SDMS US EPA REGION V -1

SOME IMAGES WITHIN THIS DOCUMENT MAY BE ILLEGIBLE DUE TO BAD SOURCE DOCUMENTS.

FINAL REPORT AND CERTIFICATIONS

151823

SITE PREPARATION AND MATERIAL REMOVAL

ZIONSVILLE, INDIANA

VOLUME II OF III

Appendices H-R

PREPARED FOR

ECC TRUST
DEