) to encompass chemical substances, biological agents, and physical stresses for which there is evidence of harmful health effects. The regulation uses the latest printed edition of the National Institute for Occupational Safety and Health (NIOSH) Registry of Toxic Effects of Chemical Substances (RTECS) as one of the chief sources of information as to whether evidence of harmful health effects exists. If a substance is listed in the latest printed RTECS, the regulation applies to exposure and medical records (and analyses of these records) relevant to employees exposed to the substance.

It is appropriate to note that the final regulation does not require that employers purchase a copy of RTECS, and many employers need not consult RTECS to ascertain whether their employee exposure or medical records are subject to the rule. Employers who do not currently have the latest printed edition of the NIOSH RTECS, however, may desire to obtain a copy. The RTECS is issued in an annual printed edition as mandated by section 20(a)(6) of the Occupational Safety and Health Act (29 U.S.C. 669(a)(6)).

The Introduction to the 1980 printed edition describes the RTECS as follows:

"The 1980 edition of the Registry of Toxic Effects of Chemical Substances, formerly known as the Toxic Substances list, is the ninth revision prepared in compliance with the requirements of Section 20(a)(6) of the Occupational Safety and Health Act of 1970 (Public Law 91-596). The original list was completed on June 28, 1971, and has been updated annually in book format. Beginning in October 1977, quarterly revisions have been provided in microfiche. This edition of the Registry contains 168,096 listings of chemical substances: 45,156 are names of different chemicals with their associated toxicity data and 122,940 are synonyms. This edition includes approximately 5,900 new chemical compounds that did not appear in the 1979 Registry. (p. xi)

"The Registry's purposes are many, and it serves a variety of users. It is a single source document for basic toxicity information and for other data, such as chemical identifiers ad information necessary for the preparation of safety directives and hazard evaluations for chemical substances. The various types of toxic effects linked to literature citations provide researchers and occupational health scientists with an introduction to the toxicological literature, making their own review of the toxic hazards of a given substance easier. By presenting data on the lowest reported doses that produce effects by several routes of entry in various species, the Registry furnishes valuable information to those responsible for preparing safety data sheets for chemical substances in the workplace. Chemical and production engineers can use the Registry to identify the hazards which may be associated with chemical intermediates in the development of final products, and thus can more readily select substitutes or alternative processes which may be less hazardous. Some organizations, including health agencies and chemical companies, have included the NIOSH Registry accession numbers with the listing of chemicals in their files to reference toxicity information associated with those chemicals. By including foreign language chemical names, a start has been made toward providing rapid identification of substances produced in other countries. (p. xi)

"In this edition of the Registry, the editors intend to identify "all known toxic substances" which may exist in the environment and to provide pertinent data on the toxic effects from known doses entering an organism by any route described. (p xi)

"It must be reemphasized that the entry of a substance in the Registry does not automatically mean that it must be avoided. A listing does mean, however, that the substance has the documented potential of being harmful if misused, and care must be exercised to prevent tragic consequences. Thus, the Registry lists many substances that are common in everyday life and are in nearly every household in the United States. One can name a variety of such dangerous substances: prescription and non-prescription drugs; food additives; pesticide concentrates, sprays, and dusts; fungicides; herbicides; paints; glazes, dyes; bleaches and other household cleaning agents; alkalies; and various solvents and diluents. The list is extensive because chemicals have become an integral part of our existence."

The RTECS printed edition may be purchased from the Superintendent of Documents, U.S. Government Printing Office (GPO), Washington, DC 20402 (202-783-3238).

Some employers may desire to subscribe to the quarterly update to the RTECS which is published in a microfiche edition. An annual subscription to the quarterly microfiche may be purchased from the GPO (Order the "Microfiche Edition, Registry of Toxic Effects of Chemical Substances"). Both the printed edition and the microfiche edition of RTECS are available for review at many university and public libraries throughout the country. The latest RTECS editions may also be examined at the OSHA Technical Data Center, Room N2439—Rear, United States Department of Labor, 200 Constitution Avenue, NW., Washington, DC 20210 (202-523-9700), or at any OSHA Regional or Area Office (*See*, major city telephone directories under United States Government-Labor Department).

[53 FR 38163, Sept. 29, 1988; 53 FR 49981, Dec. 13, 1988, as amended at 54 FR 24333, June 7, 1989]

Effective Date Note: At 53 FR 38163, Sept. 29, 1988, § 1910.20 was revised, effective November 28, 1988, except for the recordkeeping requirements in paragraphs (d), (e), (f)(2), (f)(8), (f)(12), (g) and (h) which were to become effective upon approval by the Office of Management and Budget. Each of these paragraphs, except paragraph (g), were subsequently approved by the Office of Management and Budget and became effective December 13, 1988. (See 53 FR 49981, December 13, 1988.) Paragraph (g) will become effective upon approval by the Office of Management and Budget.

Subpart D—Walking-Working Surfaces

Authority: Secs. 4, 6, 8, Occupational Safety and Health Act of 1970 (29 U.S.C. 653, 655, 657); Secretary of Labor's Order No. 12-71 (36 FR 8754), 8-76 (41 FR 25059), or 9-83 (48 FR 35736), as applicable.

Sections 1910.23, .24, .25, .26 and .28 also issued under 29 CFR Part 1911.

§ 1910.21 Definitions.

(a) As used in § 1910.23, unless the context requires otherwise, floor and wall opening, railing and toe board terms shall have the meanings ascribed in this paragraph.

(1) *Floor hole.* An opening measuring less than 12 inches but more than 1 inch in its least dimension, in any floor, platform, pavement, or yard, through which materials but not persons may fall; such as a belt hole, pipe opening, or slot opening.

(2) *Floor opening.* An opening measuring 12 inches or more in its least dimension, in any floor, platform, pavement, or yard through which persons may fall; such as a hatchway, stair or ladder opening, pit, or large manhole. Floor openings occupied by elevators, dumb waiters, conveyors, machinery,

U.S. EPA Diskette

Submission Checklist

PLEASE CHECK AND COMPLETE EACH STEP BELOW:	**Complete?**
1. The submission diskette is a new diskette. Older diskettes (for example, "recycled" diskettes) have caused upload problems in the past.	
2. The diskette is a 3.5" high-density (1.44 MB) Windows-compatible diskette.	
3. The diskette contains only files created by TRI-ME. Any other files on the diskette may cause the entire diskette to be rejected during the upload process into the Toxics Release Inventory System (TRIS).	
4. The diskette has been virus-checked and it is virus free.	
5. Attach a label to each diskette. The label should be in the following format:	

TRIS Report
(Your Company Name)

Date:	07-01-2003
Density:	HD
Report Year:	2003
Number:	1 of 1
Contact:	(Technical Contact Name)
	(Technical Contact Phone)

6. **The certification letter is signed by a senior management official per EPCRA section 313(g)(1)(B).**	
7. Use the correct address:	

Certified mail, overnight mail, or hand-delivered

TRI Data Processing Center
c/o Computer Sciences Corportation
Suite 300
8400 Corporate Drive
Landover, MD 20785

(301) 429-5005

All other submissions

TRI Data Processing Center
P.O. Box 1513
Lanham, MD 20703-1513

8. **The envelope contains only the submission diskette and the signed certification letter. (Do not send paper forms with a diskette submission.)**	
9. **The signed certification letter and diskette must be postmarked and mailed on or before July 1, 2004.**	

Signature Certification for U.S. EPA Diskette Submission

SULZER METCO (US), INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590
11801PRKNL220MI

June 29, 2004

TRI Data Processing Center
c/o Computer Sciences Corportation
Suite 300
8400 Corporate Drive
Landover, MD 20785

(301) 429-5005

To Whom It May Concern:

Enclosed please find one (1) microcomputer diskette containing toxic chemical release reporting information for:

SULZER METCO (US), INC.

This information is submitted as required under section 313 of the Emergency Planning and Community Right-to-Know Act of 1986 and the Pollution Prevention Act of 1990.

We are submitting a total of 4 chemical report(s) for our facility.

These 4 chemical report(s) are described below:

TRI Chemical or Chemical Category	Reporting Year	CAS Number	Report
Aluminum (fume or dust)	2003	7429-90-5	Form R
Chromium	2003	7440-47-3	Form R
Cobalt	2003	7440-48-4	Form R
Nickel	2003	7440-02-0	Form R

Our technical point of contact is:

PETER DIPIETRANTONIO
(516) 338-2337
PETERDIPIETRANTONIO@SULZER.COM

and is available should any questions or problems arise in the processing of this diskette.

If the enclosed diskette contains one or more Form R chemicals, then I hereby certify that I have reviewed the enclosed documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report(s) are accurate based on reasonable estimates using data available to the preparers of this report(s).

If the enclosed diskette contains one or more Form A chemicals, then I hereby certify that to the best of my knowledge and belief, for each toxic chemical listed in the Form A statement, the annual reportable amount as defined in 40 CFR 372.27(a) did not exceed 500 pounds for this reporting year and that the chemical was manufactured, processed or otherwise used in an amount not exceeding 1 million pounds during the reporting year.

11801PRKNL220MI
SULZER METCO (US), INC.

Sincerely,

W. GREGORY WUEST
MGR, GLOBAL QUAL, ENVIRONMENT, SAFETY, HEALTH

Enclosure: Diskette

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

Fire Chief
Westbury Fire Department
Maple Ave.
Westbury, NY 11590

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301997.DOC

METCO AMDRY

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

Fire Chief
Hicksville Fire Department
East Marie St.
Hicksville, NY 11801

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301996.DOC

METCO AMDRY

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

Local Emergency Planning Committee
C/o Civil Preparedness Office
140 5th St.
Mineola, NY 11501

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you,

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301995.DOC

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

NYSDEC
Bureau of Spill Prevention and Response
Room 360
50 Wolf Rd.
Albany, NY 12233-3750

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301994.DOC

METCO AMDRY

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

State Emergency Response Commission
c/o State Emergency Management Office
Albany, New York 12226-5000

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301993.DOC

METCO AMDRY

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

EPA Region #2
Fred Rubel, preparedness Coordinator
Woodridge Ave.
Edison, NJ 08837

Subject: SARA Title III – Tier II Report

Mr. Rubel:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301992.DOC

SULZER METCO

March 1, 1999

Sulzer Metco (U.S.) Inc.
1101 Prospect Avenue
Westbury, NY 11590
Phone: (516) 334-1300
Fax: (516) 338-2296

Fire Chief
Syosset Fire Department
Cold Spring Road
Syossett, NY 11791

Subject: SARA Title III – Tier II Report

Dear Sir / Madam:

Enclosed please find Sulzer Metco's 1998 SARA Title III, Tier II Reports for our Prospect Avenue and Miller Place facilities.

Thank you.

Michael S. Lydon
Environment, Health & Safety
Phone #: (516) 338-2337
FAX #: (516) 338-2336

FILE: 0301998.DOC

METCO AMDRY

Form Approved OMB No 2050 0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name Sulzer Metco (US), Inc
Street 220 Miller Place
City Hicksville County Nassau State NY Zip 11801
SIC Code 3399 Dun & Brad Number 15-208-4398

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name Russell Siedlewicz Phone 516 334-1300
Mail Address 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact
Name Michael S. Lydon Title Environment,Health&Safety
Phone (516) 338-2337 24 Hr Phone (800) 424-9300 Chemtrec
Name Russell Siedlewicz Title Manager Facilities
Phone (516) 338-2139 24 Hr Phone (800) 424-9300

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name Nickel Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor 1 1 4 Warehouse Production Floor	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name Chromium Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor 1 1 4 Warehouse Production Floor	☐
CAS 7440 48 4 Trade Secret ☐ Chem. Name Cobalt Check all that apply: Pure ☐, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor 1 1 4 Warehouse Production Floor	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Russell Sieldewicz Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

3-3-99
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
S/C Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #:
Date Received:

Owner/Operator Name
Name: Russell Siedlewicz Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact
Name: Michael S. Lydon Title: Environment, Health&Safety
Phone: (516) 338-2337 24 Hr. Phone: (800) 424-9300 Chemtrec
Name: Russell Siedlewicz Title: Manager Facilities
Phone: (516) 338-2139 24 Hr. Phone: (800) 424-9300

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS 26099-71-8 Trade Secret ☐ Chem. Name: Polyester "POB" Homopolymer Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Haredened Steel Hoppers E 1 4 Warehouse Production Floor I 1 4 Warehouse Production Floor	☐
CAS 1308-38-9 Trade Secret ☐ Chem. Name: Chromium Oxide Check all that apply: Pure ☐, Mix ☐, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 04 Avg. Daily Amount (code): 04 No. of Days On-site (days): 365	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor I 1 4 Warehouse Production Floor	☐
CAS ☐ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐, Mix ☐, Solid ☐, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic) ☐	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner/operator OR owner/operator's authorized representative

Signature: R. Siedlewicz

Date signed: 3-3-99

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc
Street: 220 Miller Place
City: Hicksville County: Nassau State: NY Zip: 11801
SIC Code: 3399 Dun & Brad Number: 15-208-4398

FOR OFFICIAL USE ONLY
ID #:
Date Received:

Owner/Operator Name

Name: Russell Siedlewicz Phone: (516) 334-1300
Mail Address: 1101 Prospect Ave., Westbury, NY 11590

Emergency Contact

Name: Michael S. Lydon Title: Environment,Health&Safety
Phone: (516) 338-2337 24 Hr. Phone: (800) 424-9300 Chemtrec
Name: Russell Siedlewicz Title: Manager Facilities
Phone: (516) 338-2139 24 Hr. Phone: (800) 424-9300

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7429905 Trade Secret ☐ Chem. Name: Aluminum Check all that apply: X Pure, X Mix, X Solid, ☐ Liquid, ☐ Gas, ☐ EHS EHS Name:	X Fire Sudden Release of Pressure X Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor I 1 4 Warehouse Production Floor	☐
CAS 1344281 Trade Secret ☐ Chem. Name: Aluminum Oxide Check all that apply: X Pure, X Mix, X Solid, ☐ Liquid, ☐ Gas, ☐ EHS EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) X Delayed (chronic)	03 Max. Daily Amount (code) 03 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor I 1 4 Warehouse Production FLoor	☐
CAS 1314234 Trade Secret ☐ Chem. Name: Zirconium Oxide Check all that apply: X Pure, X Mix, X Solid, ☐ Liquid, ☐ Gas, ☐ EHS EHS Name:	Fire Sudden Release of Pressure Reactivity X Immediate (acute) X Delayed (chronic)	04 Max. Daily Amount (code) 04 Avg. Daily Amount (code) 365 No. of Days On-site (days)	D 1 4 Warehouse Production Floor N 1 4 Production Floor R 1 4 Production Floor Hardened Steel Hoppers E 1 4 Warehouse Production Floor I 1 4 Warehouse Production Floor	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Russell Siedlewicz Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

3-3-99
Date signed

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No. 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: Russell Siedlewicz Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Michael S. Lydon Title: Environment, Health& Safety
Phone: (516) 338-2337 24 Hr Phone: (800) 424-9300 Chentrec

Name: Russell Siedlewicz Title: Manager Facilities
Phone: (516) 338-2139 24 Hr Phone: (516) 424-9300

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) — Storage Locations	Optional
CAS 7429905 Trade Secret ☐ Chem. Name: Aluminum Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboritories D 1 4 Warehouse	☐
CAS 1344281 Trade Secret ☐ Chem. Name: Aluminum oxide Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboratories D 1 4 Warehouse	☐
CAS 7439896 Trade Secret ☐ Chem. Name: Iron Check all that apply: Pure X, Mix X, Solid X, Liquid ☐, Gas ☐, EHS ☐ EHS Name:	Fire X Sudden Release of Pressure ☐ Reactivity X Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboratories D 1 4 Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Russell Siedlewicz Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature: [signature] Date signed: 3-3-99

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two

EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY — ID #: ____ Date Received: ____

Owner/Operator Name

Name: Russell Siedlewicz Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact

Name: Michael S. Lydon Title: Environment, Health&Safety
Phone: (516) 338-2337 24 Hr. Phone: (800) 424-9300 Chemtrec
Name: Russell Siedlewicz Title: Manager Facilities
Phone: (516) 338-2139 24 Hr. Phone: (800) 424-9300

Important: Read all instructions before completing form

Reporting Period: From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential)	Optional
CAS ____ Trade Secret ☐ Chem. Name: Polyester "POB" Homopolymer Check all that apply: Pure [X] Mix [X] Solid [X] Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity [X] Immediate (acute) [X] Delayed (chronic)	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days):	Container Type / Temperature / Pressure / Storage Locations N 1 4 Engineering Laboratories D 1 4 Warehouse	☐
CAS ____ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐
CAS ____ Trade Secret ☐ Chem. Name: Check all that apply: Pure ☐ Mix ☐ Solid ☐ Liquid ☐ Gas ☐ EHS ☐ EHS Name:	☐ Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic)	Max. Daily Amount (code): Avg. Daily Amount (code): No. of Days On-site (days):		☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Russell Siedlewicz Manager Facilities — Name and official title of owner/operator OR owner/operator's authorized representative
Signature: [signature] Date signed: 3-3-99

Optional Attachments

☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

Form Approved OMB No 2050-0072

Tier Two
EMERGENCY AND HAZARDOUS CHEMICAL INVENTORY

Specific Information by Chemical

Facility Identification

Name: Sulzer Metco (US) Inc
Street: 1101 Prospect Avenue
City: Westbury County: Nassau State: NY Zip: 11590
SIC Code: 3542 Dun & Brad Number: 87-429-0349

FOR OFFICIAL USE ONLY
ID #
Date Received

Owner/Operator Name
Name: Russell Siedlewicz Phone: (516) 334-1300
Mail Address: 1101 Prospect Avenue, Westbury, NY 11590

Emergency Contact
Name: Michael S. Lydon Title: Environment, Health&Safety
Phone: (516) 338-2337 24 Hr. Phone: (800) 424-9300 Chemtrec
Name: Russell Siedlewicz Title: Manager Facilities
Phone: (516) 338-2139 24 Hr Phone: (800) 424-9300

Important: Read all instructions before completing form

Reporting Period From January 1 to December 31, 19 98

☐ Check if information below is identical to the information submitted last year.

Chemical Description	Physical and Health Hazards (check all that apply)	Inventory	Storage Codes and Locations (Non-Confidential) Storage Locations	Optional
CAS 7440 02 0 Trade Secret ☐ Chem. Name: Nickel Check all that apply: Pure ☐ Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) X	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboratories D 1 4 Warehouse	☐
CAS 7440 47 3 Trade Secret ☐ Chem. Name: Chromium Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name	Fire X Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) ☐ Delayed (chronic) ☐	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboratories D 1 4 Warehouse	☐
CAS 1314 23 4 Trade Secret ☐ Chem. Name Check all that apply: Pure X Mix X Solid X Liquid ☐ Gas ☐ EHS ☐ EHS Name	Fire ☐ Sudden Release of Pressure ☐ Reactivity ☐ Immediate (acute) X Delayed (chronic) ☐	Max. Daily Amount (code): 03 Avg. Daily Amount (code): 03 No. of Days On-site (days): 365	N 1 4 Engineering Laboratories D 1 4 Warehouse	☐

Certification *(Read and sign after completing all sections)*

I certify under penalty of law that I have personally examined and am familiar with the information submitted in pages one through 3 and that based on my inquiry of those individuals responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Russell Siedlewicz Manager Facilities
Name and official title of owner/operator OR owner/operator's authorized representative

Signature

3-3-99
Date signed

Optional Attachments
☐ I have attached a site plan
☐ I have attached a list of site coordinate abbreviations
☐ I have attached a description of dikes and other safeguard measures

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1994

Certified Mail Z 024 624 045

Mr. William Miner
New York Emergency Response Commission
New York State Department of
Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road/Room 326
Albany, NY 12233-3510

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

J. Macri

Joe Macri
Manager Facilities

JM/amm
cc: Andrew B. Mazzone, Executive Vice President
Constance L. Conroy, Supervisor Environmental Compliance

PWPlus - Corrcl15.Pwp

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. William Miner
New York Emergency Response Comm.
New York State Dept. of
Environmental Conservation
Bureau of Spill Prev. & Response
50 Wolf Road/Room 326
Albany, NY 12233--3510

4a. Article Number

Z 024 624 045

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

JUL 06 1994

5. Signature (Addressee)

6. Signature (Agent)

E. Clayson

8. Addressee's Address (Only if requested and fee is paid)

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S.MAIL

Print your name, address and ZIP Code here

Mr. Joe Macri
Metco Div. Perkin-Elmer Corp.
1101 Prospect Avenue
Westbury, NY 11590

Z 024 624 045

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to Mr. William Miner NYERC, NYSDEC Bureau Spill Prev.	
Street and No. & Response 50 Wolf Rd/Room 326	
P.O., State and ZIP Code Albany, NY 12233-3510	
Postage	$ 2.90
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 4.90
Postmark or Date 6/30/94	

PS Form 3800, March 1993

STICK POSTAGE S... CERTIFIED MAIL FEE, AND L...

...LE TO COVER FIRST CLASS POSTAGE, ...ANY SELECTED OPTIONAL SERVICES (see front).

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier (no extra charge).

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make inquiry.

105603-93-B-0218

PS Form **3800**, March 1993 *(Reverse)*

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

Mr. William Miner
New York Emergency Response Comm.
New York State Dept. of
Environmental Conservation
Bureau of Spill Prev. & Response
50 Wolf Road/Room 326
Albany, NY 12233-3510

4a. Article Number

Z 024 624 045

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991 ★U.S. GPO: 1993—352-714 DOMESTIC RETURN RECEIPT

Thank you for using Return Receipt Service.

Z 024 624 045

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

UNITED STATES POSTAL SERVICE

Sent to	Mr. William Miner
Street and No.	NYERC, NYSDEC Bureau Spill Prev. & Response
P.O., State and ZIP Code	50 Wolf Rd/Room 326 Albany, NY 12233-3510
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, March 1993

Fold at line over top of envelope to the right of the return address

CERTIFIED MAIL

Z 024 624 045

METCO
1101 Prospect Avenue
Westbury, N.Y. 11590

FIRST CLASS

Mr. William Miner
New York Emergency Response Commission
New York State Department of
Environmental Conservation
Bureau of Spill Prevention & Response
50 Wolf Road/Room 326
Albany, NY 12233-3510

PERKIN ELMER

ALUMINUM COMPANY OF AMERICA
SPECIALTY METALS DIVISION
POST OFFICE BOX 472
ROCKDALE, TEXAS 76567

ALCOA

1992 September 16

METCO, INC.
1101 PROSPECT AVENUE
WESTBURY, NY 11590

Dear NANCY ST. NICHOLAS:

For many years aluminum atomized powders have been listed by name as regulated materials under the United Nations Recommendations on the Transportation of Dangerous Goods. In the past, in the absence of test criteria to the contrary, we made our shipments of these materials under the UN recommendations as applied by the International Maritime Organization's Dangerous Goods Code (IMO). This practice entailed using UN-marked non-bulk packaging, applying hazardous warning labels and markings to this packaging, and identifying the powders on shipping documents as regulated dangerous goods by UN number and UN hazard class.

Recently, the Bureau of Mines of the United States Department of the Interior, an authorized testing facility, under DOT Hazardous Materials Transportation Regulations completed a thorough test program in accordance with these regulations and has determined that all grades, coated and uncoated, of Alcoa's aluminum atomized powder do not meet these definitions; therefore, are not covered by the UN recommendations. Specifically, the Bureau of Mines confirms that none of Alcoa's coated or uncoated aluminum powders meet the UN definitions of Division 4.1 or Division 4.3 and in accordance with special provision 184 these materials are, therefore, considered non-dangerous in transportation.

Also, they are not subject to the IMO Dangerous Goods Code, ICAO Technical Instructions, or the U.S. adaptation of the international recommendations published by the U.S. Department of Transportation in their Docket No. HM-181 and the Canadian adaptation of their Transportation of Dangerous Goods Regulations. In summary, we are implementing this change effective September 1, 1992, and will take the following action:

1) Reference to and use of United Nations hazard Class (4.1 and 4.3) and number (1309 and 1396) will be discontinued for shipping documentation, marking and labeling of all Alcoa aluminum powders.

2) Notification of this action is being sent to freight carriers and forwarders, port authorities, distribution centers and Chemtrec.

RECEIVED
SEP 29 1992
DIVISION OF PE

3) Section IX of the MSDS, copy attached, has been changed to read: "Tested under UN criteria (Appendix E.DOT) and found not to meet the definition of any transportation hazard class. Therefore, not regulated by DOT, ICAO, IMO, Canadian TDG and UN Recommendations. See 172.101(c) 49CFR."

You may wish to pass this letter on to your transportation department in the event that a carrier has refused to deliver your atomized powder.

Sincerely,

Sue B. Key

Sue B. Key
Sales Service Representative

Specialty Metals Division

Material Safety Data Sheet

Aluminum Company of America, SMD Powder, P.O. Box 472, Rockdale, TX 76567

ALCOA NO. 123

Common Name	Phone	Date
Atomized Aluminum Powder	Emergency: 412-553-4001 Chemtrec: 800-424-9300 Technical: 412-553-4649	Rev 92-09-01 Orig 80-09-17

Prepared by the Hazardous Materials Control Committee.

SECTION I. Material Description

Chemical Name & Formula: Aluminum, Al

Other Designation: Grade Series 12, 12C, 101, 102, 102H, 104, 105, 108, 110, 115, 119, 120, 123, 126, 132, 200, 1126, 1202, 1203, 1204, 1220, 1221, 1222, 1224, 1230, 1231, 1233, 1235, 1261, 1401, 1620, 1622, 6401, 7123, 7124, 7125, 7126, 7401, 8401, 8122, 9280.

CAS No.: Aluminum (7429-90-5)

Manufacturer: Aluminum Co. of America

Product Use: Various metallurgical/chemical/structural/coating applications.

SECTION II. Ingredients and Occupational Exposure Limits

	% by Weight Typical		TWA in mg/m³ ACGIH TLV	TWA in mg/m³ OSHA PEL
Aluminum	. . 99.7	Aluminum, total dust	10	15, 5 (respirable)

SECTION III. Physical Data

Physical Form: Finely divided aluminum powder.

Boiling Temperature: Not applicable

Freeze-Melt Temperature: 1195-1215°F (646-657°C)

Vapor Pressure (mm): Not applicable

Vapor Density (air = 1): Not applicable

Evaporation Rate: Not applicable

Specific Gravity: Not applicable

Density: 50-81 lb/ft³ (0.8-1.3 g/cm³)

Water Solubility: Insoluble; insoluble in organic solvents

pH: Not applicable

Color: Varies from dull gray to metallic silver

Odor: None

Odor Threshold (ppm): Not applicable

Coefficient of water/oil distribution: Not applicable

SECTION IV. Fire and Explosion Data

Flashpoint:	Auto-Ignition Temp.:	Flammability Limits in Air: Upper:	Lower:
None	650°C (layered)	Minimum Explosive Concentration in Air	40 mg/L

Aluminum powder may be explosive when dispersed in air. Even a minor dust cloud can explode violently.

In case of fire: Use extreme care to prevent dust cloud formation. Use gentle surface application of Class D extinguishing agent or dry inert granular material (e.g., sand) to cover and ring the burning powder. Do not use fire extinguishers rated for Class A, B, or C fires. Do not use water or halogenated fire extinguishing agents. Do not disturb the burning powder or cause mixing of the agent with the burning powder. Do not disturb the powder until completely cool.

Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and protective clothing when appropriate.

SECTION V. Reactivity Data

With water: Generates hydrogen and heat slowly. Water/aluminum powder mixtures may be especially hazardous when confined.
With heat: Oxidizes at a rate dependent on temperature.
With strong oxidizers: Violent reaction with much heat generated.
With halogenated compounds: Many halogenated hydrocarbons, including halogenated fire extinguishing agents, can react violently with finely divided aluminum.

When exposed to fire, aluminum oxide and aluminum nitride are formed.

SECTION VI. Health Hazard Information (See Section II for exposure limits.)

Aluminum dust/fines are low health risks by inhalation. Aluminum should be treated as a nuisance dust and is so defined by the American Conference of Governmental Industrial Hygienists (ACGIH).

SECTION VII. Spill, Leak & Disposal Procedures

Avoid all ignition sources around spill area. Prohibit smoking. Do not use water for spill clean-up. Avoid dusting of powder to the greatest extent possible. Sweep spilled powder with natural bristle broom (push type recommended). Pick up material with non-sparking shovel. Place carefully in dry, water-tight containers. Seal containers.

For disposal of this material as a waste, act in accordance with all applicable federal, state, and local waste management regulations.

After complete clean-up by sweeping, area may be washed down with copious quantities of water, if necessary.

RCRA Hazardous Waste No. Not Federally Regulated

SECTION VIII. Special Protection and Precautions

Use with adequate explosion-proof ventilation to meet the exposure limits as listed in Section II. Use non-sparking handling equipment per NFPA 651, 65. Cover and reseal partially empty containers. Keep absolutely dry. Storage rooms must be of fire resistant construction. It is preferable not to store powder in same room as other combustible materials. Smoking is prohibited.

Where respiratory protection is necessary, select appropriate NIOSH-approved respiratory protection (dust respirator, etc.) based on the actual or potential airborne contaminants and their concentrations present.

SECTION IX. Regulatory Information

Components of this product are listed on the TSCA inventory (USA), the Domestic Substances List (Canada), and the EINECS core inventory (EC Market).

All electrical equipment must be suitable for use in hazardous atmospheres involving aluminum powder in accordance with 29 CFR 1910.307. The National Electrical Code, NFPA 70, contains guidelines for determining the type and design of equipment and installation which will meet this requirement.

For purposes of SARA III reporting, this substance contains the following listed ingredients:

Aluminum (fume/dust) -- Section 313 List

This material fits the EPA Hazard Category definitions of Reactive and Sudden Release of Pressure Hazards, under SARA Sections 311, 312.

Transportation

Tested under UN criteria (Appendix E, DOT) and found not to meet the definition of any transportation hazard class. Therefore, not regulated by DOT, ICAO, IMO, Canadian TDG and UN Recommendations. (See 712.101 (c), 49CFR.)

SECTION X. References

Aluminum Association Bulletin TR-2, "Recommendations for Storage and Handling of Aluminum Pigments and Powders"

Bureau of Mines #6516, "Explosibility of Metal Powders (1964)"

NFPA 651, "Standard for the Manufacture of Aluminum and Magnesium Powder"

NFPA 65, "Standard for the Processing and Finishing of Aluminum"

U.S. Dept. of Health and Human Services, NIOSH: Registry of Toxic Effects of Chemical Substances, 1985-86 Edition

Sax, N. Irving: Dangerous Properties of Industrial Materials, Van Nostrand Reinhold Co., Inc., 1984

Information herein is given in good faith as authoritative and valid; however, no warranty, express or implied, can be made.

Specialty Metals Division

Material Safety Data Sheet

Aluminum Company of America, SMD Powder, P.O. Box 472, Rockdale, TX 76567

ALCOA NO. 126

Common Name	Phone	Date
Atomized Aluminum/Silicon Alloy Powder	Emergency: 412-553-4001 Chemtrec: 800-424-9300 Technical: 412-553-4649	Rev 92-09-01 Orig 80-09-17

Prepared by the Hazardous Materials Control Committee.

SECTION I. Material Description

Chemical Name & Formula: Alloy of aluminum (Al) and silicon (Si)
Other Designation: Atomized Powder 718
CAS No.: Aluminum (7429-90-5); Silicon (7440-21-3)
Manufacturer: Aluminum Co. of America
Product Use: Various metallurgical/chemical/structural/coating applications.

SECTION II. Ingredients and Occupational Exposure Limits

	% by Weight Typical		TWA in mg/m^3 ACGIH TLV	OSHA PEL
Aluminum. . .	87.5			
Silicon . . .	12.0	Aluminum, total dust	10	15, 5 (respirable)
		Silicon dust	10	10, 5 (respirable)

Silicon: oral rat LD_{50}: 3160 mg/kg body weight

SECTION III. Physical Data

Physical Form: Finely divided aluminum powder
Boiling Temperature: Not applicable
Freeze-Melt Temperature: 1070-1080°F (577-582°C)
Vapor Pressure: Not applicable
Evaporation Rate: Not applicable
Specific Gravity: Not applicable
Density: 69 lb/ft^3 (1.1 g/cm^3)
Water Solubility: Insoluble; insoluble in organic solvents
pH: Not applicable
Color: Varies from dull gray to metallic silver
Odor: None

SECTION IV. Fire and Explosion Data

Flashpoint:	Auto-Ignition Temp.:	Flammability Limits in Air: Upper:	Lower:
None	650°C (layered)	Minimum Explosive Concentration in Air	40 mg/L

Aluminum powder may be explosive when dispersed in air. Even a minor dust cloud can explode violently.

In case of fire: Use extreme care to prevent dust cloud formation. Use gentle surface application of Class D extinguishing agent or dry inert granular material (e.g., sand) to cover and ring the burning powder. Do not use fire extinguishers rated for Class A, B, or C fires. Do not use water or halogenated fire extinguishing agents. Do not disturb the burning powder or cause mixing of the agent with the burning powder. Do not disturb the powder until completely cool.

Firefighters should wear NIOSH approved, positive pressure, self-contained breathing apparatus and protective clothing when appropriate.

SECTION V. Reactivity Data

With water: Generates hydrogen and heat slowly. Water/aluminum powder mixtures may be especially hazardous when confined.
With heat: Oxidizes at a rate dependent on temperature.
With strong oxidizers: Violent reaction with much heat generated.
With halogenated compounds: Many halogenated hydrocarbons, including halogenated fire extinguishing agents, can react violently with finely divided aluminum.
When exposed to fire, aluminum oxide and aluminum nitride are formed.

SECTION VI. Health Hazard Information (See Section II for exposure limits.)

Chronic exposure to inert dusts of silicon may cause increased airways resistance and contribute to chronic bronchitis. Intratracheal administration of silicon in rabbits produced significant pulmonary lesions.

Aluminum dust/fines and fumes are low health risks by inhalation. Aluminum should be treated as a nuisance dust and is so defined by the American Conference of Governmental Industrial Hygienists (ACGIH).

SECTION VII. Spill, Leak & Disposal Procedures

Avoid all ignition sources around spill area. Prohibit smoking.

Do not use water for spill clean-up. Avoid dusting of powder to the greatest extent possible. Sweep spilled powder with natural bristle broom (push type recom- mended). Pick up material with non-sparking shovel. Place carefully in dry, water-tight containers. Seal containers.

For disposal of this material as a waste, act in accordance with all applicable federal, state, and local waste management regulations.

After complete clean-up by sweeping, area may be washed down with copious amounts of water, if necessary.

RCRA Hazardous Waste No. Not Federally Regulated

SECTION VIII. Special Protection and Precautions

Use with adequate explosion-proof ventilation to meet the exposure limits as listed in Section II. Use non-sparking handling equipment per NFPA 651, 65. Cover and reseal partially empty containers. Keep absolutely dry. Storage rooms must be of fire resistant construction. It is preferable not to store powder in same room as other combustible materials. Smoking is prohibited.

Where respiratory protection is necessary, select appropriate NIOSH-approved respiratory protection (dust respirator, etc.) based on the actual or potential airborne contaminants and their concentrations present.

SECTION IX. Regulatory Information

Components of this product are listed on the TSCA inventory (USA), the Domestic Substances List (Canada), and the EINECS core inventory (EC Market).

All electrical equipment must be suitable for use in hazardous atmospheres involving aluminum powder in accordance with 29 CFR 1910.307. The National Electric Code, NFPA 70, contains guidelines for determining the type and design of equipment and installation which will meet this requirement.

For purposes of SARA III reporting, this substance contains the following listed ingredients:

Aluminum (fume/dust) -- Section 313 List

This material fits the EPA Hazard Category definitions of Reactive and Sudden Release of Pressure Hazards and Delayed (Chronic) Health Hazard under SARA Sections 311, 312.

Transportation

Tested under UN criteria (Appendix E, DOT) and found not to meet the definition of any transportation hazard class. Therefore, not regulated by DOT, ICAO, IMO, Canadian TDG and UN Recommendations. (See 172.101 (c), 49CFR.)

SECTION X. References

Aluminum Association Bulletin TR-2, "Recommendation for Storage and Handling of Aluminum Pigments and Powders"

Bureau of Mines #6516, "Explosibility of Metal Powders (1964)"

NFPA 651, "Standard for the Manufacture of Aluminum and Magnesium Powder"

NFPA 65, "Standard for the Processing and Finishing of Aluminum"

U.S. Dept. of Health and Human Services, NIOSH: Registry of Toxic Effects of Chemical Substances, 1985-86 Edition

Sax, N. Irving: Dangerous Properties of Industrial Materials, Van Nostrand Reinhold Co., Inc., 1984

Information herein is given in good faith as authoritative and valid; however, no warranty, express or implied, can be made.

EPA
United States Environmental Protection Agency

FORM R TOXIC CHEMICAL RELEASE INVENTORY REPORTING FORM

Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986, also known as Title III of the Superfund Amendments and Reauthorization Act

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: COBALT POWDER

WHERE TO SEND COMPLETED FORMS:
1. EPCRA Reporting Center, P.O. Box 3348, Merrifield, VA 22116-3348, ATTN: TOXIC CHEMICAL RELEASE INVENTORY
2. APPROPRIATE STATE OFFICE (See instructions in Appendix F)

Enter "X" here if this is a revision: [ ]

IMPORTANT: See instructions to determine when "Not Applicable (NA)" boxes should be checked.

For EPA use only

PART I. FACILITY IDENTIFICATION INFORMATION

SECTION 1. REPORTING YEAR

19 92

SECTION 2. TRADE SECRET INFORMATION

2.1 Are you claiming the toxic chemical identified on page 3 trade secret?
[ ] Yes (Answer question 2.2; Attach substantiation forms)
[X] No (Do not answer 2.2; Go to Section 3)

2.2 If yes in 2.1, is this copy: [ ] Sanitized [X] Unsanitized

SECTION 3. CERTIFICATION (Important: Read and sign after completing all form sections.)

I hereby certify that I have reviewed the attached documents and that, to the best of my knowledge and belief, the submitted information is true and complete and that the amounts and values in this report are accurate based on reasonable estimates using data available to the preparers of this report.

Name and official title of owner/operator or senior management official: JOE MACRI, MANAGER FACILITIES

Signature: Joseph Macri

Date Signed: June 30, 1993

SECTION 4. FACILITY IDENTIFICATION

4.1

Facility or Establishment Name: METCO DIVISION PERKIN-ELMER CORPORATION

TRI Facility ID Number: 11801PRKNL220MI

Street Address: 220 Miller Place

City: Hicksville

County: Nassau

State: New York

Zip Code: 11801

Mailing Address (if different from street address):

City:

State:

Zip Code:

PUT LABEL HERE

EPA
United States Environmental Protection Agency

EPA FORM R

PART I. FACILITY IDENTIFICATION INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 4. FACILITY IDENTIFICATION (Continued)

4.2	This report contains information for: (Important: check only one)	a. [ ] An entire facility	b. [X] Part of a facility
4.3	Technical Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300
4.4	Public Contact	Name: JOE MACRI	Telephone Number (include area code): (516) 334-1300

4.5	SIC Code (4-digit)	a. 3399	b.	c.	d.	e.	f.
4.6	Latitude and Longitude	Latitude			Longitude		
		Degrees	Minutes	Seconds	Degrees	Minutes	Seconds
		086	13	00	003	47	00

4.7	Dun & Bradstreet Number(s) (9 digits)	a. 05-773-1663
		b.
4.8	EPA Identification Number(s) (RCRA I.D. No.) (12 characters)	a. NYD981558570
		b.
4.9	Facility NPDES Permit Number(s) (9 characters)	a. N/A
		b.
4.10	Underground Injection Well Code (UIC) I.D. Number(s) (12 digits)	a. N/A
		b.

SECTION 5. PARENT COMPANY INFORMATION

5.1	Name of Parent Company	[ ] NA PERKIN-ELMER CORPORATION
5.2	Parent Company's Dun & Bradstreet Number	[ ] NA (9 digits) 00-118-4480

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 1. TOXIC CHEMICAL IDENTITY

(Important: DO NOT complete this section if you complete Section 2 below.)

1.1	CAS Number (Important: Enter only one number exactly as it appears on the Section 313 list. Enter category code if reporting a chemical category.)
	7440-48-4
1.2	Toxic Chemical or Chemical Category Name (Important: Enter only one name exactly as it appears on the Section 313 list.)
	COBALT
1.3	Generic Chemical Name (Important: Complete **only** if Part I, Section 2.1 is checked "yes." Generic Name must be structurally descriptive.)
	N/A

SECTION 2. MIXTURE COMPONENT IDENTITY

(Important: DO NOT complete this section if you complete Section 1 above.)

2.1	Generic Chemical Name Provided by Supplier (Important: Maximum of 70 characters, including numbers, letters, spaces, and punctuation.)
	N/A

SECTION 3. ACTIVITIES AND USES OF THE TOXIC CHEMICAL AT THE FACILITY

(Important: Check all that apply.)

3.1	Manufacture the toxic chemical:	a. [ ] Produce b. [ ] Import	If produce or import: c. [ ] For on-site use/processing d. [ ] For sale/distribution e. [ ] As a byproduct f. [ ] As an impurity
3.2	Process the toxic chemical:	a. [ ] As a reactant b. [ ] As a formulation component	c. [X] As an article component d. [X] Repackaging
3.3	Otherwise use the toxic chemical:	a. [ ] As a chemical processing aid b. [ ] As a manufacturing aid	c. [ ] Ancillary or other use

SECTION 4. MAXIMUM AMOUNT OF THE TOXIC CHEMICAL ON-SITE AT ANY TIME DURING THE CALENDAR YEAR

4.1	04	(Enter two-digit code from instruction package.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: COBALT POWDER

SECTION 5. RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

			A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.1	Fugitive or non-point air emissions	[X] NA			
5.2	Stack or point air emissions	[ ] NA	310	C	
5.3	Discharges to receiving streams or water bodies (enter one name per box)				
5.3.1	Stream or Water Body Name: N/A				
5.3.2	Stream or Water Body Name: N/A				
5.3.3	Stream or Water Body Name: N/A				
5.4	Underground injections on-site	[X] NA			
5.5	Releases to land on-site				
5.5.1	Landfill	[X] NA			
5.5.2	Land treatment/ application farming	[X] NA			
5.5.3	Surface impoundment	[X] NA			
5.5.4	Other disposal	[X] NA			

[ ] Check here only if additional Section 5.3 information is provided on page 5 of this form.

Range Codes: A = 1 - 10 pounds; B = C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 5.3 ADDITIONAL INFORMATION ON RELEASES OF THE TOXIC CHEMICAL TO THE ENVIRONMENT ON-SITE

5.3 Discharges to receiving streams or water bodies (enter one name per box)	A. Total Release (pounds/year) (enter range code from instructions or estimate)	B. Basis of Estimate (enter code)	C. % From Stormwater
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			
5.3.__ Stream or Water Body Name N/A			

SECTION 6. TRANSFERS OF THE TOXIC CHEMICAL IN WASTES TO OFF-SITE LOCATIONS

6.1 DISCHARGES TO PUBLICLY OWNED TREATMENT WORKS (POTW)

6.1.A Total Quantity Transferred to POTWs and Basis of Estimate	
6.1.A.1 Total Transfers (pounds/year) (enter range code or estimate)	6.1.A.2 Basis of Estimate (enter code)
N/A	

6.1.B POTW Name and Location Information			
6.1.B.__ POTW Name N/A		6.1.B.__ POTW Name	
Street Address		Street Address	
City	County	City	County
State	Zip Code	State	Zip Code

If additional pages of Part II, Sections 5.3 and/or 6.1 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Sections 5.3/6.1 page this is, here. [ ]
(example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = 11
C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER: 11801PRKNL220MI

Toxic Chemical, Category, or Generic Name: COBALT POWDER

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: LONI-JO SCRAP METAL

Street Address: 70 KINKEL STREET

City: WESTBURY

County: NASSAU

State: NY

Zip Code: 11590

Is location under control of reporting facility or parent company? [ ] Yes [X] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1. 240	1. M	1. M 24
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

SECTION 6.2 TRANSFERS TO OTHER OFF-SITE LOCATIONS

6.2.__ Off-site EPA Identification Number (RCRA ID No.): N/A

Off-Site Location Name: N/A

Street Address:

City:

County:

State:

Zip Code:

Is location under control of reporting facility or parent company? [ ] Yes [ ] No

A. Total Transfers (pounds/year) (enter range code or estimate)	B. Basis of Estimate (enter code)	C. Type of Waste Treatment/Disposal/ Recycling/Energy Recovery (enter code)
1.	1.	1. M
2.	2.	2. M
3.	3.	3. M
4.	4.	4. M

If additional pages of Part II, Section 6.2 are attached, indicate the total number of pages in this box [ ] and indicate which Part II, Section 6.2 page this is, here. [ ] (example: 1, 2, 3, etc.)

Range Codes: A = 1 - 10 pounds; B = C = 500 - 999 pounds.

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 7A. ON-SITE WASTE TREATMENT METHODS AND EFFICIENCY

[X] Not Applicable (NA) - Check here if no on-site waste treatment is applied to any waste stream containing the toxic chemical or chemical category.

a. General Waste Stream (enter code)	b. Waste Treatment Method(s) Sequence [enter 3-character code(s)]	c. Range of Influent Concentration	d. Waste Treatment Efficiency Estimate	e. Based on Operating Data?
7A.1a	7A.1b 1 2 3 4 5 6 7 8	7A.1c	7A.1d %	7A.1e Yes [ ] No [ ]
7A.2a	7A.2b 1 2 3 4 5 6 7 8	7A.2c	7A.2d %	7A.2e Yes [ ] No [ ]
7A.3a	7A.3b 1 2 3 4 5 6 7 8	7A.3c	7A.3d %	7A.3e Yes [ ] No [ ]
7A.4a	7A.4b 1 2 3 4 5 6 7 8	7A.4c	7A.4d %	7A.4e Yes [ ] No [ ]
7A.5a	7A.5b 1 2 3 4 5 6 7 8	7A.5c	7A.5d %	7A.5e Yes [ ] No [ ]

If additional copies of page 7 are attached, indicate the total number of pages in this box [ ] and indicate which page 7 this is, here. [ ] (example: 1, 2, 3, etc.)

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Toxic Chemical, Category, or Generic Name
COBALT POWDER

SECTION 7B. ON-SITE ENERGY RECOVERY PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site energy recovery is applied to any waste stream containing the toxic chemical or chemical category.**

Energy Recovery Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ]

SECTION 7C. ON-SITE RECYCLING PROCESSES

[X] **Not Applicable (NA) - Check here if no on-site recycling is applied to any waste stream containing the toxic chemical or chemical category.**

Recycling Methods [enter 3-character code(s)]

1 [ ] 2 [ ] 3 [ ] 4 [ ] 5 [ ]

6 [ ] 7 [ ] 8 [ ] 9 [ ] 10 [ ]

EPA
United States Environmental Protection Agency

EPA FORM R

PART II. CHEMICAL-SPECIFIC INFORMATION (CONTINUED)

TRI FACILITY ID NUMBER
11801PRKNL220MI
Chemical, Category, or Generic Name
COBALT POWDER

SECTION 8. SOURCE REDUCTION AND RECYCLING ACTIVITIES

All quantity estimates can be reported using up to two significant figures.		Column A 1991 (pounds/year)	Column B 1992 (pounds/year)	Column C 1993 (pounds/year)	Column D 1994 (pounds/year)
8.1	Quantity released*	0	0	0	0
8.2	Quantity used for energy recovery on-site	0	0	0	0
8.3	Quantity used for energy recovery off-site	0	0	0	0
8.4	Quantity recycled on-site	0	0	0	0
8.5	Quantity recycled off-site	270	240	250	250
8.6	Quantity treated on-site	0	0	0	0
8.7	Quantity treated off-site	0	0	0	0
8.8	Quantity released to the environment as a result of remedial actions, catastrophic events, or one-time events not associated with production processes (pounds/year)	N/A			
8.9	Production ratio or activity index	.95			

8.10 Did your facility engage in any source reduction activities for this chemical during the reporting year? If not, enter "NA" in Section 8.10.1 and answer Section 8.11.

	Source Reduction Activities [enter code(s)]	Methods to Identify Activity (enter codes)		
8.10.1	W19	a. T04	b.	c.
8.10.2	W29	a. T04	b.	c.
8.10.3		a.	b.	c.
8.10.4		a.	b.	c.

		YES	NO
8.11	Is additional optional information on source reduction, recycling, or pollution control activities included with this report? (Check one box)		X

* Report releases pursuant to EPCRA Section 329(8) including "any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment." Do not include any quantity treated on-site or off-site.

varian

thin film systems

November 5, 1992

Dear Supplier:

Varian, Thin Film Systems, acknowledges the importance and shares the global concerns of the ozone depletion issue. As a result, we have been working to totally eliminate ozone depleting chemicals (ODC's) from all of our processes. By January 1, 1991, we had succeeded in reducing our use of ODC's by over 50%. Now, after several years of work, we are determined to meet the newly established goal of total elimination of ODC's by or before May 15, 1993.

Many of our customers have requested that we verify our commitment to comply with the ODC elimination regulations which resulted from the amendments to the Clean Air Act. As a valued member of Thin Film's supplier network, we would like to request the same of you. Please complete the attached AEA standardized questionnaire and return it to Dennis Marshall no later than December 31, 1992.

Thank you for your attention to this extremely important matter.

Sincerely,

Ted Leicher
Purchasing Manager

Dennis Marshall
Environmental Manager

Varian Associates, Inc. 3175 Hanover Street Palo Alto, California 94304-1130 U.S.A.
415/493-4000 Telex 34-8476

AEA STANDARDIZED QUESTIONNAIRE ON ODC ELIMINATION

COMPANY NAME:_____

YOUR NAME:_____TITLE_____

ADDRESS:_____

CITY:_____STATE_____ZIPCODE_____

TELEPHONE:_____FAX_____

1. Does your company have a goal and plan to phase out ozone depleting chemicals? YES_____NO_____
   Goal for eliminating the use of CFC's_____
   Goal for eliminating the use of other ODC's including methyl chloroform (TCA) and carbon tetrachloride_____
   _____
   _____

2. Are you meeting your plan?_____
   _____

3. Are any of our specifications impacting your efforts?
   YES_____NO_____

4. Are you supplying us with products which contain or use ODC's in the manufacturing process? YES_____NO_____

   If the answer is yes, provide name and part number in List A:

5. Might any products which you supply to us require labeling in May 1993 because of the provisions of the 1990 Clean Air Act?
   YES_____NO_____

6. Are we required to pay any ODC import taxes on your supplies/parts? YES_____NO_____

   If the answer is yes, provide name, part number, and shipping and purchase location in List C:

LIST A

PRODUCTS WHICH CONTAIN OR USE ODC'S IN THE MANUFACTURING PROCESS

PART NUMBER	PART NAME

LIST B

PRODUCTS WHICH MAY REQUIRE LABELING IN MAY 1993

PART NUMBER	PART NAME	PROJECTED ODC ELIMINATION DATE

LIST C

PRODUCTS ON WHICH ODC IMPORT TAXES MUST BE PAID

PART NUMBER	PART NAME	SHIPPING LOCATION	RECEIVING LOCATION

CHEMICAL (FORMULA)	SYNONYM/CROSS REFERENCE
Bromotrifluoromethane (CBrF3)	See Halon 1301
Carbon Tet	See Carbon Tetrachloride
Carbon Tetrachloride (CC14)	Carbon Tet, Tetrachloromethane
CFC-11 (CC13F)	Trichlorofluoromethane, Freon 11, Freon MF, R-ll Refrigerant 11, Racon 11, Ucon 11, Genetron 11
CFC-113 (C2C13F3)	1,1,2-Trichloro-1,2,2-trifluoroethane, Freon TF, Freon 113, Genesolv D, R-113, Refrigerant 113
CFC-114 (C2C12F4)	Dichlorotetrafluoroethane, Halocarbon 114
CFC-115 (C2C1F5)	Chloropentafluoroethane, Halocarbon 115
CFC-12 (CC12F2)	Dichlorodifluoromethane, Freon 12, R-12, Refrigerant 12, Racon 12, Ucon 12, Genetron 12
Chloropentafluoroethane	See CFC-115
Chlorothene	See Trichloroethane
Chlorothene VG	See Trichloroethane
CVG	See Trichloroethane
Dichlorodifluoromethane	See CFC-12
Dichlorotetrafluoroethane	See CFC-114
Freon 11	See CFC-11
Freon 113	See CFC-113
Freon 12	See CFC-12
Freon 500	CFC-12 + Freon 152
Freon 502	CFC-22 + CFC-115
Freon MF	See CFC-11
Freon TA	CFC-113 + Acetone
Freon TF	See CFC-113
Freon TMC	CFC-113 + Methylene Chloride
Freon TMS	CFC-113 + Methanal + Nitromethane
Freon TWD 602	CFC-113 + Dodecylbenzene Sulfonic Acid
Genesolv D	See CFC-113
Genetron 11	See CFC-11
Genetron 12	See CFC-12
Halocarbon 114	See CFC-114
Halocarbon 114B	Halon 2402
Halocarbon 115	See CFC-115
Halocarbon 12B1	Halon 1211
Halocarbon 13B1	See Halon 1301
Halon 1211 (CBrClF2)	Halocarbon 12B1
Halon 1301 (CBrF3)	Bromotrifluoromethane, Halkocarbon 13B1
Halon 2402 (C2Br2F4)	Halocarbon 114B2
R-11	See CFC-11
R-113	See CFC-113
R-12	See CFC-12
Racon 11	See CFC-11
Racon 12	See CFC-12
Refrigerant 11	See CFC-11
Refrigerant 113	See CFC-113
Refrigerant 12	See CFC-12
TCA	See Trichloroethane
Trichlorethane	See Trichloroethane
Trichloroethane	1,1,1-Trichloroethane, Methyl Chloroform, CVG, TCA, Trichlorethane, Chlorothene, Chlorothene VG
Trichlorofluoromethane	See CFC-11
Trichlorotrifluoroethane	See CFC-113
Ucon 11	See CFC-11
Ucon 12	See CFC-12

3

MATERIAL SAFETY DATA SHEET

Flamiblity Rating

Health Rating: 0 | Reactivity Rating: 0 | Hazard Rating: 0

Please rate consistent with NFPA code

SECTION I NAME AND PRODUCT

MANUFACTURER'S NAME WASHINGTON MILLS ELECTRO MINERALS CORPORATION	
ADDRESS (STREET, CITY, STATE AND ZIP CODE) 1801 BUFFALO AVE., P.O. BOX 423, NIAGARA FALLS, N.Y. 14302	
TRADE NAME, COMMON NAME OR SPECIFICATION DURALUM GW, GW/LBD, BRG, GW/BBD, HC, K5RL 700 & F, K5WT, K5X BUFFING POWDERS, XA, MICROGRITS, POLISHING GRAINS & POWDERS, RF, RF D/C FINES, G52R, G82, LT P&C, XA; BLASTITE BT; NIAGARA BLAST; DURATRED.	CONTACT KIMBERLEY MINKEL EMERGENCY TELEPHONE NO. (716) 278-6763 CHEMTREC (800) 424-9300
CHEMICAL FAMILY OR PRODUCT TYPE BROWN ALUMINUM OXIDE	APPROVED BY: KIMBERLEY MINKEL DATE: SEP-92

SECTION II COMPOSITION

CHEMICAL NAME	%	COMMON NAME	* OSHA REG. (Y/N)	CAS #	OSHA PERMISSIVE EXPOSURE LIMIT (per cubic meter)	ACGIH TLV (per cubic meter)	OSHA CARCIN-OGEN (Y/N)
Aluminum Oxide (Al2O3)+	92-99	Aluminum Oxide	Y	1344-28-1	10 mg/m3 (5 resp.)	10 mg/m3	N
Titanium Dioxide (TiO2)	1-4	Titanium Dioxide	Y	13463-67-7	10 mg/m3 (5 resp.)	10 mg/m3	N
Iron Oxide (Fe2O3)	0.1-1.	Iron Oxide	Y	1309-37-1	10 mg/m3	5 mg/m3	N
Silicon Dioxide (SiO2)	0.2-1.	Silicon Oxide	N	7631-86-9	6 mg/m3	NAIF	N
Other oxides total							
less than 0.6%							

* Materials are regulated by OSHA 29 CFR 1910.1200, Hazard Communication Standard.

\+ Non-Fibrous form of Aluminum Oxide

SECTION III PHYSICAL AND CHEMICAL DATA

BOILING POINT	NAIF	MELTING POINT (degrees C)	2040	SPECIFIC GRAVITY	3.95
VAPOR PRESSURE	NAIF	PERCENT VOLATILE BY VOL.	NAIF	VAPOR DENSITY	NAIF
EVAPORATION RATE	NAIF	SOLUBILITY IN WATER	Insoluble	SOLUBILITY IN ALCOHOL Insoluble	

SOLUBILITY IN OTHER SOLVENT Partially Soluble in HF	APPEARANCE AND ODOR Granular Brown to Black, Ordorless

SECTION IV FIRE AND EXPLOSION DATA

FLASH POINT	NAIF	(METHOD USED)	N/A	FLAMABLE LIMITS			
EXTINGUISHING MEDIA		NAIF		UEL	N/A	LEL	N/A
SPECIAL FIRE FIGHTING PROCEEDURES			None				
FIRE/EXPLOSION POTENTIAL			None				

SECTION V HEALTH, FIRST AID AND MEDICAL DATA

PRIMARY ROUTE(S) OF ENTRY	ACUTE AND CHRONIC HEALTH EFFECTS AND EFFECTS OF OVEREXPOSURE	FIRST AID AND MEDICAL INFORMATION
INHALATION (DUST)	ACUTE: May cause coughing, shortness of breath CHRONIC: May affect breathing capacity	Remove to fresh air: apply artificial respiration as needed. Obtain first aid or medical assistance.
INGESTION	No known adverse effects, but ingestion not recommended.	Obtain first aid or medical assistance, if needed.
SKIN CONTACT & ABSORBTION	Not absorbed through skin: May cause abrasions.	Obtain first aid or medical assistance, if needed.
EYE (DUST)	May irritate eyes.	Wash with large amounts of water, Obtain first aid or medical assistance, if needed.
OTHER POTENTIAL HEALTH RISKS	Not known	--

SECTION VI CORROSIVITY AND REACTIVITY DATA

STABILITY UNSTABLE ☐	STABLE ☑	POLYMERIZATION MAY OCCUR ☐	WILL NOT OCCUR ☑
INCOMPATABILITY (MATERIALS TO AVOID)	NAIF		
DECOMPOSITION PRODUCTS	NAIF		
CONDITIONS TO BE AVOIDED	NAIF		

SECTION VII STORAGE, HANDLING AND USE PROCEDURES

NORMAL STORAGE AND HANDLING

Handle with adequate ventilation for nuisance dust. See OSHA 29CFR 1910.94 (Ventilation) and CFR1910.1000. (Air Contaminants)

NORMAL USE

Handle with adequate ventilation for nuisance dust.

See OSHA 29 CFR 1910.94 (Ventilation) and 29 CFR 1910.1000 (Air Contaminants)

STEPS TO BE TAKEN IN CASE OF LEAKS OR SPILLS

Normal cleanup procedures. Respirators may be required.

WASTE DISPOSAL METHOD

Standard landfill methods consistent with applicable Federal, State and Local Laws.

SECTION VIII PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

As needed, approved dust respirator. See OSHA 29 CFR 1910.134

VENTILATION	LOCAL	Recommended
	MECHANICAL (GENERAL)	Recommended
	OTHER	NAIF
PROTECTIVE GLOVES		As desired by user
EYE PROTECTION		Recommended, See OSHA 29 CFR 1910.122
OTHER EQUIPMENT		NAIF

MEASURES TO BE TAKEN DURING REPAIR AND MAINTENANCE OF EQUIPMENT THAT HAS BEEN IN CONTACT WITH THIS MATERIAL

SEE SECTION VII AND VIII

SECTION IX SPECIAL PRECAUTIONS/REGULATORY INFORMATION

TSCA — THE CHEMICAL COMPONENTS OF THIS PRODUCT ARE REGISTERED UNDER THE TOXIC SUBSTANCES CONTROL ACT (TITLE 40 CFR PART 710).

FOR COMPANY USE

The information and recommendations set forth herein are taken from sources believed to be accurate as of the date hereof; however, WMEM Corporation makes no expressed or implied warranty with respect to the accuracy of the information or the suitability of the recommendations, and assumes no liability to any user thereof.

** NAIF = No applicable information found

*** N/A = Not applicable

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0201
Phone: (516) 334-1300
Fax: (516) 338-2488

July 31, 1995

EPCRA Reporting Center
P.O. Box 3348
Merrifield, VA 22116-3348

Subject: Toxic Chemical Release Inventory
Reporting Form R

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our Prospect Avenue and Miller Place facilities.

Please note that as of September 30, 1994, the three properties on Long Island owned by the Perkin-Elmer Corporation, doing business as the Metco division of Perkin-Elmer, were sold by Perkin-Elmer to Sulzer Metco (US), Inc., a Delaware Corporation having a principal place of business at the Prospect Avenue facility. We hope that our delayed reporting has not caused any inconvenience.

Please call me if you have any questions or require clarification.

Very truly yours,

Joseph D. Reardon, Ph.D.
Global Quality
Phone: (516) 338-2316
FAX: (516) 338-2336

JR/clc
Enclosure

c: Mario H. Kyd, Sulzer Metco
Daniel Moraschetti, Sulzer Metco
Constance L. Conroy, Sulzer Metco

METCO AMDRY

SULZER METCO

Sulzer Metco (US) Inc.
1101 Prospect Avenue
PO Box 1006
Westbury, NY 11590-0004

FIRST CLASS

Z 314 694 206

Receipt for Certified Mail
No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

PS Form **3800**, March 1993

Sent to EPCRA Reporting Center	
Street and No. P.O. Box 3348	
P.O., State and ZIP Code ~~Merrifield, VA 22116-3348~~	
Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 314 694 206

MAIL

EPCRA Reporting Center
P.O. Box 3348
Merrifield, VA 22116-3348

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
EPCRA Reporting Center
P.O. Box 3348
Merrifield, VA 22116-3348

4a. Article Number
Z 314 694 206

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form **3811**, December 1991 ★U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your **RETURN ADDRESS** completed on the reverse side?

SUPERVISOR'S REPORT OF ACCIDENT

REPORT TO BE COMPLETED BY THE SUPERVISOR OF THE INJURED EMPLOYEE AND FORWARDED TO THE EQUIPMENT MANUFACTURING OFFICE NOT LATER THAN THE WORK DAY FOLLOWING THE DATE OF ACCIDENT.

NAME OF EMPLOYEE: Joe Costello TITLE: Field Service Eng.

DEPARTMENT: Field Service

STREET ADDRESS OF BUILDING WHERE ACCIDENT OCCURRED: 1101 Prospect Ave, Westbury NY

DATE OF ACCIDENT: 21 Dec 83 PLACE WHERE ACCIDENT OCCURRED: Field Service Dept.

TIME: 3:00 Pm ☐ A.M. ☑ P.M.

DESCRIBE HOW THE ACCIDENT OCCURRED (BE SPECIFIC): Unknown material spontaneously combusted while being blended. We later found out that it was Samarium Cobalt

STATE NATURE OF INJURY AND PART(S) OF BODY AFFECTED: Vomiting — no other apparent injury.

DID YOU PROVIDE MEDICAL CARE? Yes IF SO, WHEN? 3:45 Pm.

NAME AND ADDRESS OF DOCTOR:

NAME AND ADDRESS OF HOSPITAL: Nassau County Medical Center.

DID EMPLOYEE LOSE TIME FROM WORK ON THE DATE OF THE ACCIDENT? ☐ YES ☑ NO

PHYSICAL CAUSES

- ☐ POOR HOUSEKEEPING (misplaced materials,etc.)
- ☐ LACK OF PROPER GUARDS (mechanical/electrical)
- ☐ IMPROPER APPAREL (goggles, shoes, etc.)
- ☐ DEFECTIVE EQUIPMENT (hand tools, ladders,etc.)
- ☐ DEFECTIVE FLOORS, STAIRWAYS, RAMPS, etc.
- ☐ POOR WORKING CONDITIONS (light, ventilation)
- ☑ NOT OTHERWISE CLASSED (describe below)

PERSONAL CAUSES

- ☐ DANGEROUS PRACTICES (undue haste, etc.)
- ☐ INABILITY (inexperience, poor judgment)
- ☐ INCOMPLETE KNOWLEDGE OF JOB AT HAND
- ☐ DISOBEYING RULES
- ☐ UNFIT (weak, easily fatigued, etc.)
- ☑ NOT OTHERWISE CLASSED (describe below)

Apparently safe material sent to Metro without any warnings as to its dangerous characteristics

WHAT MEASURES HAVE BEEN TAKEN TO PREVENT A SIMILAR ACCIDENT IN THIS OR ANY SIMILAR SITUATION: We will request a Safety Data Sheet on all unknown material sent for spraying.

ARE THERE ANY OTHER SIMILAR CONDITIONS WHICH COULD CAUSE THE SAME TYPE OF ACCIDENT ELSEWHERE IN THE COMPANY: Not qualified to answer.

DATE OF REPORT: 22 Dec 83 SIGNATURE OF SUPERVISOR: Paul Cos

REVIEW BY SAFETY COMMITTEE

RECOMMENDATIONS: No foreign material to be used until a safety Data sheet has been obtained & approved

SIGNATURE OF SAFETY DIRECTOR: [illegible] DATE: 1/4/84

sherritt

COBALT SAMARIUM ALLOY POWDER

GRADE Co_5Sm

Sherritt cobalt samarium powder is produced by a reduction diffusion process for use in the production of sintered or polymer bonded permanent magnet materials. This powder would normally be used as the major component in a blend with a higher samarium containing powder and be ground to a very fine particle size to produce optimum magnetic properties.

Typical Analysis

Cobalt	65.0
Samarium	34.5
Calcium	0.15
Oxygen	0.25
Iron	0.03
Magnesium	0.05
Aluminum	0.06

Typical Physical Analysis

Screen Analysis:

+150 µm	0 - 5
-150 + 75	40 - 70
- 75 + 45	30 - 50
- 45	0 - 15

Apparent Density: 2 g/cm^3
Fisher Number: 25 µm

Standard Packaging

15 kg units, packaged under argon in double poly bags with descicant package in powder. Bags contained in sealed one gallon steel cans. Shipped in wooden crates.

Safety Precautions

Cobalt samarium alloys tend to be self ingiting, particularly when particle size is low. If the material ignites, dry sand should be used for extinguishing purposes. Water or other standard fire extinguishing powders must be avoided.

...../2

Sherritt Gordon Mines Limited / Fabricated Metal Products
P.O. Box 28, Commerce Court West, Toronto M5L 1B1, Canada / Telephone (416) 363-9241 / Telex 062-2195
Fort Saskatchewan, Alberta T8L 2P2, Canada / Telephone (403) 998-6911 / Telex 037-2290

FILE NO.

N.F.P.A.

SHERRITT

MATERIAL SAFETY DATA SHEET

(APPROVED BY U.S. DEPARTMENT OF LABOR "ESSENTIALLY SIMILAR TO FORM LSB-00S-4")

PRODUCT Cobalt Samarium Powder

PRODUCTION SECTION I

MANUFACTURER'S NAME: Sherritt Gordon Mines Limited	EMERGENCY TELEPHONE No: (403) 998-6666
ADDRESS (Number, Street, City, State, and ZIP Code): Fort Saskatchewan, Alberta, Canada, T8L 2P2	
CHEMICAL NAME AND SYNONYMS: Cobalt Samarium, Rare Earth Cobalt	TRADE NAME AND SYNONYMS: Cobalt Samarium
CHEMICAL FAMILY: Metal	FORMULA: Co_5Sm, Co_7Sm_2

SECTION II — HAZARDOUS INGREDIENTS

INGREDIENT	%	TLV (Units)	INGREDIENT	%	TLV (Units)
Cobalt	62-65	0.1 mg/m^3			
Samarium	35-38				

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV (Units)
Not applicable		

SECTION III — PHYSICAL DATA

BOILING POINT (°F.)	4000	SPECIFIC GRAVITY (H_2O = 1)	8.6
VAPOR PRESSURE (mm Hg.) (ambient temperature)	0	PERCENT VOLATILE BY VOLUME (%)	0
VAPOR DENSITY (AIR = 1) (ambient temperature)	0	EVAPORATION RATE (_____ = 1) (ambient temperature)	0
SOLUBILITY IN WATER	0		

APPEARANCE AND ODOR
Fine metallic powder, grey color, no odor

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (Method used)	FLAMMABLE LIMITS	Lel	Uel
May be pyrophoric at ambient temperature			

EXTINGUISHING MEDIA
Use fine dry sand. Water or other standard fire extinguishing material must be avoided.

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS

(Continued on reverse side)

SECTION V — HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

see other side

EFFECTS OF OVEREXPOSURE

Fine metal powders are hazardous and harmful when ingested or inhaled.

Repeated contact may cause skin irritation (rash).

EMERGENCY AND FIRST AID PROCEDURES

Over exposure is not generally detectable except when skin irritation is observed; treatment is usually removal of the individual from exposure. Eye and skin contact-flush with water.

SECTION VI — REACTIVITY DATA

STABILITY			CONDITIONS TO AVOID
	UNSTABLE	X	Avoid contact with mineral acids, moisture and long term exposure to air.
	STABLE		

INCOMPATABILITY (MATERIALS TO AVOID)

Extreme heat is generated during oxidation. H_2 may be evolved if exposed to H_2O.

HAZARDOUS DECOMPOSITION PRODUCTS

HAZARDOUS POLYMERIZATION			CONDITIONS TO AVOID
	MAY OCCUR		
	WILL NOT OCCUR	X	

SECTION VII — SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

Spilled powder may be swept up in a normal fashion and the pyrophoric nature of the powder should be noted.

WASTE DISPOSAL METHOD

Disposition of waste powder should be in accordance with practice for finely divided metallic waste (i.e. chips and turnings).

SECTION VIII — SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

Cartridge type respirator (high efficiency particulate filter).

PROTECTIVE GLOVES	EYE PROTECTION
Yes	Safety glasses

VENTILATION	LOCAL EXHAUST	SPECIAL
	Face velocity greater than 100 fpm.	
Yes	MECHANICAL (GENERAL)	OTHER

OTHER PROTECTIVE EQUIPMENT

SECTION IX — SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

Keep containers closed, store under dry, inert atmosphere (N_2,Ar)

Avoid inhalation of dust. Minimize skin contact.

OTHER PRECAUTIONS

Some people are allergic to metal powders and develop dermatitis. Cleanliness is the first step in preventing this situation. Wash frequently and keep food out of work area. Follow good hygiene practice.

Date Issued June 1983 Supplier's Signature _____

Title _____ Company _____

RETURN TO Name _____

Company _____

Full Text of EPA Emergency and Hazardous Chemical Inventory Forms and Community Right-to-Know Reporting Requirements 40 CFR 370

[October 15, 1987, FR 38344; July 26, 1990, FR 30645]

PART 370—HAZARDOUS CHEMICAL REPORTING: COMMUNITY RIGHT-TO-KNOW

Subpart A—General Provisions

Sec.
370.1 Purpose
370.2 Definitions
370.5 Penalties

Subpart B—Reporting Requirements

Sec.
370.20 Applicability
370.21 MSDS Reporting
370.25 Inventory Form Reporting
370.28 Mixtures

Subpart C—Public Access and Availability of Information

Sec.
370.30 Requests for Information
370.31 Provision of Information

Subpart D—Inventory Forms

Sec.
370.40 Tier I Emergency and Hazardous Chemical Inventory Form
370.41 Tier II Emergency and Hazardous Chemical Inventory Form

Authority: Secs. 311, 312, 324, 325, 328, 329 of Pub. L. 99-499, 100 Stat. 1613, 42 U.S.C. 11011, 11012, 11024, 11025, 11028, 11029.

Subpart A—General Provisions

§ 370.1 Purpose.

These regulations establish reporting requirements which provide the public with important information on the hazardous chemicals in their communities for the purpose of enhancing community awareness of chemical hazards and facilitating development of State and local emergency response plans.

§ 370.2 Definitions.

Chief Executive Officer of the tribe means the person who is recognized by the Bureau of Indian Affairs as the chief elected administrative officer of the tribe.

Commission means the emergency response commission for the State in which the facility is located except where the facility is located in Indian Country, in which case, *commission* means the emergency response commission for the Tribe under whose jurisdiction the facility is located. In absence of an emergency response commission, the Governor and the chief executive officer, respectively, shall be the commission. Where there is a cooperative agreement between a State and a Tribe, the commission shall be the entity identified in the agreement.

Committee or *local emergency planning committee* means the local emergency planning committee appointed by the emergency response commission.

"Environment" includes water, air, and land and the interrelationship that exists among and between water, air, and land and all living things.

"Extremely hazardous substance" means a substance listed in the Appendices to 40 CFR Part 355, Emergency Planning and Notification.

Facility means all buildings, equipment, structure, and other stationary items that are located on a single site or on contiguous or adjacent sites and which are owned or operated by the same person (or by any person which controls, is controlled by, or under common control with, such person). *Facility* shall include manmade structures as well as all natural structures in which chemicals are purposefully placed or removed through human means such that it functions as a containment structure for human use. For purposes of emergency release notification, the term includes motor vehicles, rolling stock, and aircraft.

"Hazard Category" means any of the following:

(1) "Immediate (acute) health hazard," including "highly toxic," "toxic," "irritant," "sensitizer," "corrosive," (as defined under § 1910.1200 of Title 29 of the Code of Federal Regulations) and other hazardous chemicals that cause an adverse effect to a target organ and which effect usually occurs rapidly as a result of short term exposure and is of short duration;

(2) "Delayed (chronic) health hazard," including "carcinogens" (as defined under § 1910.1200 of Title 29 of the Code of Federal Regulations) and other hazardous chemicals that cause an adverse effect to a target organ and which effect generally occurs as a result of long term exposure and is of long duration;

(3) "Fire hazard," including "flammable," combustible liquid," "pyrophoric," and "oxidizer" (as defined under § 1910.1200 of Title 29 of the Code of Federal Regulations);

(4) "Sudden release of pressure," including "explosive" and "compressed gas" (as defined under § 1910.1200 of Title 29 of the Code of Federal Regulations); and

(5) "Reactive," including "unstable reactive," "organic peroxide," and "water reactive" (as defined under § 1910.1200 of Title 29 of the Code of Federal Regulations).

"Hazardous chemical" means any hazardous chemical as defined under § 1910.1200(c) of Title 29 of the Code of Federal Regulations, except that such term does not include the following substances:

(1) Any food, food additive, color additive, drug, or cosmetic regulated by the Food and Drug Administration.

(2) Any substance present as a solid in any manufactured item to the extent exposure to the substance does not occur under normal conditions of use.

(3) Any substance to the extent it is used for personal, family, or household purposes, or is present in the same form and concentration as a product packaged for distribution and use by the general public.

(4) Any substance to the extent it is used in a research laboratory or a hospital or other medical facility under the direct supervision of a technically qualified individual.

(5) Any substance to the extent it is used in routine agricultural operations or is a fertilizer held for sale by a retailer to the ultimate customer.

Indian Country means *Indian country* as defined in 18 U.S.C. 1151. That section defines Indian country as:

(a) All land within the limits of any Indian reservation under the jurisdiction of the United States government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation;

(b) All dependent Indian communities within the border of the United States whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State; and

(c) All Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same.

Indian tribe means those tribes federally recognized by the Secretary of the Interior.

Copyright © 1990 by The Bureau of National Affairs, Inc.
0-87179-939-1/90/$+.50

"Inventory form" means the Tier I and Tier II emergency and hazardous chemical inventory forms set forth in Subpart D of this Part

"Material Safety Data Sheet" or "MSDS" means the sheet required to be developed under § 1910.1200(g) of Title 29 of the Code of Federal Regulations.

"Person" means any individual, trust, firm, joint stock company, corporation (including a government corporation), partnership, association, State, municipality, commission, political subdivision of State, or interstate body.

"Present in the same form and concentration as a product packaged for distribution and use by the general public" means a substance packaged in a similar manner and present in the same concentration as the substance when packaged for use by the general public, whether or not it is intended for distribution to the general public or used for the same purpose as when it is packaged for use by the general public.

State means any State of United States, the District of Columbia, the Commonwealth of Puerto Rico, Guam, American Samoa, the United States Virgin Islands, the Northern Mariana Islands, and any other territory or possession over which the United States has jurisdiction and Indian Country.

"TPQ" means the threshold planning quantity for an extremely hazardous substance as defined in 40 CFR Part 355.

§ 370.5 Penalties

(a) *MSDA reporting.* Any person other than a governmental entity who violates any requirement of § 370.21 shall be liable for civil and administrative penalties of not more than $10,000 for each violation.

(b) *Inventory reporting.* Any person other than a governmental entity who violates any requirement of § 370.25 shall be liable for civil and administrative penalties of not more than $25,000 for each violation.

(c) *Continuing violations.* Each day a violation described in paragraphs (a) or (b) of this section continues shall constitute a separate violation.

Subpart B—Reporting Requirements

§ 370.20 Applicability.

(a) *General.* The requirements of this subpart apply to any facility that is required to prepare or have available a material safety data sheet (MSDS) for a hazardous chemical under the Occupational Safety and Health Act of 1970 and regulations promulgated under that Act.

(b) *Minimum threshold levels.* Except as provided in paragraph (b)(3) of this section, the minimum threshold level for reporting under this subpart shall be as specified in paragraphs (b)(1) and (b)(2) of this section.

(1) The owner or operator of a facility subject to this subpart shall submit an MSDS on or before October 17, 1990 (or within three months after the facility first becomes subject to this subpart), for all hazardous chemicals present at the facility at any one time in amounts equal to or greater than 10,000 pounds (or 4,540 kgs.) and for all extremely hazardous substances present at the facility in an amount greater than or equal to 500 pounds (or 227 kgs.—approximately 55 gallons) or the TPQ, whichever is lower.

(2) The owner or operator of a facility subject to this subpart shall submit the Tier I form (or Tier II form) on or before March 1, 1991 (or March 1 of the first year after the facility first becomes a subject to this subpart), and annually thereafter, covering all hazardous chemicals present at a facility at any one time during the preceding calendar year in amounts equal to or greater than 10,000 pounds (or 4,540 kgs.) and extremely hazardous substances present at the facility in an amount greater than or equal to 500 pounds (or 227 kgs.—approximately 55 gallons) or the TPQ, whichever is lower.

(3) The minimum threshold for reporting in response to requests for submission of an MSDS or a Tier II form under §§ 370.21(d) and 370.25(c) of this part shall be zero.

§ 370.21 MSDS reporting.

(a) *Basic requirement.* The owner or operator of a facility subject to this Subpart shall submit an MSDS for each hazardous chemical present at the facility according to the minimum threshold schedule provided in paragraph (b) of § 370.20 to the committee, the commission, and the fire department with jurisdiction over the facility.

(b) *Alternative reporting.* In lieu of the submission of an MSDS for each hazardous chemical under paragraph (a) of this section, the owner or operator may submit the following:

(1) a list of the hazardous chemicals for which the MSDS is required, grouped by hazard category as defined under § 370.2 of this Part;

(2) the chemical or common name of each hazardous chemical as provided on the MSDS; and

(3) except for reporting of mixtures under § 370.28(a)(2), any hazardous component of each hazardous chemical as provided on the MSDS.

(c) *Supplemental reporting.* (1) The owner or operator of a facility that has submitted an MSDS under this section shall provide a revised MSDS to the committee, the commission, and the fire department with jurisdiction over the facility within three months after discovery of significant new information concerning the hazardous chemical for which the MSDS was submitted.

(2) After October 17, 1987, the owner or operator of a facility subject to this section shall submit an MSDS for a hazardous chemical pursuant to paragraph (a) of this section or a list pursuant to paragraph (b) of this section within three months after the owner or operator is first required to prepare or have available the MSDS or after a hazardous chemical requiring an MSDS becomes present in an amount exceeding the threshold established in § 370.20(b).

(d) *Submission of MSDS upon request.* The owner or operator of a facility that has not submitted the MSDS for a hazardous chemical present at the facility shall submit the MSDS for any such hazardous chemical to the committee upon its request. The MSDS shall be submitted within 30 days of the receipt of such request.

§ 370.25 Inventory reporting.

(a) *Basic requirement.* The owner or operator of a facility subject to this Subpart shall submit an inventory form to the commission, the committee, and the fire department with jurisdiction over the facility. The inventory form containing Tier I information on hazardous chemicals present at the facility during the preceding calendar year above the threshold levels established in § 370.20(b) shall be submitted on or before March 1 of each year, beginning in 1988.

(b) *Alternative reporting.* With respect to any specific hazardous chemical at the facility, the owner or operator may submit a Tier II form in lieu of the Tier I information.

(c) *Submission of Tier II information.* The owner or operator of a facility subject to this Section shall submit the Tier II form to the commission, committee, or the fire department having jurisdiction over the facility upon request of such persons. The Tier II form shall be submitted within 30 days of the receipt of each request.

(d) *Fire department inspection.* The owner or operator of a facility that has submitted an inventory form under this section shall allow on-site inspection by the fire department having jurisdiction over the facility upon request of the department, and shall provide to the department specific location information on hazardous chemicals at the facility.

§ 370.28 Mixtures.

(a) *Basic reporting.* The owner or operator of a facility may meet the reporting requirements of §§ 370.21 (MSDS reporting) and 370.25 (inventory form reporting) of this subpart for a hazardous chemical that is a mixture of hazardous chemicals by:

(1) Providing the required information on each component in the mixture which is a hazardous chemical; or

(2) Providing the required information on the mixture itself, so long as the reporting of mixtures by a facility under § 370.25 is in the same manner as under

0-87179-939-1/90/$+.50

§ 370.21, where practicable.

(b) *Calculation of the quantity.* (1) If the reporting is on each component of the mixture which is a hazardous chemical, then the concentration of the hazardous chemical, in weight percent (greater than 1% or 0.1% if carcinogenic) shall be multiplied by the mass (in pounds) of the mixture to determine the quantity of the hazardous chemical in the mixture.

(2) If the reporting is on the mixture itself, the total quantity of the mixture shall be reported.

(c) *Aggregation of extremely hazardous substances.* (1) To determine whether the reporting threshold for an extremely hazardous substance has been equaled or exceeded, the owner or operator of a facility shall aggregate the following:

(i) The quantity of the extremely hazardous substance present as a component in all mixtures at the facility, and

(ii) All other quantities of the extremely hazardous substance present at the facility.

If the aggregate quantity of an extremely hazardous substance equals or exceeds the reporting threshold, the substance shall be reported.

(2) If extremely hazardous substances are being reported and are components of a mixture at a facility, the owner or operator of a facility may report either:

(i) The mixture, as a whole, even if the total quantity of the mixture is below its reporting threshold; or

(ii) The extremely hazardous substance component(s) of the mixture.

Subpart C—Public Access and Availability of Information

§ 370.30 Requests for information.

(a) *Request for MSDS information.* (1) Any person may obtain an MSDS with respect to a specific facility by submitting a written request to the committee.

(2) If the committee does not have in its possession the MSDS requested in paragraph (a)(1) of this section, it shall request a submission of the MSDS from the owner or operator of the facility that is the subject of the request.

(b) *Requests for Tier II information.* (1) Any person may request Tier II information with respect to a specific facility by submitting a written request to the commission or committee in accordance with the requirements of this section.

(2) If the committee or commission does not have in its possession the Tier II information requested in paragraph (b)(1) of this section, it shall request a submission of the Tier II form from the owner or operator of the facility that is the subject of the request, provided that the request is from a State or local official acting in his or her official capacity or the request is limited to hazardous chemicals stored at the facility in an amount in excess of 10,000 pounds.

(3) If the request under paragraph (b)(1) of this section does not meet the requirements of paragraph (b)(2) of this section, the committee or commission may request submission of the Tier II form from the owner or operator of the facility that is the subject of the request if the request under paragraph (b)(1) of this section includes a general statement of need.

§ 370.31 Provision of information.

All information obtained from an owner or operator in response to a request under this subpart and any requested Tier II form or MSDS otherwise in possession of the commission or the committee shall be made available to the person submitting the request under this Subpart; provided upon request of the owner or operator, the commission or committee shall withhold from disclosure the location of any specific chemical identified in the Tier II form.

Subpart D—Inventory Forms

§ 370.40 Tier I emergency and hazardous chemical inventory form.

(a) The form set out in paragraph (b) of this section shall be completed and submitted as required in § 370.25(a) of this part. In lieu of the form set out in paragraph (b) of this section, the facility owner or operator may submit a State or local form that contains identical content.

(b) Tier I Emergency and Hazardous Chemical Inventory Form.

BILLING CODE 6560-50-M

Copyright © 1990 by The Bureau of National Affairs, Inc.
0-87179-939-1/90/$+.50

Material Safety Data Sheet

Date Prepared: 1/26/95 Prepared By: K STUART

SECTION I

MANUFACTURER'S NAME: The Dexter Corporation
STREET ADDRESS : One East Water Street Waukegan, Illinois 60085
TELEPHONE : (708) 623-4200 Night: (708) 623-4200
MANUFACTURER'S CODE: 0910A01M
TRADE NAME : LACQUER THINNER S511G

SECTION II - HAZARDOUS INGREDIENTS

Ingredient(s)	Weight Percent	Vapor Pres mm Hg @ 2
TOLUENE		
CAS: 108-88-3	40 - 50%	22.0

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 100 (ppm)	TLV/TWA: SKIN 50 PPM
STEL: 150 (ppm)	TLV/STEL: 150 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

METHYL ISOBUTYL KETONE		
CAS: 108-10-1	40 - 50%	15.0

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 50 (ppm)	TLV/TWA: 50 (ppm)
STEL: 75 (ppm)	TLV/STEL: 75 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

DIISOBUTYL KETONE		
CAS: 108-83-8	< 10%	1.0

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 25 (ppm)	TLV/TWA: 25 (ppm)
STEL: UK	TLV/STEL: UK
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

ISOPROPYL ALCOHOL		
CAS: 67-63-0	< 10%	33.0

OSHA Exposure Limits	ACGIH Exposure Limits
PEL/TWA: 400 (ppm)	TLV/TWA: 400 (ppm)
STEL: 500 (ppm)	TLV/STEL: 500 (ppm)
PEL/Ceiling: UK	TWA-C: UK
Peak: UK	Mfr's: UK

SECTION III - PHYSICAL PROPERTIES + FIRE AND EXPLOSION HAZARDS

FLASHPOINT FOR 0910A01M = 40 Deg. F Setaflash CC LEL: .80
BOILING RANGE = 180 to 338 Deg. F.
OSHA Classification = Flammable Liquid - Class IB
VAPOR DENSITY: Heavier than air.
EXTINGUISHING MEDIA: Use water fog, foam, dry chemical, or carbon dioxide.
WEIGHT BY VOLUME: 6.919 pounds per gallon
THEORETICAL VOLATILE ORGANIC CONTENT: 6.9 pounds per gallon less water.

SECTION IV - HEALTH INFORMATION

ACUTE: Over exposure by inhalation may cause irritation of the respirato tract, headache, dizziness, or drowsiness.
SKIN OR EYE CONTACT: Irritant to the eyes and skin.
EMERGENCY AND FIRST AID PROCEDURES: INHALATION: Remove from exposure. EYE CONTACT: Flush immediately with large amounts of running water for least 15 minutes. SKIN CONTACT: Remove contaminated clothing and wash sk with soap and water. INGESTION: Drink water.
If necessary, consult a physician for any of these conditions.
ROUTES OF ENTRY: Product may be absorbed thru the following ways: eye inhalation, skin, & ingestion.
MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: Unknown at this time.
CHRONIC HEALTH EFFECTS: Those hazardous materials listed in Section II ma affect the following organs: KIDNEYS- RESPIRATORY TRACT- LIVER- REPRODUCTIVE SYSTEM- CENTRAL NERVOUS SYSTEM- CARDIAC SENSITIZATION.

SECTION V - REACTIVITY DATA

STABILITY: Stable. HAZARDOUS DECOMPOSITION BY-PRODUCTS: Fumes may conta carbon monoxide and oxides of nitrogen. May produce hazardous fumes wh heated to decomposition as in welding.

SECTION VI - SPILL OR LEAK PROCEDURES

Remove all sources of ignition, avoid breathing vapors, ventilate area, a remove with inert absorbant and non-sparking tools. Dispose of in accordar with local, state, and federal regulations. Before attempting to clean up, s Section II.

SECTION VII - PRECAUTIONS IN HANDLING

VENTILATION: Provide general dilution or local exhaust ventilation to keep T and LEL below acceptable limits and to remove decomposition products.

RESPIRATORY PROTECTION: Where general dilution or local exhaust fails to ac quately dilute the TWA/PEL of the material, then respiratory protection shou be used as follows: In accord with 29CFR 1910.134, use NIOSH/MSHA approved a line type respirators or hoods for enclosed and confined areas. Air purify respirators may be used for other areas.

PROTECTIVE EQUIPMENT: Chemical resistant gloves are required for prolonged repeated contact. Use safety eyeware designed to protect against splash liquids.

Do not take internally. Containers should be grounded when pouring. Avoid f fall of liquid in excess of a few inches. Make sure the drum is complet empty before attempting to weld or braze. The drum should be industria cleaned prior to reuse. Do not flame cut, braze, or weld without a NI approved respirator or appropriate ventilation.

SECTION VIII - RIGHT-TO-KNOW

The following ingredients are listed by one or more of the regulatory bodies: SARA Title III Information, Proposition 65, and Clean Air Ac

Chemical Name/CAS Number	Clean Air Act 1990 % by Wt. (1)	SARA 302 % by Wt. (2)	SARA 313 % by Wt. (3)	Prop. 65 % by Wt. (4)
TOLUENE 108-88-3	43	---	43	43.00467
BENZENE 71-43-2	---	---	---	.00860
METHYL ISOBUTYL KETONE 108-10-1	44	---	44	---

FOOTNOTES

(1) Clean Air Act (Hazardous Air Pollutants)
(2) Extremely hazardous substance, Sec. 302
(3) Toxic Chemical, Sec. 313
(4) State of California Safe Drinking Water and Toxic Enforcement Act of 198 Proposition 65 (Prop. 65) Warning: Those ingredients listed are known tc the State of California to cause cancer and/or birth defects or other reproductive harm.

IN COMPLIANCE WITH THE NEW JERSEY RIGHT TO KNOW LAW INGREDIENTS: TOLUENE 108-88-3, METHYL ISOBUTYL KETONE 108-10-1, DIISOBUTYL KETONE 108-83-8, ISOPROPYL ALCOHOL 67-63-0.

COMPOSITION IS PARTIALLY UNKNOWN.

Toxic Substances Control Act (TSCA) Status: The ingredients of this product are on the TSCA inventory.

SECTION IX - SHIPPING INFORMATION

DOT Reportable Quantity - 5000 gallons or greater of product: TOLUENE
5000 gallons or greater of product: METHYL ISOBUTYL KETONE

DOT: SURFACE - HM181

Proper Shipping Name. : Paint Related Material
Hazard Class. . . . . : 3
UN or ID# . . . . . : UN 1263
Packaging Group . . . : II
Marine Pollutant. . . : N/A
Emerg.Guide DOT 5800.5: 26

IMO: WATER/VESSEL

Proper Shipping Name. : Paint related material
IMDG Code Page . . . : 3268
UN Number . . . . . : UN1263

Hazard Class. . . . . : 3.2
Packaging Group . . . : II
Subsidiary Risk Label : N/A
EMS Number . . . . . : 3-05
MFAG Table Number . . : 310
Marine Pollutant. . . : N

IATA: AIR

UN or ID# . . . . . : UN1263
Proper Shipping Name. : Paint related material
Hazard Class. . . . . : 3
Subsidiary Risk Label : N/A
Hazard Label. . . . . : Flammable Liquid
Packaging Group . . . : II

SECTION X - ADDITIONAL INFORMATION

Those materials listed in Section II with an asterisk have been listed by c of the following testing bodies: National Toxicology Program Annual Report c Carcinogens, International Agency for Research on Cancer, or OSHA as potenti or known carcinogens.

KEEP CONTAINER CLOSED WHEN NOT IN USE.

NPCA HMIS CLASSIFICATION: Health- 3 Flammability- 3 Reactivity- 0
See Section VII for personal protection equipment.

HAZARD RATING INDEX
0 = Minimal
1 = Slight
2 = Moderate
3 = Serious
4 = Severe

****
* The information and recommendations contained herein are based *
* upon data believed to be correct. However, since much of the *
* information has been received from sources outside our company, *
* we cannot guarantee its accuracy or completeness. Health and *
* safety precautions contained within this data sheet may not be *
* adequate for all individuals and/or situations. It is the user's *
* obligation to evaluate and use this data in order to comply with *
* all applicable laws and regulations. Additionally, no guarantee *
* or warranty of any kind, expressed or implied, is made with *
* respect to the information contained herein. *
****

HAZARDOUS WASTE REPORT SUBMISSION CHECKLIST

Please review the following checklist to make sure that your site's submission is complete and correct.

Have you:

___ Included Form IC, answering questions on both the front and back of the form?

___ Prepared a complete, separate and independent GM Form for each hazardous waste

- generated on site form production processes or service activities?
- from a spill cleanup or other cleanup activity?
- derived form the management of a non-hazardous waste (i.e. F006 sludge)?

___ Prepared a complete, separate and independent GM Form for each hazardous waste residual generated from the on-site treatment, disposal, or recycling of wastes?

___ Reported all information on 1992 shipments of hazardous waste form off site on WR Forms?

___ Prepared a complete and separate PS Form for each on-site hazardous waste treatment, disposal, or recycling system?

___ Double checked all EPA ID Numbers for correctness?

___ Right justified all quantity entries?

___ Numbered all pages correctly, including any continuation pages?

___ Signed the certification statement in Section V of Form IC?

___ Made a copy of the 1992 Hazardous Waste Report to retain for your records as required by New York State Regulation?

This checklist is for your own use and is not to be returned.

PERKIN ELMER

The Perkin-Elmer Corporation
Metco Division
1101 Prospect Avenue — P.O. Box 1006
Westbury, New York 11590-0201
Phone (516) 334-1300
Fax (516) 338-2477
RCA 229913

June 30, 1994

Certified Mail Z 024 624 046

EPCRA Reporting Center
c/o Computer Based Systems Inc.
4301 N. Fairfax Drive
6th Floor Suite 650
Arlington, VA 22203

Ref: SARA TITLE III - Toxic Chemical Release Inventory Reporting Forms

Dear Sir/Madam:

Enclosed you will find completed Toxic Chemical Release Inventory Reporting Forms for our facilities.

If you have any requests or questions, please feel free to contact me at the above number.

Sincerely,

Joe Macri
Manager Facilities

JM/amm
cc: Andrew B. Mazzone, Executive Vice President
Constance L. Conroy, Supervisor Environmental Compliance

Is your RETURN ADDRESS completed on the reverse side?

SENDER:

- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):

1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:

EPCRA Reporting Center
c/o Computer Based Systems Inc.
4301 N. Fairfax Drive
6th Floor Suite 650
Arlington, VA 22203

EPCRA Reporting Center

4a. Article Number

Z 024 624 046

4b. Service Type

☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

6. Signature (Agent)

Springfield, VA 22116-3348

8. Addressee's Address (Only if requested and fee is paid)

JUL 06 1994

PS Form **3811**, December 1991 ☆U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

UNITED STATES POSTAL SERVICE

Official Business

PENALTY FOR PRIVATE
USE TO AVOID PAYMENT
OF POSTAGE, $300

U.S.MAIL

Print your name, address and ZIP Code here

Mr. Joe Macri
Metco Div. Perkin-Elmer Corp.
1101 Prospect Avenue
Westbury, NY 11590

42

Z 024 624 046

UNITED STATES POSTAL SERVICE

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to EPCRA Reporting Center c/o Computer Based Sys. Inc.	
Street and No. 4301 N. Fairfax Dr. 6th Fl.	
P.O., State and ZIP Code Suite 650 Arlington, VA 22203	
Postage	$ 2.90
Certified Fee	1.00
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	1.00
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$ 4.90
Postmark or Date 6/30/94	

PS Form 3800, March 1993

STICK POSTAGE STAMPS TO ARTICLE TO COVER FIRST CLASS POSTAGE, CERTIFIED MAIL FEE, AND CHARGES FOR ANY SELECTED OPTIONAL SERVICES (see front).

1. If you want this receipt postmarked, stick the gummed stub to the right of the return address leaving the receipt attached and present the article at a post office service window or hand it to your rural carrier (no extra charge).

2. If you do not want this receipt postmarked, stick the gummed stub to the right of the return address of the article, date, detach and retain the receipt, and mail the article.

3. If you want a return receipt, write the certified mail number and your name and address on a return receipt card, Form 3811, and attach it to the front of the article by means of the gummed ends if space permits. Otherwise, affix to back of article. Endorse front of article **RETURN RECEIPT REQUESTED** adjacent to the number.

4. If you want delivery restricted to the addressee, or to an authorized agent of the addressee, endorse **RESTRICTED DELIVERY** on the front of the article.

5. Enter fees for the services requested in the appropriate spaces on the front of this receipt. If return receipt is requested, check the applicable blocks in item 1 of Form 3811.

6. Save this receipt and present it if you make inquiry.

105603-93-B-0218

PS Form 3800, March 1993 *(Reverse)*

Z 024 624 046

UNITED STATES POSTAL SERVICE

Receipt for Certified Mail

No Insurance Coverage Provided
Do not use for International Mail
(See Reverse)

Sent to EPCRA Reporting Center
c/o Computer Based Sys. Inc.

Street and No.
4301 N. Fairfax Dr. 6th Fl
Suite 650

P.O., State and ZIP Code
Arlington, VA 22203

Postage	$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, and Addressee's Address	
TOTAL Postage & Fees	$
Postmark or Date	

PS Form 3800, March 1993

Fold at line over top of envelope to the right of the return address

CERTIFIED

Z 024 624 046

MAIL

SENDER:
- Complete items 1 and/or 2 for additional services.
- Complete items 3, and 4a & b.
- Print your name and address on the reverse of this form so that we can return this card to you.
- Attach this form to the front of the mailpiece, or on the back if space does not permit.
- Write "Return Receipt Requested" on the mailpiece below the article number.
- The Return Receipt will show to whom the article was delivered and the date delivered.

I also wish to receive the following services (for an extra fee):
1. ☐ Addressee's Address
2. ☐ Restricted Delivery

Consult postmaster for fee.

3. Article Addressed to:
EPCRA Reporting Center
c/o Computer Based Systems Inc.
4301 N. Fairfax Drive
6th Floor Suite 650
Arlington, VA 22203

4a. Article Number
Z 024 624 046

4b. Service Type
☐ Registered ☐ Insured
☒ Certified ☐ COD
☐ Express Mail ☐ Return Receipt for Merchandise

7. Date of Delivery

5. Signature (Addressee)

8. Addressee's Address (Only if requested and fee is paid)

6. Signature (Agent)

PS Form 3811, December 1991 ★U.S. GPO: 1993—352-714 **DOMESTIC RETURN RECEIPT**

Thank you for using Return Receipt Service.

Is your RETURN ADDRESS completed on the reverse side?

METCO
1 Prospect Avenue
stbury, N.Y. 11590

FIRST CLASS

EPCRA Reporting Center
c/o Computer Based Systems Inc.
4301 N. Fairfax Drive
6th Floor Suite 650
Arlington, VA 22203

RKIN ELMER

CHEMICAL RELEASE REPORTING REQUIREMENT
STATE DESIGNATED SECTION 313 CONTACTS

TERRI G. PEAVY

RECYCLING COORDINATORS

600 E. Exchange St.
Akron, OH 44306
330.434.4500
330.434.4501 Fax
www.recyclingcoordinators.com

RECYCLING
COORDINATORS
600 E. Exchange St.
Akron, OH 44306
330.434.4500
330.434.4501 Fax

March 24, 2003

Peter DiPietrantonio
Sulzer Metco
1101 Prospect Avenue
Westbury, NY 11590

Dear Peter:

Enclosed please find Recycling Coordinators, Inc. (RCI) Environmental Audit Package. After you review the contents please feel free to give me a call if you have any concerns.

At RCI, we take a service-oriented approach to your materials and can customize a program that meets your volume and material needs. Our organization has a proven track record in the handling of metal bearing materials in a safe and lawful manner.

We welcome your visit to Akron, Ohio to conduct your own audit, and to assure you of our intent to be your full service material handling company in the recycling industry.

Sincerely,

Terri G. Peavy

TABLE OF CONTENTS

1. Environmental Audit.....1-7

2. Environmental Compliance Overview.....8-11

3. Spill Prevention & Response Plan.....12-15

4. Facility Compliance Review.....16-17

5. Material Profile Form.....18-19

6. Certificate of Consumption.....20

I. GENERAL FACILITY INFORMATION

Facility Name: Recycling Coordinators Inc.

Address: 600 E. Exchange Street Akron, Ohio 44306

Telephone Number: 330-434-4500

Primary Contact: Mr. Dennis Dunagan

Secondary Contact: Mr. Jeff Miner

1) Describe the processes used to treat or dispose of wastes as well as other services provided (transportation, laboratory services, etc.):

   Recycling Coordinators Inc. (RCI) does not treat any materials. RCI disposes only of packaging materials (cardboard, plastic) and wooden pallets (if there is not a recycling outlet available). RCI does dispose of spent solvents and paint related wastes from a spray booth that is used only for maintenace purposes. RCI is regarded as Conditionally Exempt Small Quantity Generator (CESQG) for this reason.

   RCI has an in-house laboratory used solely for the verification of metal content for incoming materials. Any environmental characterization analysis would be sub-contracted to a qualified laboratory. All transportation needs are managed by an in-house logistics administrator.

2) Describe any expected operational changes including expansions or deletions planned:

   No significant expansions or deletions of the facility are expected.

3) Who owns the land on which the company is located?

   Recycling Coordinators Inc.

4) When was the property first acquired or leased?

   January, 1999.

5) Describe past uses of the property?

   Pepsi-Cola operated at the facility from 1923 to approximately 1988.

6) Describe the uses of the land within 5 kilometers of the facility:

   Residential, commercial, light industrial.

7) How close is the nearest community?

   Residential neighborhood is within the immediate area.

8) Please describe any complaints or concerns form neighbors:

None

9) Describe any documented contamination at the facility. Also, describe any corrective actions taken to remediate the areas:

On November 1, 2002 a ground water treatment system was decommissioned following years of use on by Pepsi-Cola. The treatment system was monitored by an environmental consulting group hired by Pepsi-Cola. RCI has had no responsibilities associated with the treatment system as well as sub-surface contamination and/or conditions. All such responsibilities have been assumed by Pepsi-Cola.

10) Have there been any major spills? What actions have been taken to avoid spills?

No spills have occurred while RCI has operated at the premises. RCI has recently installed a fifteen-millimeter HDPE liner underneath seven inches of concrete in the metals handling area. The liner extends the entire length of the floor and extends up each wall to serve as a containment. Catch basins have also been installed along the perimeter to contain materials that migrate from the processing areas as a result of daily operations. All materials removed from the catch basins are re-introduced in the recycling process.

RCI has also developed a Spill Prevention Plan which outlines preventative measures to be taken in case of a spill. This plan has been developed primarily for training purposes.

11) Please list regulatory contacts of local, state, or federal officials who are regularly involved in environmental issues at the facility.

None

II. SITE SECURITY

1) Does the facility have a fence or other barrier with a controlled entrance?

No.

2) Does the facility have a 24-hour surveillance?

No.

3) How is access controlled?

The facility is accessible only through designated entrances in which visitors must register with the receptionist and then are permitted through after automatic lock is activated.

4) Who is responsible for emergency response outside of normal business hours?

Charles Long/Dennis Dunagan

III. PERMIT AND LICENSE INFORMATION

1) Please list any permits held by the company relative to waste management, air emissions, waste water discharges, or storm water discharges:

RCI maintains an air permit for spray booth operations (miscellaneous metals parts). Spray painting operations are conducted only for miscellaneous maintenance purposes.

2) Please indicate if your facility has been cited for any violations of waste management regulations, air pollution control regulations, or water pollution control regulations:

None.

3) Please indicate any additional permit applications or renewals within the next three years:

None.

IV. TRAINING

1) Does the facility have a training program for personnel handling regulated wastes?

Yes.

2) Does the training program include the following:

a. Company safety rules	Yes
b. Spill prevention plans	Yes
c. Response to fires	Yes
d. Safe operation of equipment	Yes
e. Hazard Communication	Yes
f. Periodic review of training	Yes

V. INSPECTIONS

1) Are periodic inspections conducted?

Yes

2) Do the inspections include:

a. safety and emergency equipment?	Yes
b. operating equipment/area?	Yes
c. container storage area?	Yes
d. personnel protective equipment?	Yes

VI. EMERGENCY PLANNING AND RESPONSE

1) How close is the nearest fire department?

   Less than 1/2 mile.

2) Does the company have a written emergency response plan?

   Yes

3) Describe the emergency control equipment located on-site:

   Fire extinguishers conspicuously located throughout the facility; sprinkler system.

4) Describe the spill equipment located on-site:

   Absorbent materials; storage containers; PPE.

VII. HEALTH AND SAFETY

1) Does the facility conduct routine inspections/audits/reviews of it's operations to ensure compliance?

   Yes

2) Does the facility have a written program?

   Yes

3) Are records maintained on work-related injury and illnesses?

   Yes

4) Are there programs/procedures in place at the facility for the following:

Confined Space	Yes
Lock-Out/Tag-Out	Yes
PPE	Yes
Hazardous Communication	Yes
Respiratory Protection	Yes

5) Are emergency showers and eyewash stations available?

   Yes

6) Are employees wearing safety equipment as required by facility policies?

   Yes

VIII. REGULATED WASTE INFORMATION

1) Using the following waste codes, please list the types of wastes managed:

   a.Bulk non-hazardous liquids: oil/water used in the recycling process for moisture.

   b. Ignitable waste: paint related wastes - approximately one fifty-five gallon drum per year.

   c. Waste oils - as indicated.

   d. Reactive wastes – N/A

   e. Halogenated wastes - N/A

   f. Pesticides - N/A

   g. Solvents - used for paint related operations.

   h. Organic sludges/solids- N/A

   i. PCB's - N/A

   j. Contaminated soils - N/A

   k. Other - N/A

2) Are any wastes specifically excluded by permit?

   No.

IX. MATERIAL RECEIPT AND RECORDKEEPING

1) For each incoming material, does the facility have standards or specifications for acceptance?

   Yes.

2) Do facility procedures verify whether received materials meet acceptance standards or specifications?

   Yes.

3) What steps are taken if materials do not meet facility specifications?

   Generator assumes costs for shipment back to their facility.

4) How often is each shipment sampled?

   Every container of every shipment is sampled.

5) What analytical tests are performed on collected samples?

RCI reserves the right to conduct chemical analysis on all prospected materials. The type of analysis is contingent upon the Material Profile Form used by RCI and correspondence with the generator. Should RCI not receive accurate information from the generator, or it is determined that the material is inconsistent with previous characterization efforts, appropriate sampling and analysis will be conducted.

6) Are records kept of all shipments?

All records are maintained by RCI of each incoming and outgoing materials.

X. HANDLING AND TRANSFER OPERATIONS

1. Are the staging areas free from large cracks and severe damage?

   Yes. As mentioned, RCI has recently invested in a 'containment pad' in the metals processing and staging area. This pad consists of a fifteen millimeter HDPE liner underneath seven inches of concrete.

2. Are holding and staging areas under roof?

   Yes.

3. Are incompatible materials segregated?

   Yes.

4. Is enough curbing provided to contain leaks and spills?

   Yes

XI. RESIDUES MANAGEMENT

1) Are labels on drums and containers removed or obscured prior to reuse or recycling?

   Labels are maintained on incoming materials during staging. Appropriate labels are affixed to each drum or container prior to leaving the facility.

2) Identify all off-site facilities used for disposition of generated materials:

   a. residues - filter cloth is presently sent to a solid waste landfill (Waste Management). RCI does have the capability to recycle the material, however, the associated costs make it prohibitive on behalf of the customer.

   b. paint related wastes - off site disposal by Perma-Fix/North East Chemical.

   c. solid waste - packaging materials, pallets, garbage, etc. (Waste Management).

XII. RECYCLED PRODUCTS

1) Describe the recycled products produced by this facility:

   RCI produces various blends of metals suited to be re-melted into new products. The blends are based on the end-users specifications.

2) Have these materials been characterized to determine if they contain hazardous constituents?

   Yes.

3) Is there a written procedure explaining how the company characterizes materials prior to receipt?

   Yes.

XIII. CONTAINER STORAGE

1) What wastes are stored in containers?

   Paint related wastes stored in sealed and labeled 55-gallon drums.

2) Are containers properly labeled and secured?

   Yes.

3) Does the company have a designated storage are for flammable materials, compressed gas, etc.?

   Yes, the area is also clearly identified.

4) Are storage containers generally in good condition?

   Yes. RCI has the capability to shred damaged drums.

5) Are the storage areas under roof?

   Yes. No material or equipment is stored outside the facility.

XIV. TANKS - ABOVE/BELOW GROUND

N/A

XV. WASTE PILES

N/A

Environmental Compliance Overview

I. Scope

Express the company's environmental compliance policy as well as to document the environmental compliance that Recycling Coordinators., Inc. (RCI) addresses as part of its overall program.

II. Purpose

To maintain a proactive approach with regard to environmental compliance.

III. Policy

Recycling Coordinators., Inc. regards regulatory compliance as a responsibility that will be fulfilled throughout the existence of our operations. Specifically, addressing environmental compliance that is applicable to our operations is of utmost importance. Due to the nature of the services we provide, we must continuously address any potential environmental liability for the good of our company and customers. Compliance with Federal, State and local laws will be carried out specifically by RCI personnel. All RCI personnel are required to do their part in maintaining our company's overall compliance program and are challenged to continuously improve our effort.

IV. Training

Recycling Coordinators, Inc. conducts regulatory compliance training to enhance it's employee's knowledge of our operations. From safety training that addresses inherent occupational hazards to environmental training that includes spill response, all such training is based on our operations. Safety/Environmental Awareness meetings are conducted for all employees on a bi-monthly basis. By keeping employees trained in the company's environmental, health & safety requirements, and by showing how those requirements are applicable to our operations, we believe that our employees gain a sense of empowerment and responsibility.

V. Material Management & Procurement Procedures

A. Material Profile:

RCI utilizes a Material Profile Form (MPF), chemical analysis, as well as Material Safety Data Sheets (MSDS) as procurement procedures for potential recyclable materials.

This information is not only important for RCI to determine material characteristics, but it also provides us with accurate information to determine the potential for efficient recycling. RCI does not accept incompatible materials and assesses such materials through the required information. RCI also reserves the right to require additional chemical analysis and supporting documentation from a potential customer should an incoming material not be consistent with the information contained on the MPF.

B. Management of Waste Streams:

All received materials are assessed for consistency with their respective Material Profile Form. Any deviation from the MPF requires RCI personnel to further determine the characteristic of the material (see Section V, A). Should the material not meet the requirements of RCI recycling procedures, arrangements will be made with the generator for the material's disposition.

Once received materials are determined to be consistent with the MPF, the suitability of the metal(s) are examined. The value of the material is then assessed and is cross-checked with the original assessment on the MPF. Should a metal content be significantly lower compared to the values indicated on the MPF, RCI personnel will determine if the material is worthy of being part of the recycling process.

All materials to be recycled are then identified and stored. All outgoing materials are also labeled and stored awaiting transportation. Following material use, the generator will receive a Certificate of Consumption from Recycling Coordinators.

VI. Environmental Compliance

A. Solid Waste Regulation

For the purpose of solid waste regulation, Recycling Coordinators Inc. is considered a legitimate recycling facility per Ohio EPA Division of Solid and Infectious Waste Management regulation 3745-27-01(C) (2) (a) and 3745-27-03 (F)(1) (a).
A legitimate Recycling Facility is a facility that:

- accepts only source separated recyclables or mixed solid waste streams;
- recovers for end-use not less than 60 % of the volume of solid wastes each month;
- dispose of not more than 40% of the volume of solid waste received each month;
- be able to demonstrate that operations recycle 60% of incoming materials and properly manage unrecoverable materials.

B. Surface/Waste Water Regulation

RCI operations do not generate any industrial waste water that requires discharge from the facility. Any visible liquid that may be a component of an incoming material is suctioned-off and stored for characterization and proper disposal.
Further, RCI does not maintain outdoor accumulation areas of wastes, fuels, lubricants, etc. which would necessitate compliance with the National Pollutant Discharge Elimination System (NPDES) Industrial Discharge regulation.

C. Ground Water

The Exchange Street facility was formerly operated by Pepsi-Cola. Prior to the purchase of the facility there was soil and groundwater remediation conducted in accordance with the Ohio EPA. Ground water monitoring activities continue but are independent of RCI operations. All liability associated with past industrial activities are assumed by Pepsi-Cola.

D. Air Pollution

RCI maintains an air permit for spray booth operations. The air permit addresses the management of Volatile Organic Compounds (VOC's) relative to the miscellaneous painting of metal parts. Record keeping is maintained by RCI personnel. The spray booth is utilized for maintenance purposes and is not an intricate part of company production operations.

RCI also has equipped the recycling operation (mixer) with a fugitive dust collection system. The system includes two ventilation duct work "extensions" to collect any fugitive dust from the shaker table and at the point in which the feed conveyor empties to the mixer.

All collected fugitive dust is then collected in a bag-house. As necessary, the material contained in the bag-house is then re-introduced in to the recycling process.

In regards to Toxic Chemical Release Reporting (TRI), Recycling Coordinators, Inc. is not considered a "covered facility" for release reporting due to their Standard Industrial Classification (SIC) code. Specifically, under Code of Federal Regulation (40 CFR) Chapter 1-Part 372.22, a covered facility must meet three criteria to be subject to release reporting. One of the criteria is that one of the operations conduced by a facility must fall within SIC codes listed in the regulation. RCI operations fall under SIC 5093 designated as scrap metals processing and recycling respectively. This SIC code is not listed by the TRI regulation as one in which would require the operator to conduct release reporting.

E. Hazardous Waste

RCI generates minimal amounts of paint related wastes only during miscellaneous painting of operational equipment.
Such volume classifies RCI as a Conditionally Exempt Small Quantity Generator (CESQG) in accordance with Ohio EPA Division of Hazardous Waste Management. As previously mentioned, RCI requests a Material Profile Forms, an MSDS, as well as the generators analysis to characterize a potential incoming material for metals recycling. Such an effort is conducted on behalf of RCI to prohibit a potential material that possess hazardous waste constituents from entering the recycling operation.

F. Spill Prevention & Response

In anticipation of a spill event, RCI has constructed a Spill Prevention and Response Plan to address the containment, handling and disposal of workplace materials.
The Spill Prevention and Response Plan was developed to address any incidental spills within the facility. However, RCI does not store in excess of the threshold quantity of a hazardous material or an extremely hazardous material that would necessitate compliance with the SARA III reporting requirements.

G. Used Oil Storage

As RCI receives incoming recyclable materials such as metal grindings and turnings, the accumulation of rainwater can infiltrate into the storage drums. The resulting oil/water is vacuumed out and contained in storage drums. Water-soluble coolant and machine oils are also part of the delivery of some incoming materials.

RCI stores the oil-based materials in labeled storage drums within the facility.
A licensed disposal company is used for the collection and disposal of the oil based materials. RCI maintains documentation on the disposal of such materials.

H. Compliance Reviews

RCI routinely conducts facility compliance reviews in an effort to remain compliant with applicable regulation. Corrective action of noted conditions is addressed by the Operations Manager.

VII. Conclusion

As previously mentioned, RCI is continually addressing applicable environmental compliance. Our entire compliance effort is revised on an on-going basis and includes company personnel policy, health & safety, and environmental compliance. Should you require additional information, or need clarification, please contact RCI at your convenience.

Recycling Coordinators, Inc.
Spill Prevention & Response Plan

I. Introduction

The purpose of the Spill Prevention and Response Plan (SPRP) is twofold: (1) to insure proper handling, storage and response procedures relevant to workplace materials and possible spill events, (2) to train company employee's in proper spill response and prevention procedures.

II. Facility Contacts

Mr. Dennis Dunagan, President	330-434-4500
Mr. Charles Long, Operations	330-434-4500
	*Alt.Phone-330-620-4761
Mr. Gary Cox, Maintenance	330-434-4500
Mr. Brandon Smith, Environmental	440-742-8309

Emergency Notification List

Ohio Environmental Protection Agency	- 330-425-9171
Local Emergency Planning Committee	- 330-430-3871
Akron Fire Department	- *911 or 330-375-2122
National Response Center	- 800-424-8802

III. Facility Description

Located at 600 East Exchange Street in Akron, Recycling Coordinators, Inc. is a multi-level warehouse facility. The bottom floor is not used by RCI in terms of employee occupancy.

The middle level is used for operations while the third level is used for employee locker room, eating facilities and training. Administrative personnel are occupying the north front of the facility.

Formerly operated as the Pepsi Cola facility, RCI now conducts recycling operations including metals and plastics. Plastic and metal recycling operations are conducted in separate, but contiguous areas of the middle level. The east-side of the facility (middle level) is used for storage only.

Parking areas include an employee lot to the east of the facility as well as a truck entrance on the north side and south side of the facility.

IV. Waste Generation

A. Operations

As RCI receives recyclable materials including metal grindings and turnings, the accumulation of rainwater infiltrates the storage drums creating a liquid that cannot be part of RCI operations. As a result, RCI personnel utilize the collect the water and oils and utilize the waste stream as a moisture component in the recycling process.

RCI operations also generate paint related wastes and store minimal amounts of solvents. These materials are stored near the spray booth. This material storage area is clearly identified and maintained as such.

B. Storage

The above mentioned waste materials are presently stored in drums and are located against the interior east wall of the metals grinding operations area. The storage drums are not located near any floor drains but are near equipment operations and employees. The quantity of storage drums is approximately twenty drums prior to shipment at any one time.

V. Spill Prevention Procedures

- All storage drums shall not have any damage; the condition shall be capable of being easily handled, and stored.
- All storage drums shall have lids securely fastened with drum ring and bung.
- All drums shall be securely staged.
- Drum contents shall be clearly identified.
- Drums shall not be stored more than three pallets high.
- Drum storage area shall be clearly identified to keep personnel and equipment at a minimum
  ten feet away.
- Ignition sources are prohibited in drum storage area.
- Drum storage area shall have absorbent regularly applied and swept.

VI. Spill Event Procedures

If there is a release of any of the above mentioned materials greater than 25 gallons onto land that is not owned by RCI, or material reaches a discharge point that will contaminate "Waters of the State", operating personnel will contact production personnel.

Designated company personnel will report the spill to the Local Emergency Response Commission and the Ohio EPA within thirty minutes of knowledge of the spill. The following information shall be gathered and relayed to all parties should such a spill event occur:

- Name and phone number where he/she may be contacted.
- The time the release was observed.
- Probable source of release.
- Identification of material released.
- Volume and/or duration of the release
- Weather conditions
- Present and anticipated movement of released material.
- Company and emergency personnel on the scene.
- Potential health effects from exposure to the material. (MSDS)
- Actions initiated.

While the necessary calls are being made, facility personnel shall caution tape the area to prevent access and contain the spill to prevent migration by applying absorbent along the perimeter of the spill. Spill absorbent shall also be applied to the spilled material to further stabilize. Ideally, the entire spill is to be contained with the absorbent materials preventing it from reaching any sensitive receptors.

Smoking and all other ignition sources are strictly prohibited throughout the clean up process. Appropriate personal protective equipment will be issued to all personnel involved in clean up procedures. All materials used to absorb and contain the spilled material will be properly deposited into storage drums for disposal.

A. Spill Containment Materials

RCI utilizes absorbent floor dry for the containment and collection of spilled material. Storage drums are utilized for the used absorbent materials. Such drums will be labeled indicating the waste name and date of generation.

Spill prevention materials are located in the maintenance department. Additional materials are purchased through distributors on as needed basis.

B. Personal Protective Equipment (PPE)

All personnel responding to a spill of the above mentioned materials must utilize appropriate PPE. The following is required:

- Neoprene gloves
- Safety glasses
- Tyvex overalls

C. Fire Prevention/Evacuation Procedures

- Multi-purpose (ABC) extinguishers shall be readily available and located near the spill area in case of fire.

- Visual inspections will be conducted throughout the clean up to determine the presence of ignition sources.

- Combustible materials and equipment near the spill area shall be moved.

- In the event of a fire occurring, the local fire department will be called immediately. (See Section II)

- All personnel will evacuate the building with the exception of those trained in fire fighting.

- Trained company personnel will utilize extinguishers to suppress, control combustion.

- Should fire not be "controlled" fire prevention personnel will evacuate the building and wait for emergency personnel.

D. Spill Event Documentation

Following the spill response, a written report shall be complied including the information gathered under Section VI. In addition, should the spill be required for submittal to the Ohio EPA, additional information will be gathered and assembled. The Emergency Planning and Community Right-to-Know requirements (Ohio Revised Code 3750) will be used as reference.

VII. Conclusion

This Spill Prevention & Response plan is written to address the prevention and response to a possible spill scenario that could occur at Recycling Coordinators, Inc. This plan will change as operations change, or as new workplace materials and chemicals are added. All RCI personnel will be trained in the contents of this plan.

Recycling Coordinators, Inc.
Facility Compliance Review

Date:_____ Time:_____

Facility Location:_____

Person Conducting Review:_____

A-adequate at time of review **B**-needs attention **C**-needs consideration

I. Safety

a. OSHA poster displayed?
b. Are regular safety meetings being conducted?
c. Personnel wearing prescribed personal protective equipment?
d. First aid materials, medical & emergency phone numbers available/posted?
e. Is housekeeping kept-up in operation areas?
f. Are passage and walkways clear?
g. Is there adequate lighting?
h. Have fire extinguishers been checked?
i. Are employees complying with "No Smoking" signs?
j. Are lock/out procedures being followed on applicable equipment?
k. Are electrical cords being properly used and in good condition?
l. Are electrical panels/boxes adequately covered?
m. Do hand tools have necessary guards?
n. Are hand tools being used correctly?
o. Are lift trucks being operated responsibly?
p. Are new employees in need of fork lift training?
q. Are lift trucks in safe/operable condition?
r. Is propane being stored correctly?
s. Paint related waste being stored properly?
t. Storage of drums do not exceed three pallets high?
u. Exits remain clear without obstruction?
v. Storage drums of used oils securely stored with lids and bungs?
w. Safety signs in tact and visible?

II. Environmental

a. Are shipments of incoming recyclable materials being checked in accordance with Material Profile Form?
b. Are MSDS's available for employee review?
c. Have any incompatible materials been identified to have been sent the facility?

d. Is facility personnel maintaining percentage of recycling record?
e. Has facility personnel been conducting paint operations in spray booth?

f. Have any used oils, coolants, etc. been stored for disposal?
g. Is paint related waste drum ready for off-site shipment?
h. Are storage drums containing generated waste labeled?
i. Has solid waste items been placed in correct containers?
j. Has there been any incidental spill since the last review?

Comments:

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Signature: _____

Plant Manager Signature:_____

Material Profile Form

A. Company Name:_____ Date:_____

B. Facility Address & Contact

Street_____
City_____
State_____ Zip_____
Phone No._____
Fax No._____
E-Mail_____

Billing Address & Contact

Street_____
City_____
State_____ Zip_____
Phone No._____
Fax No._____
E-Mail_____

C. Material Information

a. Common Name_____
b. Is the material a characteristic hazardous waste? Yes__No___
(if "yes", please describe characteristics:_____

_____

c. Is the material a listed hazardous waste? Yes___ No____
d. Is the material a by-product? Yes ___ No_____
e. Does the material contain any type of machining oils? Yes___No__
f. What is the flash point of the material?_____
g. What is the Ph?_____
h. Please describe the process that generates the material?_____

_____

i. How is your company presently handling this material?_____

_____

D. Company Documentation

a. Does your company have a Material Safety Data Sheet (MSDS) for the Material? Yes___ No___

b. Has a TCLP been performed on the material? Yes_____ No___
(If "yes", please complete the following)

Arsenic	__(>5ppm)	Lead	_____(>5)
Barium	__(>100)	Mercury	_____ (.2)
Cadmium	_(>1)	Selenium	_____ (.1)
Chromium	__(>5)	Silver	_____ (>5)

c. Please indicate the levels of the following, if applicable:

VOC ____Antimony _____Tin_____Thallium____Beryllium_____

Dioxin_____Cyanide_____Sulfide_____PCB_____

d. Total Metal Content (%), if known

Ni ____W____ Mn__Cd ___Pt ____Zn ___Co____ Nb___ Pb___

Br_____ Na___ Zr___Cu___ Ti____ Sn___ Au___ S____ Cr___

Fe_____ Bi____ Ag___ Ta___ Mo___ Mg___ B____ P_____V____

e. % Moisture _____ Color _____ Odor _____

E. Shipping Information:

a. Tons per month _____

b. Dump Trailer_____Van Trailer _____Flat Bed _____ Hopper Truck
Roll off_____Hopper Car_____Gondola Car ____Rail Line at Plant ___

c. DOT Shipping Description_____

RECYCLING
COORDINATORS
600 E. Exchange St.
Akron, OH 44306
330.434.4500
330.434.4501 Fax

DATE SHIPPED:

CERTIFICATE OF CONSUMPTION

Recycling Coordinators, Inc. "a recycler" has wholly consumed and/or recycled **your** material under the guidelines established by the federal, regional, state and local regulatory agencies.

SAMPLE

This certificate issued to: _____

Is to verify that the entire quantity of: _____

Weight Received: _____
The material has been consumed or recycled. The transference of possession of this material occurred on or about _____.

Signature:

_____

Recycling Coordinators, Inc.

RECYCLING COORDINATORS

600 E. Exchange St.
Akron, OH 44306
330.434.4500
330.434.4501 Fax

***** DRAFT FOR PUBLIC COMMENT *****

Global Reporting Initiative™

DRAFT

2002 SUSTAINABILITY REPORTING GUIDELINES

01 APRIL 2002

This draft document is released for public comment. Please submit comments by 26 May 2002 by email (guidelines@globalreporting.org) or fax: +1-617-267-5400.

The GRI Board of Directors

Last	First	Organisation
Adams	Roger	Association of Chartered Certified Accountants (ACCA)
Aloisi de Larderel	Jacqueline	United Nations Environment Programme, Division of Technology, Industry, and Economics
Feldmann	Fabio	Former Secretary of Environment, State of São Paulo
Goto	Toshihiko	Environmental Auditing Research Group (EARG)
Henderson	Judy	Immediate past Chair, Australian Ethical Investment Ltd
Hölz	Hanns Michael	Deutsche Bank Group
Irani	Jamshed J.	Tata Sons Limited
Massie	Robert Kinloch	Coalition for Environmentally Responsible Economies (CERES)
Moody-Stuart	Mark	Retired Chair, Royal Dutch/Shell
Normark	Anita	International Federation of Building and Wood Workers (IFBWW)
Pityana	Nyameko Barney	University of South Africa, Former Chair, Human Rights Commission
Shailor	Barbara	American Federation of Labor-Congress of Industrial Organizations (AFL-CIO)
Stigson	Björn	World Business Council for Sustainable Development
Wong	Peter	Deloitte Touche Tohmatsu, Hong Kong; Board Member, International Federation of Accountants

 COPYRIGHT © GRI (2002)

P2SUL002994

CONTENTS

INTRODUCTION **5**

PART A: USING THESE GUIDELINES **10**

WHAT ARE THE *GUIDELINES*? 11
WHO SHOULD USE THE *GUIDELINES*? 12
THE GRI FAMILY OF DOCUMENTS 12
RELATIONSHIP OF THE *GUIDELINES* TO OTHER SUSTAINABILITY MANAGEMENT PRACTICES 13
REPORTING EXPECTATIONS AND DESIGN 14

PART B: REPORTING PRINCIPLES **20**

COMPLETENESS 21
INCLUSIVITY 23
CONSISTENCY 23
ACCURACY 23
CLARITY 24
NEUTRALITY 24
TIMELINESS 25
AUDITABILITY 25
TRANSPARENCY 26
SUSTAINABILITY CONTEXT 26

PART C: REPORT CONTENT **28**

GENERAL NOTES 29
OVERVIEW OF PART C 30
GRI REPORT CONTENT 34
1. VISION AND STRATEGY 34
2. PROFILE 36
3. GOVERNANCE STRUCTURE & MANAGEMENT SYSTEMS & GOVERNANCE STRUCTURE 38
4. PERFORMANCE INDICATORS 41
A. Economic Performance Indicators 43
B. Environmental Performance Indicators 45
C. Social Performance Indicators 50
5. GRI CONTENT INDEX 56

 COPYRIGHT © GRI (2002)

P2SUL002995

PART D: ANNEXES **57**

GLOSSARY **58**

ANNEX 1: OVERVIEW OF THE GLOBAL REPORTING INITIATIVE 59
ANNEX 2: GUIDANCE ON INCREMENTAL APPLICATION OF THE *GUIDELINES* 62
ANNEX 3: ASSURANCE PROCESSES 65
ANNEX 4: GRI INDICATORS 69
ANNEX 5: GRI CONTENT INDEX 74
ANNEX 6: LINKAGES TO FINANCIAL REPORTING 75

ACKNOWLEDGEMENTS **76**

 COPYRIGHT © GRI (2002)

P2SUL002996

INTRODUCTION

The Global Reporting Initiative (GRI) is a long-term, multi-stakeholder, international process whose mission is to develop and disseminate globally applicable *Sustainability Reporting Guidelines ("Guidelines")* for voluntary use by organisations[1] reporting on the economic, environmental, and social dimensions of their activities, products and services[2]. The aim of the *Guidelines* is to assist reporting organisations and their stakeholders better describe and articulate the overall contributions of the reporting organisations towards sustainable development.

In the two years that have elapsed since publication of its first *Sustainability Reporting Guidelines* in June 2000, the forces that catalysed the formation of GRI in 1997 have continued unabated and, in most cases, have intensified. Globalisation, governance, accountability, citizenship – powerful forces at the close of the 20th century that spurred the GRI process in its early years – now have moved to the mainstream of policy and management debates. The turbulent first years of the new century underscore the cornerstone of GRI's rapid expansion—higher standards of accountability and dependence on networks of relationships will form part of the fabric of organizational practice in the 21st century.

The mission of creating a new, generally accepted disclosure framework for sustainability reporting continues to garner widespread support in civil society, business, government, and labour. GRI's rapid evolution in just a few years from a bold vision to a new permanent global institution reflects the imperative and the value that various constituencies assign to such a disclosure framework. The modus operandi of the GRI process, rooted in inclusiveness, transparency, neutrality, and continuous enhancement, has enabled GRI to become a leading contributor to giving concrete expression to this new level of accountability.

Trends

What, specifically, are the key trends during the last two years that have fuelled GRI's swift progress? Among the most influential are:

Expanding globalisation: Expansion of global capital markets and information technology continue to bring unprecedented opportunities for creation of new wealth at the same time they deepen scepticism among many that such wealth will ameliorate social inequities. While governmental and non-governmental entities are major players in the globalisation process, it is corporate activity that remains its driving force. The result: all parties—including corporations themselves—seek new forms of accountability that credibly describe the consequences of business operations wherever, whenever, and however they occur.

Searching for new forms of global governance: Globalisation challenges the capacity of existing international and national institutions to govern corporate activity. One dramatic symptom of this concern has been the incipient interest in the drafting of a binding international convention on corporate accountability. The borderless global economy requires equally borderless governance structures to help direct private sector activity toward socially

[1] This includes corporate, governmental, and non-governmental organisations. All are included within GRI's mission. In its first phase, GRI has prioritised corporations with the expectation that governmental and non-governmental organisations will follow in the near future.

[2] GRI uses the term "sustainability reporting" as synonymous with citizenship reporting, social reporting, triple-bottom line reporting and other terms that encompass the economic, environmental, and social aspects of an organisation's performance.

 COPYRIGHT © GRI (2002)

P2SUL002997

and environmentally as well as economically beneficial outcomes. New models of international governance, affecting such areas as greenhouse gas emissions, forestry and fishing practices, ozone depletion, labour practices, and financial accounting standards exemplify a new generation of efforts to align governance and associated information demands in the context of an increasingly complex and interconnected world. A key theme in all of the emerging governance models is the need for transparency and access to information.

Reforming corporate governance: Pressures on corporations to establish and maintain high standards of internal governance are accelerating. As society witnesses the unprecedented influence of corporations in driving economic, environmental, and social change, investors and other stakeholders expect the highest standards of ethics, transparency, sensitivity, and responsiveness from corporate executives and managers. Governance systems are increasingly expected to pay heed to concerns and stakeholder groups beyond the traditional focus on investors. The independence of board members, executive participation in external partnerships, compensation and incentive schemes, and integrity of auditors are under increasing scrutiny. Effective corporate governance depends on relevant, high quality information that allows performance tracking and invites new forms of stakeholder engagement. The proliferation of corporate governance initiatives - the Cadbury and Turnbull Commissions in the UK, the King Commission in South Africa, Brazil's New Stock Exchange, OECD's Guidelines for Multinational Enterprises and Corporate Governance Principles, and the World Bank's Corporate Governance Forum - attest to the rising expectations for high standards of corporate behaviour.

Global role of emerging economies: The same globalisation, accountability, and governance trends associated with industrial nations are taking root in emerging economies. Nations such as Brazil, India, and South Africa are engaging in the globalisation process and trade opportunities in foreign markets. Technology innovation and capital flows that powered globalisation in the last decade now permeate these emerging nations, positioning them as regional and global players on the economic stage of the 21st century. Tightly linked global supply chains are spreading common management practices and increasing accountability pressures along all segments of the value chain. Corporate accountability has expanded from its early association with multi-national (or trans-national) corporations into a broad-based movement that is affecting private sector entities of all sizes around the world.

Rising visibility of and expectations for organisations: The spread of the Internet and communications technologies is speeding the transfer of information through traditional and new channels and amplifying the speed and force of feedback mechanisms. Consumers, supported by growing media coverage of sustainability issues, have ready access to information about the actions of individual organisations of an unprecedented level of detail. Companies, in particular, are facing more clearly articulated expectations from customers and consumers regarding their contributions to sustainable development as well as growing demands for specific changes in operating practices. Several recent profile events have driven home the risks to reputation and brand image associated with poor sustainability management.

Measuring progress towards sustainable development: As sustainable development has become widely adopted as a core theme of public policy and organisational strategy, many organisations have turned their attention to the challenge of translating the concept into operational practices. The need to better assess an organisation's status and define future goals in alignment with a complex range of external factors and partners has escalated the urgency of defining broadly accepted sustainability performance indicators.

 COPYRIGHT © GRI (2002)

P2SUL002998

Governmental interest in sustainability reporting: When the GRI was conceived in 1997, governmental interest in integrated economic, environmental, and social reporting was scant. Today, voluntary, statutory, and regulatory initiatives abound. In Australia, Denmark, the EU, France, Japan, Netherlands, Taiwan, UK, and the US, incentives and requirements to enlarge the scope of conventional corporate financial reporting to include non-financial information are rapidly unfolding. Some actions are motivated by national environmental and social policy goals, others by investor pressures to obtain a clearer picture of corporate performance via the securities regulatory processes. All indications point to continuing expansion of governmental reporting initiatives to new countries and regions in the next few years.

Financial markets' interest in sustainability reporting: The financial industry slowly but steadily is embracing sustainability reporting as part of its toolkit and analytics. Spurred by growing demand for social and ethical funds among institutional and small investors, new "socially responsible" indices are appearing each year. At the same time, the exploration of linkages between corporate sustainability activities and shareholder value is advancing. Linkages between sustainability performance and brand image, reputation, and future asset valuation are awakening the mainstream of the financial markets to new tools for understanding and predicting value in capital markets. Sustainability reporting according to an international, generally accepted framework promises to act as the platform upon which such understanding is deepened over time.

Emergence of next generation accounting: The 20th century saw worldwide progress in harmonising financial reporting. Indeed, the rich tradition of financial reporting, continually evolving to capture and communicate the financial condition of the enterprise, has inspired GRI's evolution. Yet today, many observers—including accountants themselves, whose job is to create the "language of business"—recognize that characterising the "bricks and mortar" economy of the past will not suffice as a basis for characterising the information economy of the future. Valuing intangible assets—human capital, environmental capital, alliances and partnerships—must complement the valuation of conventional tangible assets—factories, equipment, and inventory. Under the rubric of "business reporting," "intangible assets analysis" and "value reporting", a number of accounting groups have launched programs to explore how accounting standards should be updated to embrace such value drivers. New concepts of risk, opportunity, and uncertainty are likely to emerge. GRI believes that rigorous sustainability reporting, if held to the same standards of relevance, reliability, and other defining principles of financial reporting, has much to offer next generation accounting. (See Annex 6.)

Benefits of Reporting

All these trends are familiar to business managers seeking to sharpen their competitiveness in a globalising world. For the 2000-plus companies worldwide that already do so, the business justification for voluntary economic, environmental, and social reporting is fact, not hypothesis. While no reporting organisation has, or may ever, see the full range of potential benefits, observers point to the following as common views in the business community:

- Effective management in a global economy, where information (reliable or unreliable) travels at Internet speed, requires a proactive approach. Measuring and reporting results, both past and anticipated, is a critical management tool in such a high speed, interconnected, "CNN" world.

- Today's strategic and operational complexities require a continuous dialogue with investors, customers, advocates, suppliers, and employees. Reporting is a key ingredient to building, sustaining, and continuously refining stakeholder engagement. Reports can help communicate an organisation's

 COPYRIGHT © GRI (2002)

P2SUL002999

economic, environmental, and social initiatives and challenges in a way far superior to reactive reporting in response to stakeholder information requests.

- Sustainability reporting is a vehicle for linking typically discrete and insular functions of the corporation—finance, marketing, R&D, operations—into a more integrated strategic vision. Sound reporting opens internal conversations where they would not otherwise occur.

- The process of sustainability reporting provides a beacon of trouble spots—and unanticipated opportunities—in supply chains, in communities, among regulators, and in reputation and brand management. Reporting helps management evaluate potentially damaging developments before they appear as unmanaged and unwelcome surprises.

- Sustainability reporting helps sharpen management's ability to assess their contribution to natural, human, and social capital, enlarging the perspective provided by conventional financial accounts to create a more complete picture of the company's long-term prospects. Reporting helps highlight the societal and ecological contributions of the corporation and the "sustainability value proposition" inherent in its products and services. Such measurement is central to maintaining and strengthening the "license to operate" in today's fast-changing and complex business environment.

- Sustainability reporting can serve to reduce volatility and uncertainty in share price for publicly traded enterprises, and reduce its cost of capital. Fuller information disclosure, including much of what analysts seek from managers on an ad hoc basis, can add stability to a company's financial condition by avoiding major swings in investor behaviour occasioned by surprise, untimely, or selective disclosure.

These trends, separately and synergistically during 2000-2002, have reinforced interest in GRI and its core mission.

Confluence of Need and Opportunity

Yet much work remains. Inconsistent reporting approaches developed by business, government, and civil society continue to appear. As diverse groups seek information, the continuing flow of unconnected information queries gives rise to confusion, redundancy, and frustration. As was the case in June 2000, these 2002 *Guidelines* represent another step along a pathway to resolving the challenge of responding to surging information demands amidst a multiplicity of competing reporting frameworks. By drawing thousands of partners and hundreds of organisations into a voluntary, multi-stakeholder process, the GRI continues to work towards harmonization of disclosure, thereby maximising the value of reporting for both reporting organisations and users alike.

This confluence of need and opportunity underpins GRI's rapid development. There are, of course, many challenges ahead. The GRI recognises that the goal of reporting on the economic, environmental, and social dimensions of organisation-level activity—let alone a fully integrated sustainability assessment—is at the earliest stages of a journey that will continue for many years.

 COPYRIGHT © GRI (2002)

P2SUL003000

But for GRI, the fundamentals that inspired its creation remain unchanged. The long-term objective of developing "generally accepted sustainability accounting principles" requires both a concrete product incorporating the world's best thinking and a legitimate, dynamic process through which continuous learning can occur. With a new permanent institution to implement its mission, the GRI is positioned to deliver continuously stronger guidelines, technical protocols, and industry supplements. All will evolve on a platform of technical excellence, multi-stakeholder process, and transparency embodied in GRI as a new global institution.

 COPYRIGHT © GRI (2002)

P2SUL003001

PART A:

USING THESE GUIDELINES

 COPYRIGHT © GRI (2002)

P2SUL003002

What are the GRI *Guidelines*?

The GRI *Guidelines* are a framework for reporting on an organisation's economic, environmental, and social performance that:

- outline reporting principles and specific content to guide the preparation of organisation-level sustainability reports;
- assist organisations in presenting a true and fair picture of their economic, environmental, and social performance;
- promote comparability of sustainability reports while taking into account the practical considerations related to disclosing information across a diverse range of organisations with extensive and geographically dispersed operations; and
- support benchmarking of sustainability performance with respect to codes, performance standards, and voluntary initiatives.

The *Guidelines* are not:

- a code or set of principles of conduct;
- a performance standard; or
- a management system.

The *Guidelines* do not:

- provide instruction for designing an organisation's internal data management and reporting systems; or
- offer instruction for preparing reports or on performance monitoring and verification practices.

The *Guidelines* document is structured in five parts:

Introduction	Overview of the trends driving sustainability reporting, the interest in GRI, and the benefits of reporting.
Part A: Using these Guidelines	General guidance on use of the Guidelines.
Part B: Reporting Principles	Principles and practices that promote rigorous reporting, and underlie the application of the Guidelines.
Part C: Report Content	The specific content of a GRI report, and guidance on compiling the report.
Part D: Annexes	Additional guidance and resources for using the Guidelines.

 COPYRIGHT © GRI (2002)

P2SUL003003

Who Should Use the *Guidelines*?

Use of the GRI *Guidelines* is voluntary. They are intended to be applicable to organisations of all sizes and types operating in any location. The core *Guidelines* embodied in this document are not specific to any sector. This 2002 release has been developed primarily with the needs of business organisations in mind. However, with some adaptation, the *Guidelines* can be applied to other types of organisations such as government agencies and non-profit organisations. As more of these organisations use the *Guidelines* in the future, the GRI will work to address their specific needs.

The *Guidelines* are intended to complement the implementation of other initiatives related to managing economic, environmental, and social performance and related information disclosure. The *Guidelines* and GRI reports are not a substitute for legally mandated reporting or disclosure requirements nor do they override any local or national legislation. Instances where government regulations, conventions, or treaties restrict disclosure of certain information required in the *Guidelines* should be clearly noted by reporting organisations in their reports.

Reporting by Smaller Organisations

Reporting may present a special challenge for smaller organisations—whether for-profit or not-for-profit, private or public. Such organisations may find it practical to adopt a phased or incremental approach to implementing the *Guidelines*. GRI welcomes efforts to develop tools and guidance to help smaller organisations effectively approach incremental sustainability reporting. Such tools gradually enlarge the coverage of economic, environmental, and social performance information, and, hopefully will eventually allow the organisation to issue a report in accordance with the GRI *Guidelines*.

The GRI Family of Documents

The GRI family of documents includes the following:

- The *Sustainability Reporting Guidelines* (*"the Guidelines"*)
- Sector supplements
- Issue supplements
- Technical protocols

Brief explanations are as follows:

The Guidelines

This document contains the reporting *Guidelines* upon which all other GRI documents are based. These *Guidelines* represent the reporting content that has been identified as most broadly relevant to both reporting organisations and report users, and the entire document could be considered the 'core' of the GRI family of documents. Other supplements, focussed on sectors and issues, are intended to add to, but not replace, the *Guidelines*. In other words, reporting organisations using a supplement are also expected to use the *Guidelines*.

Sector Supplements

GRI recognizes the limits of a one-size-fits-all approach and the importance of capturing the unique set of sustainability issues faced by different industry sectors. To address this need, the GRI is developing sector supplements through a multi-stakeholder process for reporting organisations to use together with the core *Guidelines*. These supplements are at an early stage of development, but will grow in number and rigour over time. Early examples will begin appearing in 2002.

 COPYRIGHT © GRI (2002)

P2SUL003004

Issue Supplements
GRI expects to develop issue-specific supplements on topics such as "diversity" and "productivity" to provide reporting organisations with additional models for organising the information in the *Guidelines* and sector supplements.

Technical Protocols
To assist users in applying the *Guidelines*, GRI is developing its first technical protocols on indicator measurement. Each protocol addresses a specific set of indicators (e.g., energy, child labour). Over time, most of the indicators in the GRI *Guidelines* will be supported by a technical protocol. The series of protocols may also be extended to cover issues such as reporting boundaries or other questions pertaining to reporting principles and structure.

An organisation preparing a GRI report should start from the *Guidelines*. If a sector supplement applicable to your organisation is available, the reporting guidance and indicators contained in that supplement should be used in addition to the indicators and information contained in these *Guidelines*. In the absence of a sector supplement, reporting organisations are invited to include whatever information is specific to their sector and essential to ensuring a true and fair representation of their sustainability performance in addition to the requirements in the *Guidelines*. When reporting on specific indicators in either this document or a supplement, reporting organisations should apply the GRI technical protocols whenever available.

For more information on any of the GRI documents, visit www.globalreporting.org.

Relationship of the *Guidelines* to Other Sustainability Management Tools

Over the last decade, there has been a proliferation of tools to help organisations, especially businesses, manage their economic, environmental, and social performance. These tools have appeared in a number of forms ranging from codes to management systems to standardized methodologies and more. The common thread is that they help guide behaviour. The GRI, in contrast, is an external reporting framework that enables organisations to communicate their: 1) actions to improve sustainability performance; and 2) the outcomes of such actions. The *Guidelines* do not govern an organisation's behaviour. Rather the *Guidelines* are designed to help an organisation describe and document the outcome of adopting and applying codes, policies, standards, and management systems.

The GRI complements other tools and practices used by organisations to manage their sustainability performance, including:

- Charters or codes of conduct (general principles to guide an organisation's behaviour);
- Organisational policies (internal guidance or rules on how an organisation addresses an issue);
- Standards (prescribing methodologies, processes, or specific performance targets);
- Third-party voluntary initiatives; and

 COPYRIGHT © GRI (2002)

P2SUL003005

- Management systems (both certifiable and non-certifiable systems for managing specific aspects of the organisation's performance such as environmental, social, and quality).

The GRI *Guidelines* have been enriched by incorporating facets from a wide range of business, governmental, labour, and NGO initiatives, including those that address issues at the facility, sector, organisation, national, and global levels. In developing the *Guidelines*, the GRI has attempted to provide a reporting tool that is complementary to other initiatives while remaining faithful to its overarching mission and reporting principles. The *Guidelines* can serve as a valuable tool for an organisation to communicate the whole of its activities in a neutral and non-biased manner to allow its stakeholders to make informed decisions based on a true and fair picture of an organisation's sustainability performance.

Reporting Expectations and Design

The specific issues listed below are addressed in the following pages:

- Required content of a GRI report;
- Incremental application of the *Guidelines;*
- Customizing a report within the GRI framework;
- Structuring GRI reports;
- Selecting indicators through engaging stakeholders;
- Frequency and medium of reporting; and
- Credibility of GRI reports.

Required Content of a GRI Report

GRI encourages the use of the GRI family of documents by all reporting organisations, regardless of their experience in preparing sustainability reports. To date, there has been a proliferation of sustainability reports that reference use of the *Guidelines* in a variety of ways. This has occurred owing to the still early and evolving nature of the GRI framework.

For the 2002 *Guidelines*, however, those organisations that wish to identify their report as prepared "in accordance" with the 2002 GRI *Guidelines* should meet a set of requirements. In order to use the term "in accordance" with the GRI *Guidelines,* a report must meet five conditions:

1. Include a GRI Content Index as specified in Part C.

2. Report on the numbered elements in Sections 1-3 of Part C.

3. Report on the core performance indicators in Section 4 of Part C. *Omission of each core indicator must be explained.*

4. Ensure that the report is consistent with the principles outlined in Part B of the *Guidelines*.

5. Include a statement by the Board or CEO as follows: "this report has been prepared in accordance with the 2002 GRI *Guidelines*. We believe that this report is a true and fair representation of our organisation's sustainability performance."

 COPYRIGHT © GRI (2002)

P2SUL003006

At this juncture, GRI does not certify these claims, but reporting organisations should expect that users will evaluate those reports that identify themselves as "in accordance" with the GRI *Guidelines* against the above points.

The 2002 *Guidelines* contain two categories of performance indicators: core and additional. In selected cases, through its consultative process, GRI has elected to modify the criteria in classifying indicators as core or additional. Generally speaking, however, core indicators are:

- those relevant to most reporting organisations; and
- of interest to most stakeholders.

GRI reports should include all of these core indicators or, for each one, an explanation as to why it was not included.

Additional indicators are viewed as one or more of the following:

- leading practice in economic, environmental, or social measurement aspects though currently used by few reporting organisations;
- providing information of significant potential interest to stakeholders who are particularly important to the reporting entity; or
- deemed worthy of further testing for possible consideration as a future core indicator.

Reporting organisations are encouraged to use the additional indicators in Section 4 of Part C, but are not expected to explain why should they chose not to.

In asking reporting organisations to include all core indicators, the GRI recognizes that individual reporting organisations may, in some cases, have legitimate reasons for not reporting on an indicator. In such instances, reporting organisations are asked to make note of these reasons in their report, preferably in or near the GRI Content Index. In providing these explanations, reporting organisations are also encouraged to indicate their future reporting plans relative to each excluded core indicator.

Incremental Application of the Guidelines

The GRI recognizes the complexity of implementing a sustainability reporting program, and the need for some organisations to build their reporting capacity in an incremental fashion. Such organisations may choose not to cover all of the GRI *Guidelines* in their initial efforts, but rather to base their reports on the GRI framework and gradually expand coverage over time in a stepwise fashion. An organisation may choose to initially report on a portion of its operations and gradually cover more of its activities (e.g., additional business units, facilities, or regions). Alternatively, an organisation reporting for the first time might start by reporting on one dimension of its sustainability performance (e.g. environmental) for all of its operations, then progress to incorporate the remaining dimensions of sustainability performance.

Those organisations whose goal is to work towards reporting "in accordance" with the *Guidelines* should clearly communicate to users that their effort is an incremental application of the *Guidelines* that will grow over time. For these purposes, including a GRI Content Index may be helpful to report users. See Part C for further details on the GRI Content Index. Additional guidance on incremental application of the *Guidelines* can be found in Annex 2.

 COPYRIGHT © GRI (2002)

P2SUL003007

Customising your report within the GRI framework

The *Guidelines* set out the basic information for inclusion in a GRI report. However, it is understood and expected that reporting organisations will need to take further steps to design their report content to reflect the unique nature of their organisation and the context in which it operates. These steps may involve:

- Boundaries definition
- Inserting additional content (usually based on stakeholder consultation) such as indicators, textual discussions, etc.
- Adopting a tailored structure or format

Boundaries

While most organisations will have similar boundaries, individual organisations may choose to make certain explicit decisions regarding boundary definitions to best capture their sustainability footprint. The completeness principle in Part B offers brief commentary on boundaries, and GRI is working to develop additional guidance on this issue for future reporting cycles.

Content

GRI encourages organisations to go beyond the information requested in Part C of the *Guidelines,* as needed, to present a true and fair picture of their overall sustainability performance. In applying the *Guidelines*, each reporting organisation will make different decisions regarding the use of the additional performance indicators in Section 4 of Part C based on its unique situation. Furthermore, reporting organisations should also include additional content, particularly integrated performance indicators, identified through stakeholder consultation (see below). This information and these indicators may relate to sector-specific or geography-specific issues that are facing the organisation. GRI is developing supplements to address some of these sector and issue-specific needs.

Structure

See below for GRI guidance on structuring reports.

Selecting Indicators through Engaging Stakeholders

In comparison to financial reporting, which is targeted primarily at one key stakeholder—the shareholder—sustainability reports have a large and diverse audience. Stakeholder engagement plays an important role in helping to ensure that a GRI report achieves it primary purpose: providing information that meets the needs of the organisation's stakeholders. GRI reporters are expected to use these *Guidelines* (Part C, Sections 2-4 and core indicators from Section 5) in addition to sector supplements (if available) as the basis for their report. The reporting elements and indicators in the *Guidelines* have been developed through an extensive multi-stakeholder, consultative process. However, the inclusion of indicators derived from stakeholder engagement is an important additional step in furthering the utility of an organisation's report and is one of the fundamental principles underlying GRI reporting (see Part B on "inclusivity").

Reporting organisations are encouraged to engage in direct and frequent consultation with their key stakeholders to identify additional indicators of interest to their stakeholders beyond those in the GRI framework. Since consultation often involves a range of parallel discussions with different stakeholders, it is important to document the interactions that result in the

 COPYRIGHT © GRI (2002)

P2SUL003008

organisation's selection of indicators and explain these in the report or in the GRI Content Index.

Structuring GRI Reports

The "Report Content" outlined in Part C of these *Guidelines* is ordered to form a logical framework. Reporting organisations are encouraged to use the same order for their report. While GRI believes that completeness and comparability in economic, environmental, and social reporting are best served when all reporting organisations adhere as closely as possible to a common framework, the GRI recognizes that some reporting organisations will want to choose a different format and structure based on what they perceive as most effective for their situation. In evaluating alternative approaches to organizing their report, organisations should carefully weigh the need to capture legitimate organisational and sectoral differences against the benefits of standardized structures. Common structures and formats support consistency and comparability, which provide benefits to both reporting organisations and report users by enhancing the clarity of communication and the ease of use of the documents over an extended period of time.

The choice among different media for reporting (e.g., paper, electronic) may also influence decisions on the structure of reports. For example, some organisations might choose to produce a summary paper report, and a fully detailed report on the Internet. Where Internet GRI reports are constructed of linked pages, a means to view the report ordered according to GRI sections should be provided, in addition to any other structure.

Frequency and Medium of Reporting

A wide range of media are now available to prepare and distribute sustainability reports, ranging from traditional printing to various multimedia technologies including Internet, and CD-ROMs. This affords organisations substantial creativity and freedom in determining the frequency of preparing reports and the mode of distribution. In general, GRI recommends timing, and possibly integrating, sustainability reporting with other external reporting, such as annual financial reports and quarterly earning statements. Such timing will reinforce the linkages between financial performance and sustainability performance as a whole (see Annex 6).

In the future, information disclosure is likely to involve a mix of annual, quarterly, and even "real-time data" distributed through a range of different media, each chosen based on the timing and nature of the reported information. Internet-based reporting will facilitate frequent updating of some aspects of GRI reports. However, continuous reporting should not replace periodic consolidated reports, vetted through an internal procedure, that provide a "snapshot" of the organisation at a given point in time. It is also recommended that such periodic reports be available, as a whole, from the reporting organisation's website (e.g., as a downloadable file).

Credibility of GRI Reports

Organizations that publish sustainability reports in accordance with the GRI Guidelines are expected to present a factual and fair account of their economic, environmental, and social performance. Stakeholders need to be satisfied that the report provided is credible if organizations who publish sustainability reports are to benefit from the process.

In order to address stakeholders' concerns about the credibility of sustainability reports, the GRI recommends that reports include a statement of:

- the reporting organisation's policies and internal practices to enhance and provide assurance about the accuracy, completeness and reliability that can be placed on its sustainability report; and

 COPYRIGHT © GRI (2002)

P2SUL003009

- the reporting organisation's policy and current practice with regard to providing independent assurance[3] about the full report.

The GRI recognizes that providing assurance about the trustworthiness of sustainability reports is, like sustainability reporting itself, at an early stage of development. Reporting organisations have adopted a variety of strategies for providing stakeholders with assurance, including stakeholder consultation panels, internal audits, independent reviews and systematic independent assurance processes.

The GRI encourages the independent assurance of sustainability reports and the development of standards and guidelines for providing such assurance. In developing their assurance policies and practices organizations should demonstrate a progressive approach, each stage of which adds to the credibility of their reporting.

The perceptions and expectations of users about the credibility of the organisation's sustainability report may be influenced by:

- The approach used by the organisation to identify all significant sustainability impacts.
- The process used to recognize the interests of stakeholders affected by its activities, consult with them and take their interests into account when compiling its report, and to select, collect and verify the information that forms the basis of the report.
- The users' ability to understand the content and the information provided and their ability to reach their own conclusions about the organization's commitment to and progress towards sustainability.
- Whether the report conveys a complete and clear understanding of the sustainability risks faced by the organization.
- The users' perception(s) of the willingness of the organization to report honestly.
- The inclusion by management of a statement or declaration that the report is presented in accordance with the GRI Guidelines.
- The inclusion in the report of an independent assurance statement, provided by a competent organization or person about the reliance that can be placed on the report.
- The knowledge that independent assurance or attestation is normal and in certain circumstances prescribed for published financial and environmental reports.

The GRI recommends that consultation with stakeholders is the best way to ascertain their perceptions and expectations about matters of credibility.

[3] The provision of independent assurance is a structured and comprehensive process of collecting and evaluating evidence on a subject matter (the sustainability report) that is the responsibility of another party (management of the reporting organisation), against identified suitable criteria, which process is performed by independent competent experts, in an attitude of "professional scepticism". As a result of the process, assurance providers express a conclusion that provides the intended user/stakeholder with the required level of assurance about whether the subject matter (the sustainability report) conforms in all material respects with identified suitable criteria.

 COPYRIGHT © GRI (2002)

P2SUL003010

The GRI expects guidelines and practice standards for assurance providers to be developed by international bodies through public multi-stakeholder consultation and in consultation with the assurance providers themselves. Annex 3 offers further guidance on practical considerations about assurance provision and related processes.

 COPYRIGHT © GRI (2002)

P2SUL003011

PART B:

REPORTING PRINCIPLES

 COPYRIGHT © GRI (2002)

P2SUL003012

Introduction

This section of the *Guidelines* identifies reporting principles essential to producing a true and fair statement of an organisation's sustainability performance. In the June 2000 *Guidelines,* a first version of these principles appeared. These were informed by the financial accounting tradition and adapted for sustainability reporting with reference to further research related to environmental accounting. Now, with the benefit of time and learning through application of the June 2000 *Guidelines,* GRI presents a revised set of principles that combine and extend many of the concepts that appeared under the earlier headings of "underlying principles" and "qualitative characteristics" of GRI reports.

Those familiar with financial reporting will recognise overlap between GRI's reporting principles and those used in financial reporting. However, while financial reporting is a key benchmark for development of sustainability reporting principles, significant differences do exist in measuring financial versus economic, environmental, and social performance. The principles in this section of the *Guidelines* attempt to capture these differences. They are rooted in GRI's experience during the last four years, incorporating knowledge from both science and practice. Thus, they represent a blend of the financial tradition with emerging concepts in the field of sustainability reporting.

The GRI views these principles as integral to its reporting framework, equal in weight to the information elements in Part C of the Guidelines. Collectively, the principles define a compact between the reporting organisation and report user, ensuring that both parties share a common understanding of the underpinnings of a GRI report and means to interpret decisions made regarding content. The principles are designed with the long-term in mind. They strive to create an enduring foundation upon which performance measurement will continue to evolve based on new knowledge and continuing practice.

Organisations preparing GRI reports are expected to adopt and apply these principles. GRI reports do not need to contain a detailed checklist showing that all principles have been adopted. However, if a reporting organisation does not fully apply these principles, they are asked to indicate where such departures exist and why.

The ten principles outlined below will help ensure that GRI reports:

- Present a true and fair account of economic, environmental, and social performance, and the related contribution of the organisation to sustainable development;
- Facilitate comparison over time;
- Facilitate comparisons across organisations; and
- Credibly address issues of concern to stakeholders.

Completeness

All information material to users for assessing the reporting organisation's economic, environmental, and social performance should appear in the report in a manner consistent with the declared boundaries, scope, and time period.

Completeness means accounting for and disclosing, in sufficient detail, all information of significant concern to stakeholders within the declared boundaries of the report. Defining

 COPYRIGHT © GRI (2002)

P2SUL003013

such information that meets the test of significance to stakeholders should be based on both stakeholder consultation as well as broad-based societal concerns that may not have surfaced through the stakeholder consultation process. Such broad-based concerns may derive, for example, from national policy and international conventions.

The completeness principle is three-dimensional:

Boundary dimension: Reported information should be complete in relation to the boundaries defined by the reporting organisation. These boundaries should be selected with consideration of the economic, environmental, and social impacts of the organization. Such boundaries may be defined based on financial control, legal ownership, business relationships, and other considerations related to the substance and vehicle (i.e. product, supply chain, etc.) through which impacts occur. The boundaries may vary according to the nature of the reported information. Note that the most appropriate boundaries definition may extend beyond those applicable to the organisation's financial reporting.

Scope dimension: Reported information should be complete in terms of the scope of issues addressed and disclosure of all material information disclosed within the boundaries declared by the reporting organization. Criteria for determining scope and materiality may include, for example, lifecycle analysis of products or services and social and ecological footprint. Reporting organisations should disclose the scoping approach applied to the various elements within the GRI reporting framework.

Defining Boundaries

Defining boundary conditions for sustainability reporting is a complex challenge owing to the diverse nature of sustainability information as well as the relationship to the larger economic, environmental, and social systems within which organizations operate. Boundary research is a high priority in GRI's work program. Discussion papers, exposure drafts and testable protocols will appear during 2002-2003, leading to more systematic and precise treatment of this critical area in the near future.

Temporal dimension: Reported information should be complete with reference to the time period declared by the reporting organization. As far as possible, reportable activities, events, and impacts should be presented in the reporting period in which they occur. This may require reporting on activities that produce minimal short-term impact, but will have a cumulative effect that may become material, unavoidable, or irreversible in the longer term. Such is the case, for example, regarding the release of certain bio-accumulative or persistent pollutants. Disclosure of the nature and likelihood of such impacts, even if they materialize in the future, comports with the goal of providing a true and fair representation of the organisation's current sustainability performance. In making estimates of future impacts (both positive and negative), the reporting organisation should be careful to make well-reasoned estimates that reflect the best understanding of the likely size, nature, and scope of impacts.

A single reporting cycle often is too short to capture many important economic, environmental, and social impacts. Further, information within the organisation often flows from management systems that operate on a regular, short-term cycle, typically one year. At the same time, sustainability performance, by nature, focuses on the long-term, with forward-looking trends at least as important as lagging, or historical, ones. Thus, reporting organisations should strive to gradually align information systems to account for these forward-looking trends in addition to historical trends.

Inclusivity

The reporting organisation should systematically engage its stakeholders to help focus and continually enhance the quality of their reports.

 COPYRIGHT © GRI (2002)

P2SUL003014

The inclusivity principle is rooted in the premise that stakeholder views are integral to useful reporting, and are therefore assets that need to be tapped in the process of preparing a report. Aspects of reporting enriched by stakeholder consultation include, but are not limited to: the choice of indicators; the definition of the boundaries of the reporting entity; the format of the report; and the approaches taken to reinforce the credibility of the reported information. Characteristics relevant to designing stakeholder consultation processes include: the nature and diversity of products and services, the nature of the reporting organisation's operation/activities, and the geographic range of operations. Stakeholder engagement, like reporting itself, is a dynamic process. Executed properly, it is likely to result in continuous learning within and outside the organization, and to strengthen trust between the reporting organisation and report users. Trust, in turn, fortifies report credibility, itself a key goal of GRI's reporting framework.

The principle of inclusivity also considers the diverse needs of stakeholders who use sustainability reports. The range of users of a sustainability report is broader than those who rely on financial reports for their decision-making. Inclusivity is essential to ensuring that the reporting process and content reflect the needs of these diverse users. Each user group has specific information expectations, at times overlapping with other groups, at times distinct. Failure to identify and consult with stakeholders is likely to result in sustainability reports that are less relevant to users' needs and thereby less credible to external parties. In contrast, systematic stakeholder engagement enhances receptivity and usefulness across user groups. This engagement may also include soliciting views regarding the utility and credibility of sustainability reports issued by the reporting organisation.

Consistency

The reporting organisation should maintain consistency in the boundary, scope, and content of reporting, and disclose any changes and restate previously reported information.

The consistency principle refers to ensuring that sustainability reports allow comparison of the organization with its own earlier performance as well as in relation to other comparable organisations. Consistent information is a precondition to supporting informed decision-making across user groups. It supports benchmarking and progress assessment by internal and external parties, rating activities, investment decisions, advocacy programs and other users and uses of sustainability performance information. When changes in boundary, scope, and content of reporting occur, including design and use of indicators, reporting organisations should, to the maximum extent practicable, restate current accounts to ensure that time series information and cross-organisational comparisons are both reliable and meaningful. Where such restatements are not provided, the reporting organisation should disclose such circumstances, explain why, and discuss implications for interpreting current accounts.

Accuracy

The accuracy principle refers to achieving the degree of exactness and low margin of error in reported information necessary for users to make decisions with a high degree of confidence.

Sustainability information is by nature heterogeneous, ranging from the purely qualitative, to binominal (yes/no), ordinal, and continuous in nature. Along this spectrum, the test of accuracy takes on different meanings and the specific threshold that must be achieved will depend in part on the intended use of the information. For example, qualitative information draws accuracy from the degree of clarity, detail, and balance. Quantitative information, on the other hand, may involve hundreds of data points from multiple operating units where accuracy rests on the methods of sampling used to measure across populations of processes,

 COPYRIGHT © GRI (2002)

P2SUL003015

transactions, or sites. Certain types of decisions will require higher levels of accuracy in reported information than others. Applying the accuracy principle requires an appreciation of the intentions and decision-making needs of the users, the different conditions under which information is gathered, and disclosure of what approaches, methods, and techniques the reporting organisation uses to achieve satisfactory levels of accuracy. Such disclosures are integral to the overarching goal of credible reporting.

Clarity

The reporting organisation should remain cognizant of the diverse needs and backgrounds of their stakeholder groups and should make information available in a manner that is responsive to the maximum number of users while still maintaining a suitable level of detail.

The clarity principle considers the extent to which information is understandable and usable by diverse user groups. In financial reporting, there is an unspoken assumption concerning the general level of background knowledge and experience of the assumed "primary" user group, namely, investors. No such "primary" user group exists for GRI at this juncture, and in fact, may never exist owing to the diversity of user groups that are consumers of sustainability performance information. In GRI reporting, it is reasonable to assume that all users have a working knowledge of at least selected aspects of economic, environmental, and social issues faced by the reporting organisation. However, not all user groups will bring the same level of experience—or even the same language—to the report. Consequently, technical and scientific terms should be explained within the report, and clear, suitable graphics should be used where appropriate. Thus, reporting organisations, through assessing stakeholder capabilities, should design reports that are responsive to the maximum number of users without sacrificing important details of interest to a subset of user groups. Sharing information in a manner that is not understandable to stakeholders does not contribute to successful engagement, and clarity is therefore an essential characteristic of any reporting effort.

Neutrality

Reports should avoid bias in selection and presentation of information and should strive to provide a balanced account of the reporting organisation's performance.

The neutrality principle refers to the fair and factual presentation of the organisation's sustainability performance. Embodied in the principle of neutrality is the notion that the core objective behind a reporting organisation's selection and communication of information is to produce an unbiased depiction of its performance. This means presenting an account that includes both favourable and unfavourable results, free from intentional tilt, understatement, or overstatement of the organization's performance. The report should focus on neutral sharing of the facts for the users to interpret. Environmental reporting, the precursor to sustainability reporting, has demonstrated this type of gradual evolution from anecdotal and selective disclosure towards a more neutral, factual presentation of data. While reporting practices still vary significantly amongst reporting organisations, many have recognised that achieving and maintaining credibility among users hinges on the perceived and actual commitment of the reporting organisation to a neutral and fair depiction.

Under the neutrality principle, the *overall* report content must present an unbiased picture of the reporting organisation's performance, avoiding selections, omissions, or presentation formats that are intended to influence a decision or judgement by the user. Where the reporting organization wishes to present its perspective on an aspect of performance, it should be clear to the reader that such information is separate and distinct from GRI's reporting elements. In the same way that annual financial reports typically contain

 COPYRIGHT © GRI (2002)

P2SUL003016

interpretive material in the front end and financial statements in the back, so too should GRI reports strive for a clear distinction between the reporting organisation's interpretation and factual presentation.

Timeliness

Reports should provide information on a regular schedule that meets user needs and comports with the nature of the information itself.

The usefulness of sustainability information is closely tied to its timely availability to user groups. Timeliness ensures that uptake and utility of information is maximised, enabling users to effectively integrate it into their decision-making. Like financial disclosures, sustainability reporting is rendered most valuable when users can expect a predictable schedule of disclosures, allowing for special updates if and when there occur unexpected developments of material interest to users.

In light of the heterogeneous nature of economic, environmental and social performance information, reporting organisations should structure disclosures consistent with the nature of information. Certain environmental information, for example, may be most useful on a quarterly, monthly or continuous ("real time") basis, while other environmental information is suitable for an annual report. Similarly, economic performance information may track financial reporting, with annual disclosures summarising performance during the prior 12 months mixed with quarterly updates in parallel with quarterly earnings reports provided to investors. With a menu of new communications technologies available to reporting organisations, adjusting the timing of disclosures to reflect the varying nature of an organisation's impacts is now more feasible than ever before.

However, while different time steps are desirable for meeting certain needs, reporting organisations should commit to a single point in time for a consolidated accounting of their sustainability performance. This is necessary to meet the fundamental objective of comparability across organisations. As an example, a yearly consolidated report released on a predictable schedule, accompanied by interim updates using electronic media, exemplifies a standard structure that is in accordance with the principle of timeliness.

Auditability

Reported data and information should be recorded, compiled, analysed, and disclosed in a way that would enable internal auditors or external assurance providers to attest to its reliability.

The auditability principle refers to the extent to which information management systems and communication practices lend themselves to checking for accuracy by both internal and external parties. GRI reports contain data that is both qualitative and quantitative in nature, reflecting the information queries covering economic, environmental and social performance measurement. In designing data collection and information systems reporting organisations are therefore advised to take into consideration that internal audit and external assurance processes may be utilized in the future.

 COPYRIGHT © GRI (2002)

P2SUL003017

In preparing reports, organisations should continually ask the question: "is the response to a GRI information query presented in such a way that an internal or external party in the future could check its accuracy and reliability?" Unverifiable statements or data that affect the broad messages contained in a GRI report may compromise its credibility.

The Verification Working Group

In response to user requests, GRI in 1999 formed a working group to explore issues and options for strengthening credibility of sustainability reports through various assurance mechanisms. The results of these consultations are reflected in the statements in Part A "Credibility of GRI Reports" and in Annex 3 on "Assurance Processes." The Working Group also has prepared an advisory assurance strategy paper (available on www.globalreporting.org) for consideration by the GRI Board of Directors. In 2002, the Board will consider options for how GRI might continue to play a constructive role in advancing the assurance of sustainability reports.

Transparency

Full disclosure of the processes, procedures, and assumptions in report preparation are essential to its credibility.

Transparency is an overarching principle, intersecting with all other principles that come before it. It requires that regardless of the choices organizations make in terms of the format and content of their reports, users are fully informed of the processes, procedures and assumptions embodied in the reported information. For example, this includes information regarding the stakeholder engagement processes, data collection methods and related internal auditing, and scientific assumptions underlying the presentation of information.

Transparency is central to any type of reporting or disclosure. In the case of financial reporting, governments and other organisations over many decades have created, and continue to enhance, disclosure rules affecting financial reports to increase the transparency of the reporting process. These generally accepted accounting principles and evolving international accounting standards seek to ensure investors are provided a clear understanding of the organisation's financial condition that includes all material information and the basis upon which documentation of its condition is developed.

GRI seeks to move sustainability reporting in a similar direction by creating a generally accepted framework for economic, environmental and social performance disclosure. As this framework continues to evolve rapidly, general practices will evolve in parallel, based on best practice, best science, and best appraisal of user needs. In this dynamic environment, it is essential that reporting organisations be transparent regarding the underlying processes, procedures, and assumptions so that users may both believe and interpret reported information. In this sense, transparency transcends any one principle, but affects all.

Sustainability Context

The reporting organisation should seek to place its performance in the broader context of ecological, social, or other limits or constraints where such context adds significant meaning to the reported information.

In presenting the progress of an organization in improving its economic, environmental, and social performance, many aspects of sustainability performance draw significant meaning from the context of how performance at the organisation level is affecting economic, environmental, and social capital formation, and depletion, at a local, regional, or global level. In such cases, simply reporting on the trend in individual performance (or efficiency) leaves unanswered the question of an organisation's contribution to capital stock. For some users, the sustainability issue—placing performance information in the broader biophysical,

 COPYRIGHT © GRI (2002)

P2SUL003018

social, and economic context—lies at the heart of sustainability reporting, and marks one of the key differentiators with financial reporting.

Where relevant and useful, reporting organisations should consider their individual performance in the context of economic, environmental, and social sustainability. This will involve discussing the performance of the organization in the context of the limits and demands placed on economic, environmental, or social resources at a macro-level. This concept is most clearly articulated in the environmental area in terms of global limits on resource use and pollution levels, but may also be relevant to social and economic issues.

The understanding of how best to link organisational performance with macro-level concerns will continue to evolve. The GRI recommends that individual reporting organisations explore ways to incorporate these issues directly into their sustainability reports in order to advance both reporting organisations' and users' understanding of these linkages.

 COPYRIGHT © GRI (2002)

P2SUL003019

PART C:

REPORT CONTENT

 COPYRIGHT © GRI (2002)

P2SUL003020

General Notes

1. Organisations using the Guidelines will often have complex internal structures, multiple subsidiaries, joint ventures, and/or foreign operations. Particular care should be taken to match the scope of the report with the "sustainability footprint" of the organisation (i.e. the total extent of sustainability impacts). Any differences should be explained.

2. In reporting on indicators contained within the *Guidelines*, reporters should use GRI technical protocols whenever available. Protocols are under development in 2002 for a limited number of GRI indicators and are available on the GRI website (www.globalreporting.org). GRI recognizes the need for continued development of protocols and the current set of protocols represents the first of many that will follow in coming years. If, for any reason, a reporting organisation does not use an existing GRI protocol, it should clearly describe the measurement rules and methodologies for data compilation applied. For situations where a formal GRI protocol is not yet available, reporting organisations should use their best professional judgement to interpret the measurement implications, drawing on international standards and conventions wherever possible.

3. Reported data should be presented using generally accepted international metrics (e.g., kilograms, [metric] tonnes, litres), calculated using standard conversion factors.

4. Reports should present performance information for the current reporting period (e.g., one year) and at least two previous periods, as well as targets for the future.

5. As a general principle, reporting organisations should present indicator data in absolute terms. GRI recognizes the utility of data presented as ratios and encourages its use as a complement to absolute data whenever these assist communication and where these articulate performance across two or more linked dimensions of sustainability. Ratio data may be useful in partnership with absolute data for communicating performance trends. When ratios are included, organisations are asked to make use of normalising factor(s) from within the report, and from the Profile section, if appropriate. See Annex 4 for more information on ratios.

6. Reporting organisations will need to determine the appropriate level of consolidation (aggregation) of indicator data. For example, indicators could be presented in terms of the performance of the organisation worldwide or broken down by subsidiaries, countries of operation, or even individual facilities. This decision requires balancing the reporting burden against the potential additional value of data reported on a country or site basis. Consolidation of information can result in loss of a significant amount of value to users, and also risks masking particularly strong or poor performance in certain areas of operation. In general, reporting organisations should disaggregate information to an appropriate and useful level as determined through consultation with stakeholders. The appropriate level of consolidation/disaggregation will vary by indicator.

7. The use of graphics can enhance the quality of a GRI report. However, care needs to be taken to ensure that graphics used do not inadvertently lead readers to incorrect interpretations of data and results. Care is needed in the selection of axes, scales, and data (including conversion of raw data to ratios and indices for graphic purposes) and the use of colour and different types of graphs and charts. Graphics should be a supplement to—not a substitute for—text and narrative disclosure of information. As a rule, raw data should accompany all graphical presentations, either alongside or in appendices.

 COPYRIGHT © GRI (2002)

P2SUL003021

8. GRI encourages the inclusion of an executive summary. In keeping with the sustainability reporting principles in Part B, the summary should only draw on material from within the report and be materially consistent with the content of the report.

Overview of Part C

Part C of the *Guidelines* specifies the content of a GRI report. The report content is organized in what GRI considers a logical order and reporting organisations are encouraged to follow this structure in writing their reports. See General Notes and Part A for further guidance on report structure. Questions regarding other issues related to application of the *Guidelines* are also addressed in Part A. Please note that this section of the document is best read in conjunction with Part B.

Report content comprises five sections:

1. *Vision and Strategy* – description of the reporting organisation's strategy with regards to sustainability, comprised of text discussion and a statement from the CEO.
2. *Profile* – overview of the reporting organisation's organisation, operations, and the scope of the report.
3. *Governance Structure and Management Systems* – description of the reporting organisation's organisational structure, policies, and management systems, including stakeholder engagement efforts.
4. *Performance Indicators* – measures of the impact or effect of the reporting organisation divided into integrated, economic, environmental, and social performance indicators.
5. *GRI Content Index* – table supplied by the reporting organisation identifying the location of GRI information from Part C within the organisation's report.

In order to report "in accordance" with the GRI *Guidelines* the reporting organization must:

- Include a GRI Content Index as specified in Part C.
- Report on the numbered elements in Sections 1-3 of the Report Content.
- Report on the core performance indicators in Section 4 of Part C. Omission of each core indicator from the report must be explained.
- Ensure that the report is consistent with the principles outlined in Part B of the *Guidelines*.
- Include a statement by the Board or CEO as follows: "this report has been prepared in accordance with the 2002 GRI *Guidelines*. We believe that this report is a true and fair representation of our organisation's sustainability performance."

GRI does not verify these claims, but reporting organisations should expect that users will compare those reports that identify themselves as "in accordance" with the GRI *Guidelines* against the above points. See Part A for further details.

 COPYRIGHT © GRI (2002)

P2SUL003022

Major Changes since June 2000

The major changes in report content from the June 2000 version of the *Guidelines* are as follows:

- Following a year-long consultative exercise, the performance indicators have been substantially revised. The most significant changes are found in the economic and social sections. Aspects and indicators have been reorganized and new indicators appear. For details on the consultative process, please visit the Global Reporting Initiative website (www.globalreporting.org) to view the Final Report of the Measurement Working Group.

- The requirement for an Executive Summary section has been removed; however GRI encourages reporting organisations to include a summary.

- The Vision and Strategy Section has been revised to include the CEO statement.

- The 2002 *Guidelines* have added content on governance to describe the place of sustainability issues in top-level decision-making processes.

- Reporting organisations using the GRI *Guidelines* are now expected to include a table within their report identifying the location of GRI indicators and information.

- The distinction between "generally applicable" and "organisation-specific" environmental indicators has been dropped. All indicators are now classified as "core" or "additional". Core indicators are those relevant to most reporting organisations and of interest to most stakeholders. Additional indicators are viewed as 1) leading practice in economic, environmental, or social measurement aspects though currently used by few reporting organisations; 2) providing information of significant potential interest to stakeholders who are particularly important to the reporting entity; and 3) deemed worthy of further testing for possible consideration as future core indicators.

- GRI indicators have been revised to better align with major international agreements, including conventions on environment, labour, and human rights.

- The performance indicator sections are now presented in English alphabetical order: economic, environmental, social.

Indicators in the GRI Framework

GRI structures performance indicators according to a hierarchy of category, aspect, and indicator grouped in terms of the three dimensions of conventional definitions of sustainability – economic, environmental, and social. The definitions used by GRI are derived from international standards, but adapted to the GRI framework. These definitions intend to facilitate communication and understanding of the GRI framework. Annex 4 contains further information on GRI's approach to indicators.

In the 2002 Guidelines, indicators are structured as follows:

 COPYRIGHT © GRI (2002)

P2SUL003023

	Category	Aspect
ECONOMIC	Direct economic impacts	Customers Suppliers Employees Funders Public Sector
ENVIRONMENTAL	Environmental	Materials Energy Water Biodiversity Emissions, effluents, and waste Suppliers Products and services Compliance Transport Other
SOCIAL	Labour practices	Employment and decent work Industrial relations Health and safety Training and education Diversity and opportunity
	Human rights	Strategy and management Non-discrimination Freedom of association and collective bargaining Child labour Forced and compulsory labour Disciplinary practices Security practices Indigenous rights General
	Society	Consumer health and safety Product and services declaration Advertising Respect for privacy Customer satisfaction Bribery and corruption Political contributions Public policy Competition and pricing Corporate citizenship Community

Section 4 of Part C describes the thinking that led to the specific organisation of aspects and indicators seen in the 2002 *Guidelines*. Note that within the context of GRI, performance indicators can be either quantitative or qualitative. While quantitative or numerical measures offer many advantages, they may prove unreliable, incomplete, or ambiguous for measuring performance on certain issues.

 COPYRIGHT © GRI (2002)

P2SUL003024

GRI considers qualitative indicators, those indicators requiring textual response, to be complementary and essential to presenting a complete picture of an organisation's sustainability performance. Qualitative measures may result when dealing with highly complex economic or social systems in which it is not possible to identify quantitative measures that capture the role of the reporting organisation in contributing positively or negatively to economic, environmental, or social conditions. Wherever possible, qualitative performance indicators have been worded to encourage a response that can be expressed along a scale rather than a general descriptive statement (see Annex 4).

 COPYRIGHT © GRI (2002)

P2SUL003025

GRI Report Content

The following five sections contain the reporting elements and performance indicators for the 2002 GRI Guidelines. Reporting elements are numbered (e.g. 1.1, 2.10) and performance indicators are contained in tables in Section 4. The elements and indicators are listed in **bold print.** Some are supported by additional guidance or explanation in standard print.

1. Vision and Strategy

This section encompasses a statement of sustainability strategy and vision as well as a CEO statement.

1.1. Statement of the organisation's vision and strategy regarding its contribution to sustainable development.

The reporting organisation is asked to present its overall vision for the future of the organisation, particularly with regard to managing the challenges associated with economic, environmental, and social performance. This should answer, at a minimum, the following questions:

- How does the organisation balance the intersection and integration of economic, environmental, and social goals and values and how do such linkages and balancing shape the organisation's decision-making processes?
- What are the main issues for the organization in relation to the major themes of sustainable development?
- How are stakeholders included in identifying these issues?
- For each issue, which stakeholders are most affected by the organisation?
- How are these issues reflected in the organization's values and integrated into its business strategies?
- What are the organization's objectives and actions on these issues?

Reporting organisations should use maximum flexibility and creativity in preparing this section, though the discussion should be informed by the reporting organisation's major direct and indirect economic, environmental, and social issues and impacts. Reporting organisations are encouraged to draw directly from indicators and information presented elsewhere in the report. They should include in their discussion any major opportunities, challenges, or obstacles to moving towards stronger sustainability performance.

1.2. Statement from the CEO (or equivalent senior manager) describing key elements of the report.

 COPYRIGHT © GRI (2002)

P2SUL003026

A statement from the reporting organisation's CEO, or equivalent senior management person, sets the tone of the report and establishes credibility with internal and external users. While the GRI does not specify the content of the CEO statement, it believes such statements are most valuable when they explicitly refer to the organisation's commitment to sustainability and to key elements of the report. Recommended elements include the following:

- highlights of report content and commitment to targets;
- description of the nature of the commitment to economic, environmental, and social goals by the organisation's leadership;
- statement of successes and failures;
- performance against benchmarks such as the previous years' performance and targets, and industry sector norms;
- the organisation's approach to stakeholder engagement; and
- major challenges for the organisation and its business sector in integrating responsibilities for financial performance with those for economic, environmental, and social performance, and the implications of this for future business strategy.

The CEO statement may be integrated with the statement of vision and strategy.

 COPYRIGHT © GRI (2002)

P2SUL003027

2. Profile

This section provides an overview of the reporting organisation and declares the scope of the report. Thus, it provides readers with a context for understanding and evaluating information in the rest of the report. The section also includes organisational contacts.

Organisation Profile

The elements of a complete profile include those listed below. Reporting organisations are encouraged to include any additional information necessary for a full picture of the organisation's operations, products, and services.

The following items help illustrate the general nature and type of the organisation:

2.1. Name of reporting organisation.

2.2. Major products and/or services, including brands if appropriate.

2.3. Countries in which the organisation's operations are located.

2.4. Nature of ownership; legal form.

2.5. Nature of markets served.

2.6. Information on the scale of activity of the reporting organisation:

- Number of employees
- Value added
- Net sales
- Total assets
- Products produced (mass/amount/quantity)
- Other relevant measures (e.g., gross margin, net profit)

Reporting organisations should choose measures best suited to the nature of their operations and stakeholder needs, including information that can be used for creating ratios from absolute values provided in other sections of the report.

2.7. List of stakeholders and key attributes of each, including size.

Stakeholders typically include the following groups, with examples of key attributes:

- community – e.g. locations, nature of interest
- customers – e.g. retail, wholesale, businesses, governments
- shareholders & funders – e.g. stock exchange listings
- suppliers – e.g. products/services provided, local/national/international operations
- trade unions – e.g. relation to workforce and reporting organisation
- workforce (direct and indirect) – e.g. by size, diversity
- other stakeholders – e.g. business partners, local authorities, non-governmental organisations.

 COPYRIGHT © GRI (2002)

P2SUL003028

2.8. Other relevant information on the size and scope of the organisation's activities.

In addition to items 2.1 - 2.7, reporting organisations may also want to include the following information in the report profile:

- Breakdown of sales/revenues by geographic region for those countries/regions that make up five percent or more of total revenues, as well as by major products and/or identified services; and
- Breakdown of costs by geographic region.

Information on scale, sales/revenues, and costs, etc., should be provided for that portion of the organisation covered in the report.

Report Scope and Profile

The following items help clarify the context and scope of the report:

2.9. Contact person(s) for the report, including e-mail and web addresses.

2.10. Reporting period (e.g., fiscal/calendar year) for information provided.

2.11. Date of most recent previous report, if any.

2.12. Scope of report (countries/regions, products/services, divisions/facilities/joint ventures/subsidiaries) and any specific limitations on the scope. If report scope does not match the full range of sustainability impacts of the organisation and its activities, state strategy and projected timeline for complete coverage.

2.13. Basis for reporting on joint ventures, partially owned subsidiaries, leased facilities, outsourced operations, and other situations that can significantly affect comparability from period to period and/or between reporting organisations.

2.14. Significant changes in size, structure, ownership, or products/services that have occurred since the previous report.

2.15. Criteria/definitions used in any accounting for economic, environmental, and social costs and benefits.

2.16. Significant changes from previous years in the measurement methods applied to key economic, environmental, and social information.

2.17. The reporting organisation's policies and internal practices to enhance and provide assurance about the accuracy, completeness, and reliability that can be placed on its sustainability report (including internal management systems, processes and audits relied upon by management to ensure that reported data is reliable and complete having regard to the scope of the report).

2.18. The reporting organisation's policy and current practice with regard to providing independent assurance about the full report.

2.19. Methods available to report users for obtaining information and reports about economic, environmental, and social aspects of organisational activities, including facility-specific information (if available).

2.20. The reporting organisation should explain the nature and effect of any re-statements of information provided in earlier reports, and the reasons for such re-statement (e.g., mergers/acquisitions, change of base years/periods, nature of business, measurement methods).

 COPYRIGHT © GRI (2002)

P2SUL003029

3. Governance Structure & Management Systems

This section provides an overview of the governance structure, overarching policies, and the management systems in place to implement the reporting organisation's vision for sustainable development. Central to addressing these issues is a discussion of stakeholder engagement. This section emphasizes the organisation's structures and systems related to managing its sustainability performance. In contrast, Section 4 (performance indicators) addresses the results and breadth of the organisation's activities.

Structure & Governance

3.1. Operational structure of the organisation.

Description of major divisions, operating companies, subsidiaries, and key alliances.

3.2. Process for ensuring adequate diversity of viewpoints and expertise on the Board to manage strategic direction of the organisation, and manage environmental and social risks and opportunities.

3.3. Major Board committees responsible for setting strategy and oversight of the organisation

Identify major committee responsibilities and scope of responsibility, particularly where it overlaps with sustainability performance, and whether any committees have direct responsibility for reviewing sustainability strategy and reporting.

3.4. Linkages between executive compensation and achievement of the organisation's non-financial goals (e.g. environmental performance, labour practices, etc.).

3.5. Organisational structure and key individuals responsible for oversight, implementation, and audit of economic, environmental, social, and related policies.

Include identification of the highest level of management directly responsible for environmental and social policies.

3.6. Approaches to measuring and improving quality of management.

Development and execution of strategy, enhancing human resources, use of incentive systems, alliance building and retention, protection of whistle-blowers, and other approaches to raising the overall quality of management.

3.7. Systems for managing economic, environmental and social risks and adoption of preventative measures.

Include discussion of any Board-level audit committees in ensuring that environmental and social auditing and risk management and reporting are linked to organisational risk management systems.

3.8. Codes of conduct adopted and date of adoption.

3.9. Policies on accepting shareholder resolutions, and, if limited based on regulations in countries of operation, implications for the ability of minority shareholders to present resolutions related to economic, environmental, and social performance.

3.10. Shareholder resolutions filed during reporting period related to the reporting organisation's economic, environmental, or social performance and management recommendation on proxy vote.

 COPYRIGHT © GRI (2002)

P2SUL003030

Stakeholder Engagement
Stakeholder engagement activities should reflect the organisation's stakeholders as identified in the Profile section.

3.11. Basis for definition and selection of major stakeholders.

3.12. Approaches to stakeholder consultation reported in terms of frequency of consultations by type.

This could include surveys, focus groups, community panels, corporate advisory panels, written communication, management/union structures, and other vehicles.

3.13. Type of information generated by stakeholder consultations.

3.14. Use of information resulting from stakeholder engagements.

For example, this could include selecting organisation-specific indicators and performance benchmarks or influencing specific decisions on policy or operations.

Overarching Policies
Overarching policies apply to the organisation as a whole and/or to a broad range of issues rather than an individual issue such as child labour or workplace safety. Organisations typically establish policies at several levels. At the highest level, an organisation may declare its intention to abide by the UN Declaration of Human Rights. In addition, however, it may have in place policies to implement and monitor adherence to the UN Declaration of Human Rights throughout the organisation. Beyond this, it may also have detailed policies to ensure that the UN Declaration of Human Rights is implemented and monitored for specific issues, such as child labour in the supply chain.

GRI has included policy indicators in the sections on Governance and Management Systems and the section on Performance Indicators based on the general principle of grouping information items closest to the most relevant aspect. The broader, overarching human rights policies may be captured in the Governance & Management Systems section of the report. The existence of the most detailed level of policy (e.g., policies on child labour) may be captured as an indicator in the Performance Indicator section of the report under the category of human rights. These are distinct from the overarching policies covered in this section. Where the reporting organisation perceives an overlap, they should use their best judgement to choose the most appropriate location for the information. For example, a company with a general human rights policy relevant to item 3.13 (below) as well as a specific policy on child labour (listed as performance indicator HR5) would likely wish to place both pieces of information in the same place in the report.

3.15. Publicly available mission and values statement(s) and policies with economic, environmental, or social provisions developed internally by the reporting organisation, including date of adoption and areas of applicability.

For example the organisation may have a procurement policy that incorporates social auditing and is applicable to certain countries or business units.

3.16. Explanation of whether and how the precautionary principle is addressed by the organisation's policies.

3.17. Any voluntary economic, environmental, and social charters, sets of principles, or other initiatives to which the organisation subscribes or which it endorses, including date of adoption and countries of applicability.

 COPYRIGHT © GRI (2002)

P2SUL003031

Charters, principles, and other types of initiatives may be designed by external organizations to which the reporting organisation subscribes or endorses. Formal certification is typically not available for these initiatives. Such initiatives might cover labour issues, human rights, discrimination, or environmental protection.

3.18. Principal industry and business association memberships, emphasizing those which advocate public policy positions.

3.19. Policies for supply chain management as they pertain to outsourcing and supplier environmental and social performance.

3.20. Policies for decisions regarding the location of, or changes, in operations.

This includes procedures for decisions such as facility or plant openings, closings, expansions, and contractions.

Management Systems

3.21. Programmes and procedures pertaining to economic, environmental, and social performance, including:

- **setting priorities and targets**
- **major programmes to improve performance**
- **monitoring performance**
- **internal and external auditing**
- **senior management review**

3.22. Status of certification pertaining to economic, environmental, and social management systems.

Includes adherence to environmental management standards, labour or social accountability management systems, or other management systems for which formal certification is available.

 COPYRIGHT © GRI (2002)

P2SUL003032

4. Performance Indicators

This section lists the core and additional performance indicators for GRI reports. Reporting organisations that wish to report "in accordance with" the GRI *Guidelines* should report on all the core indicators or explain any omissions.

The performance indicators are grouped under three sections covering economic, environmental and social dimensions of sustainability. This grouping is based on the conventional model of sustainable development and is intended to aid users of the *Guidelines*. However, limiting performance indicators to these three categories may not fully capture the sustainability performance of an organisation for a number of reasons. For example:

- changes in one aspect of economic, environmental, or social performance often result in changes to other aspects of sustainability;
- sustainability strategies often use one area of sustainability as a reference point when defining goals for another area; and
- sustainable development requires seeing a coordinated movement across a range of performance measurements, rather than simply random improvement across the full range of measurements.

In addition to the three basic dimensions, a fourth dimension of information is therefore necessary: integrated performance.

The following pages describe the core and additional indicators related to economic, environmental, and social performance. Integrated indicators are also discussed, but the *Guidelines* leave selection of the most appropriate integrated indicators to the reporting organisation based on input from its stakeholders.

Integrated Indicators

Given the unique relationship that each organisation has with the economic, environmental, and social systems within which it operates, it is not possible to develop a standardised set of integrated performance indicators. However, GRI encourages reporting organisations to consult with stakeholders and develop an appropriate short list of integrated performance indicators.

Integrated measures are generally of two types:

1. systemic indicators
2. cross-cutting indicators.

Systemic indicators relate the activity of an organisation to that of the larger systems, economic, environmental and social, of which it is a part. Systemic indicators may themselves be relative or absolute. Relative systematic indicators describe organisational performance in relation to benchmark performance by the organisation's sector, or that of similar organisations nationally. An example would be workplace accident rates as a percentage of the rates found in a sector as a whole or in a specified geographic area.

Absolute systemic indicators describe an organisation's performance in relation to the limit or capacity of some aspect of the system of which it is a part. An example would be the

 COPYRIGHT © GRI (2002)

P2SUL003033

amount of air pollutants of a given type released as a proportion of the total amount that a region can assimilate in a given period or as proportion of the allowable limits in a region as set by a government authority.

Cross-cutting indicators directly relate two or more dimensions of sustainability using a ratio between two quantities. Eco-efficiency measures are well-known examples, such as the rate of carbon dioxide emissions per unit of output or per Euro of turnover. Another example would be the effect of emissions on human health. (Further guidance on ratio indicators may be found in Annex 4.) In developing and reporting cross-cutting indicators, care should be taken to:

- draw, where possible, on information already reported under these *Guidelines;*
- ensure that the indicators use ratios derived from normalised measures and, when possible, from internationally accepted metrics; and
- supplement, not replace, non-ratio indicators.

 COPYRIGHT © GRI (2002)

P2SUL003034

A. Economic Performance Indicators

The economic dimension of sustainability concerns an organisation's impacts on the economic capacity of its stakeholders and on economic systems at the local, national and global levels. Economic impacts can be divided into direct and indirect impacts.

Performance indicators for the economic dimension of sustainability remain the least mature of the indicator sets used in sustainability reporting frameworks. The indicators in this section are the result of a consultation process started after the release of the June 2000 *Guidelines* and represent a new approach to reporting on economic impacts. This framework will continue to evolve in future versions of the GRI *Guidelines* as the understanding of the field continues to mature.

Direct Impacts

A crucial feature of economic impacts is that they include but extend beyond financial performance as presented in financial reports. They address the influence of the reporting organisation on the global, regional, national, and local economic systems within which it operates and the accompanying economic impact on key stakeholder groups. The economic indicators in this section are designed to:

- measure the financial flows between the organisation and its key economic stakeholders; and
- indicate how the organisation affects the economic capacity of those stakeholders.

The aspects for this section are organized around stakeholder groups. Each aspect includes a monetary distribution indicator, which provides an indication of the scale of the relationship between reporting organisation and stakeholder, as well as one or more other indicators that provide insight into the nature of the performance and impact on the stakeholder's economic capacity.

For example, the monetary distribution indicator associated with "funders" that provides the context for the reporting organisation's impact on its funders' economic capacity is: "Dividends payments and interest payments on borrowings". The performance indicator is "return on average capital employed".

Indirect impacts

The total economic impact of an organisation includes indirect impacts stemming from externalities or from impacts on communities. Externalities are those costs or benefits arising from a transaction that are not fully reflected in the price or monetary amount of the transaction. A community in this context can be considered as anything from a local neighbourhood, to a country, or even a community of interest such as a minority group within a society. Though often complex, indirect impacts are measurable. However, given the diversity of situations facing reporting organisations, there is no practical way to predetermine a single, generic set of such indicators. Thus, each organisation will have to make its own selection based on analysis of the issues.

 COPYRIGHT © GRI (2002)

P2SUL003035

Economic Performance Indicators

Core	Additional
Customers	
Monetary Distribution indicator: **EC1. Monetary amounts received and receivable by the reporter from customers for the sales of its products and services.**	
EC2. Geographic breakdown of 'key' markets by sales. Key markets are defined as greater than 25% turnover within any specific product range or where the reporter country sales represents greater than 5% of national GDP.	**EC13. Customer perception of how far relationship with reporting organisation brings economic benefit.**
EC3. Market share of products or product lines/ranges/services in 'key' markets.	
Suppliers	
Monetary Distribution Indicator: **EC4. Monetary payments and payables by the reporter to suppliers for all goods, materials, and services purchased.**	
EC5. For 'key' suppliers: percent of purchasing spent per supplier and main invoicing country. 'Key' is defined as greater than 10% of total purchasing spent with a given supplier or where total reporter purchasing spent in a particular country represents greater than 5% of national GDP.	**EC14. Supplier perceptions of value of relationship with reporting organisation in economic terms** (e.g. improved productivity, increased human and intellectual capital).
EC6. Percent of contracts paid in accordance with agreed terms, excluding agreed penalty arrangements.	
Employees	
Monetary Distribution indicator: **EC7. Monetary value of total remuneration to employees (including wages, pension, and other benefits and redundancy payments) broken down by geographic region.** Total remuneration should refer to current payments and not include future commitments.	
Note: LA7 also serves as a measure of economic performance for this aspect.	**EC15. Employee perception of value of relationship with reporting organisation in economic terms.**
Funders	
Monetary Distribution indicator: **EC8. Interest on debt and common share dividend payments.** Any arrears in preference dividends should be stated.	
EC9. ROACE (Return On Average Capital Employed).	

 COPYRIGHT © GRI (2002)

P2SUL003036

Core	Additional
Public Sector	
Monetary Distribution indicators: **EC10. Total sum of taxes paid broken down by geographic region.** **EC11. Subsidies received broken down by geographic region.**	
	EC16. Dollars of non-core business infrastructure development. This is infrastructure built outside of the main business activities of the reporting entity such as a factory building, a school, or hospital for reporter employees and their family.
Indirect Economic Impacts	
EC12. Describe the organisation's indirect economic impacts. Indirect impacts tend to be highly specific to sectors or individual organisations. The appropriate analysis will depend strongly on variables such as the size and geographic spread of the company, and the nature of its operations, products, supply chain, and customer base.	

B. Environmental Performance Indicators

The environmental dimension of sustainability concerns an organisation's impacts on living and non-living natural systems, including eco-systems, land, air and water. The environmental dimension of sustainability has achieved the highest level of consensus among the three dimensions of sustainability reporting. Still, environmental indicators in GRI reports will increasingly be supported by technical protocols in order to achieve the GRI objective of comparable and rigorous reporting. GRI is developing such protocols; further details may be found at www.globalreporting.org.

The Question of Limits: Underlying the concept of sustainability is the existence of biophysical limits to the capacity of the environment to absorb pollutants on a regional and global level. Such limits, once surpassed, may cause irreversible damage to the biosphere to occur. This is seen, for example, in numerous discussions of hazardous chemicals on a local level and, in recent years, with regard to carbon dioxide emissions on a global level. In the spirit of continuous learning, GRI asks that reporting organisation using the 2002 *Guidelines* to relate their individual performance to global limits using carbon dioxide emissions as an example. Reporting organisations should do this by applying a common scaling factor (i.e. per capita, per dollar of value-added, etc.) to both their individual emissions and estimated global limits. Please see www.globalreporting.org for further technical guidance on limits-based indicators.

 COPYRIGHT © GRI (2002)

P2SUL003037

Environmental Performance Indicators

Core Indicators	Additional Indicators
Materials	
EN1. Total materials use, other than fuel and water (tonnes or kilograms).	
EN2. Percentage of materials used that are processed or unprocessed wastes from sources external to the reporting organisation (tonnes or kilograms). Refers to both post-consumer recycled material and waste from industrial sources.	
Energy	
EN3. Direct energy use (joules). Report on all energy sources used by the reporting organization for its own uses as well as for the production and delivery of energy products (e.g. electricity or heat) to other organizations. See GRI Energy Protocol (forthcoming).	**EN20. Initiatives to use renewable energy sources and increase energy efficiency.** See GRI Energy Protocol (forthcoming).
EN4. Indirect energy (joules). Report on all energy used to produce and deliver energy products purchased by the reporting organization (e.g. electricity or heat). See GRI Energy Protocol (forthcoming).	**EN21. Energy consumption (joules) footprint (i.e. annualised lifetime energy requirements) of major products.** See GRI Energy Protocol (forthcoming).
	EN22. Other indirect (upstream/downstream) energy use and implications, such as organizational travel, product life-cycle management, and use of energy-intensive materials. See GRI Energy Protocol (forthcoming).
Water	
EN5. Total water use. See GRI Water Protocol (forthcoming).	
EN6. Total recycling and reuse of water. Includes wastewater and other used water (i.e. cooling water). See GRI Water Protocol (forthcoming).	**EN23. Identify water sources and related ecosystems/habitats significantly affected by the organisation's use of water.** Include Ramsar-listed wetlands and the overall contribution to resulting environmental trends. See GRI Water Protocol (forthcoming).
	EN24. Ratio of water used to rainfall available. See GRI Water Protocol (forthcoming).
	EN25. Annual withdrawals of ground and surface water as a percent of water available from the sources. See GRI Water Protocol (forthcoming).
Biodiversity	
EN7. Total amount of land owned, leased, or managed by the organization.	**EN26. Amount of impermeable surface as a percentage of land purchased or leased.**
EN8. Location and size of land owned, leased, or managed in biodiversity-rich habitats. Further guidance on bio-diversity rich habitats may found at www.globalreporting.org (forthcoming).	**EN27. Impacts of organization's activities and operations on protected and sensitive areas** (e.g. IUCN protected area categories 1-4, world heritage sites, and biosphere reserves).

 COPYRIGHT © GRI (2002)

P2SUL003038

Core Indicators	Additional Indicators
Biodiversity	
EN9. Description of the major impacts on biodiversity associated with the organization's activities and/or products and services in terrestrial, freshwater, and marine environments.	**EN28. Changes to natural habitats resulting from the reporting organisation's activities and operations and percentage of habitat protected or restored.** Identify type of habitat affected and its status.
	EN29. Objectives, programmes, and targets for protecting and restoring native ecosystems and species in degraded areas.
	EN30. Number of IUCN Red List species with habitats in areas affected by the reporting organisation's operations.
	EN31. The proportion of current or planned business units operating in or around protected or sensitive areas.
Emissions, Effluents, and Waste	
EN10. Greenhouse gas emissions (CO2, CH4, N2O, HFCs, PFCs, SF6). Report separate sub-totals for each gas in tonnes and in tonnes of CO2 equivalent for the following: • Direct emissions from sources owned or controlled by the reporting entity • Indirect emissions from imported electricity heat or steam	**EN32 Other relevant indirect greenhouse gas emissions** (CO2, CH4, N2O, HFCs, PFCs, SF6). Refers to emissions that are a consequence of the activities of the reporting entity, but occur from sources owned or controlled by another entity (report in tonnes of gas and tonnes of CO2 equivalent).
EN11. Ozone depleting substances emissions (report in accordance with Montreal Protocol Annexes A, B, C, and E) in tonnes of CFC-11 equivalents (ozone depleting potential).	
EN12. NOx, SOx, and other significant air emissions by type. Include emissions of substances regulated under: • Local laws and regulations • Montreal Protocol (Annexes A, B, C, and E) • Stockholm POPs Convention (Annex A, B, and C) – persistent organic pollutants • Rotterdam Convention on Prior Informed Consent (PIC) • Basel Convention (Annex I, II, III and VII,) – hazardous waste • Helsinki, Sofia, and Geneva Protocols to the Convention on Long-Range Trans-boundary Air Pollution	
EN13. Total amount of waste by type and destination. 'Destination' refers to the method by which waste is treated, including composting, reuse, recycling, recovery, incineration, or landfilling. Explain estimation method.	**EN33. Identify all production, transport, import, or export of any waste deemed 'hazardous' under the terms of the Basel convention Annex I, II, III, and VIII.**

 COPYRIGHT © GRI (2002)

P2SUL003039

Core Indicators	Additional Indicators
Effluents to Water	
EN14. Significant discharges to water by type. See GRI Water Protocol (forthcoming).	**EN34. Identify water sources and related ecosystems/habitats significantly affected by the organisation's discharges of water.** Include Ramsar-listed wetlands and the overall contribution to resulting environmental trends. See GRI Water Protocol.
Suppliers	
	EN35. Performance of suppliers relative to environmental components of programmes and procedures described in response to Management Systems and Governance section of the *Guidelines* (Section 3).
	EN36. Issues identified through stakeholder consultation regarding environmental performance of the reporting organisation's supply chain or specific suppliers. Examples include forest stewardship practices, use of genetically modified organisms, and petroleum sourced in disputed areas, etc. Describe programmes and initiatives to address such issues.
Products and Services	
EN15. Describe and quantify (where relevant) major environmental impacts at each stage of the life cycle of principle products and services. In particular, the extent to which use, consumption, storage, and/or disposal/treatment of the reporter's products and services entails the generation, depletion, or use of: • Ozone depleting substances (listed in Annexes A, B, C, and E of the Montreal Protocol) • POPs (listed in Annex A and B of the Stockholm POPs Convention) • Substances subject to the Rotterdam Convention on PIC • Hazardous chemicals/materials according to Basel Convention (Annex I, II, III, and VIII) • Endangered species listed in CITES Appendices I-III • Greenhouse emissions covered by the Kyoto Protocol • Radioactive substances • Limited natural resources • Significant hazards or nuisances such as regulated pollutants, dust, and noise, etc.	
EN16. Percentage of weight/volume of products sold that are reclaimed by the reporting organisation after use.	

 COPYRIGHT © GRI (2002)

EN17. Describe product and service stewardship initiatives across the entire life cycle of the product, including efforts to improve product design and lessen impacts associated with manufacturing, use, and final disposal.	
Compliance	
EN18. Penalties for non-compliance with all applicable international declarations/conventions/treaties, and national, sub-national, regional, and local regulations associated with environmental issues. Explain in terms of countries of operation.	
Transport	
	EN37. Transportation used by reporting organisation for logistical purposes.
Overall	
EN19. Policies and procedures to minimize the environmental impacts of the reporting organisation's operations and activities. This may include policies and procedures for issues such as biodiversity conservation and the use of environmental impact assessments, climate change, pollution prevention/waste minimization/cleaner production, etc.	**EN38. Environmental expenditures.**

C. Social Performance Indicators

The social dimension of sustainability concerns an organisation's impacts on the social systems within which it operates. For operational purposes, this may be gauged through analysis of impacts on stakeholders at the local, national and global levels.

Social reporting enjoys less consensus than environmental reporting from the standpoint of indicator selection. The approach taken by the GRI centres on identifying the key performance aspects surrounding labour practices, human rights and broader issues affecting consumers, community and other stakeholders in society. The specific aspects for labour practices and human rights performance are based mainly on internationally recognized standards such as the Conventions of the International Labour Organisation and international instruments such as the United Nations Universal Declaration of Human Rights. In particular, the labour practices and human rights indicators have drawn heavily on the ILO's Tripartite Declaration Concerning Multinational Enterprises and Social Policy and the OECD Guidelines for Multinational Enterprises, which were deemed to be most relevant to the responsibilities of business. The aspects of labour practices that relate to human rights have been incorporated into the latter category. This decision was made to avoid treating "labour rights" as something different or less important than "human rights." This also allowed the labour practices category to address other expectations concerning the reporter's performance with respect to sustainability concerns as they intersect with the world of work and labour.

A number of the social performance indicators differ in nature considerably from other economic and environmental performance indicators in the *Guidelines*. Many of the social issues that are the subject of performance measurement are not easily quantifiable, so the social indicators provide qualitative

 COPYRIGHT © GRI (2002)

P2SUL003041

information about the organisation's systems and operations, including policies, procedures, and management practices. In contrast to those policies listed under Part C of Section 3 of the *Guidelines*, these measures are concerned with specific issues in social performance such as forced or compulsory labour, child labour, etc. Given the diversity of social situations and issues that confront them, organisations should ensure that the social impacts on which they report are as complete as possible. An important part of this is the use of stakeholder consultation to identify additional indicators that cover any gaps in social performance measurement as articulated in this section. While GRI has sought to capture issues of key concern to most stakeholders, the *Guidelines* do not, at present, address the questions of all potential stakeholders. The coverage of GRI will be continually enhanced over time as the field of performance measurement progresses and GRI receives further feedback on the indicators contained within the *Guidelines*.

The GRI social performance indicators will continue to evolve as part of GRI's continuous efforts to improve the utility of the *Guidelines* to both reporters and users. The social performance indicators that appear in this document represent a significant step forward from the previous version of the *Guidelines* in identifying core issues that are applicable to most organisations. Nevertheless, the field of social performance measurement is still maturing.

Social Performance Indicators: Labour Practices

Core Indicators	Additional Indicators
Employment and Decent Work	
LA1. Geographical breakdown of workforce by status (employee / non employee), employment type (full time / part time), and by employment contract (indefinite or permanent / fixed term or temporary). Also identify workforce retained in conjunction with other employers (temporary agency workers or workers in co-employment relationships), segmented geographically.	**LA10. Reporter's contribution to social security of employees beyond those legally mandated** (i.e. contributions refers to health care, disability, maternity, education, and retirement, etc.).
LA2. Employment net creation and average turnover segmented by geographical area.	
Industrial Relations	
LA3. Percentage of employees represented by independent trade union organizations or other bona fide employee representatives broken down geographically OR percentage of employees covered by collective bargaining agreements broken down geographically.	**LA11. Participation / representation in bipartite or tripartite bodies.**
LA4. Policy and procedures involving information, consultation, and negotiation with employees over changes in the reporting entity's operations (i.e. restructuring).	**LA12. Provision for formal worker representation in decision making or management including corporate governance (Board of Directors).**
Health and Safety	
LA5. Describe reporter practices on recording and notification of occupational accidents and diseases, and how they relate to the ILO Code of Practice on Recording and Notification of Occupational Accidents and Diseases.	**LA13. Evidence of substantial compliance with the ILO Guidelines for Occupational Health Management Systems.**
LA6. Existence of formal joint health and	**LA14. Existence of formal agreements with**

 COPYRIGHT © GRI (2002)

P2SUL003042

Core Indicators	Additional Indicators
safety committees comprising management and worker representatives and proportion of workforce covered by any such committees.	**trade unions or other bona fide employee representatives covering health and safety at work and proportion of the workforce covered by any such agreements.**
	LA15. Existence of policies or programmes on HIV AIDS that are in accordance with ILO guidelines.
Training and Education	
LA7. Average hours of training per year per employee by category of employee (e.g. senior management, middle management, professional, technical, administrative, production, and maintenance).	**LA16. Existence of programs to support the continued employability of employees and to manage career endings.**
	LA17. Specific policies and programmes for skills management or for lifelong learning.
	LA18. Existence of positive or affirmative action policies or programmes to correct historical patterns of discrimination and thereby extend equality of opportunity and treatment in employment.
Diversity and Opportunity	
LA8. Existence of equal opportunity policies or programmes and any related policies such as those that address workplace harassment as well as monitoring systems to ensure compliance and results of monitoring.	
LA9. Female/male ratio in senior management and corporate governance bodies (including the Board of Directors).	

 COPYRIGHT © GRI (2002)

P2SUL003043

Social Performance Indicators: Human Rights

Core Indicators	Additional Indicators
Strategy and management	
HR1. Existence and description of policies, guidelines, and procedures to deal with all aspects of human rights relevant to the reporter's operations, including monitoring mechanisms and results. State how policies related to existing international standards such as the Universal Declaration and key ILO conventions.	**HR8. Evidence of consideration of human rights impacts as part of reporter's operational investment decisions and selection of suppliers/contractors.**
HR2. Description or map of organizational structure for human rights compliance and key offices or individuals responsible.	**HR9. Employees training on the reporter's policies and practices concerning all aspects of human rights relevant to the reporter's operations.** Include type of training, number of employees trained, and average training duration.
Non-discrimination	
HR3. Existence and description of global policy and procedures/programs excluding discrimination in reporter's operations, including monitoring systems and results of monitoring.	
Freedom of Association & Collective Bargaining	
HR4. Existence and description of freedom of association policy and extent to which this policy is universally applied independently of local laws, as well as description of procedures/programs to address this issue.	
Child Labour	
HR5. Existence and description of policy excluding child labour as defined by the ILO Convention 138 and extent to which this policy is visibly stated and applied as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring. See GRI Child Labour Protocol (forthcoming).	**HR10. Number of children working for reporter, by type of job.** See GRI Child Labour Protocol (forthcoming).
	HR11. Average weekly working and schooling hours of children. See GRI Child Labour Protocol (forthcoming).
Forced & Compulsory Labour	
HR6. Existence and description of policy to prevent forced and compulsory labour and extent to which this policy is visibly stated and applied as well as description of procedures/programs to address this issue, including monitoring systems and results of monitoring.	
Disciplinary Practices	
	HR12. Description of implemented appeal practices (representation and appeals process).
	HR13. Existence of on-retaliation policy and effective, confidential employee grievance system.

 COPYRIGHT © GRI (2002)

P2SUL003044

Security Practices	
	HR14. Human rights training for security personnel. Include type of training, number of persons trained, and average training duration.
Indigenous Rights	
	HR15. Existence of jointly managed community grievance mechanisms/authority.
	HR16. Documented management principles regarding indigenous people.
	HR17. Share of operating revenues from the area of operations that are re-distributed to local communities.
General	
HR7. Description of policies and procedures to evaluate and address human rights performance within the reporting organisation's supply chain and contractors, including monitoring systems and results of monitoring. Human rights performance refers to the aspects of human rights identified as reporting aspects in the GRI performance indicators.	

Social Performance Indicators: Society

Core Indicators	Additional Indicators
Customer health & safety	
SO1. Existence and description of policy for preserving customer health and safety during use of reporting organisation's products and services, and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue including monitoring systems and results of monitoring. Explain rationale for any use of multiple standards in marketing and sales of products.	**SO11. Number and type of instances of non-compliance with regulations concerning customer health and safety (over a set time period), including the penalties and fines assessed for these breaches.**
	SO12. Number of complaints upheld by regulatory or similar official bodies to oversee or regulate the health and safety of the reporting organisation's products and services.
	SO13. Voluntary code compliance, product labels or awards with respect to social and/or environmental responsibility that the reporter is qualified to use or has received. Include explanation of the process and criteria involved.
Product and services declaration	
SO2. Existence and description of reporting organisation's policy, procedures/management systems, and compliance mechanisms related to product information and labelling.	**SO14. Number and type of instances of non-compliance with regulations concerning product information and labelling (over a set time period), including the penalties, including fines, assessed for these breaches.**
	SO15. Reporting organisation's adherence to voluntary codes regarding social and environmental responsibility in advertising

 COPYRIGHT © GRI (2002)

	where applicable.
Advertising	
SO3. Existence and description of reporting organisation's advertising policy, procedures/management systems, and compliance mechanisms with respect to standards for social and environmental responsibility. Identify geographic areas covered by policy.	**SO16. Number and types of breaches of advertising and marketing regulations.**
	SO17. The number of substantiated complaints regarding breaches of customer privacy over the past 3 years.
Respect for privacy	
SO4. Description of reporting organisation's policy, procedures/management systems, and compliance mechanisms for customer privacy to ensure that data is not circulated without the explicit consent of the concerned customers. Identify geographic areas covered by policy.	
SO5. Existence and description of reporting organisation's policy, procedures/management systems, and compliance mechanisms related to customer satisfaction, including results of surveys measuring consumer satisfaction. Identify geographic areas covered by policy.	
Bribery and corruption	
SO6. Description of reporting organisation's policy, procedures/management systems, and compliance mechanisms for organizations and employees regarding bribery and corruption, including a description of how the organisation meets the requirements of the OECD Convention on Combating Bribery.	**SO18. Amount of money paid by the reporter to political parties and institutions whose prime function is to fund political parties or their candidates.**
Political contributions	
SO7. Description of reporting organisation's policy, procedures/management systems, and compliance mechanisms for managing political lobbying and contributions.	**SO19. Identify membership in or support of national and international advocacy organizations (including business associations) and changes in membership over the past 3 years.**
Public policy	
	SO20. Court decisions regarding cases pertaining to antitrust and monopoly regulations.
Competition and pricing	
SO8. Description of reporting organisation's policy, procedures/management systems, and compliance mechanisms for preventing anti-competitive behaviour	

 COPYRIGHT © GRI (2002)

P2SUL003046

Corporate citizenship	
	SO21. Involvement and/or contributions of reporting organisation to projects with value to the greater community (e.g. support of education and training programs, and humanitarian programs, etc.).
	SO22. Awards received relevant to the reporting organisation's social, ethical, and environmental performance.
Community	
SO9. Existence and description of Community Impact Policy, and extent to which this policy is visibly stated and applied, as well as description of procedures/programs to address this issue including monitoring systems and results of monitoring	
SO10. Describe reporting organisation's policies and procedures for identifying and engaging in dialogue with community stakeholders in areas affected by the reporting organisation's activities.	

 COPYRIGHT © GRI (2002)

5. GRI Content Index

5.1 Table identifying location of each element of the GRI Report Content (section and indicator) in the report (and *vice versa*).

The purpose of this section is to enable readers of reports to be able to quickly compare the degree to which the reporting organisation has included the information and indicators contained in the GRI *Guidelines*. Specifically, the reporter should identify the location of the following GRI elements:

- Vision and Strategy: Responses to questions identified in 1.1 and 1.2 (statement from CEO).
- Profile: 2.1-2.19.
- Governance Structure & Management Systems: 3.1-3.22.
- Performance Indicators: all core performance indicators and identification of the location of explanations for any omissions.
- Any of the additional indicators from Section 4 of Part C that the reporter chooses to include in the report.

 COPYRIGHT © GRI (2002)

P2SUL003048

PART D:

ANNEXES

 COPYRIGHT © GRI (2002)

P2SUL003049

Glossary

The following are GRI's definitions of key terms used in this document.

Additional indicators: an indicator used at the discretion of the reporter to enrich a report.
Core indicator: an indicator required to publish a report "in accordance" with the GRI *Guidelines* as described in Part A and Part B of the *Guidelines*.
Indicator: a measure of performance, either qualitative or quantitative, that appears in Part C.
Indicator aspects: the general types of information that are related to a specific category (e.g., energy use, child labour, customers, etc.) A given category may have several aspects.
Indicator categories: the broad areas, or groupings, of economic, environmental, or social issues of concern to stakeholders (e.g., human rights, direct economic impacts, etc.)
Products and services: both physical and non-physical products and services such as loans, investments, and other financial instruments.
Reporting element: Refers to the numbered information (e.g., 2.1, 3.13) queries listed in Part C that are part of a GRI report.
Reporting organisation: the organisation preparing the report specified in the Profile, Section 2.
Report user: any stakeholder who uses the report, including stakeholders both external and internal to the reporting organisation.

 COPYRIGHT © GRI (2002)

P2SUL003050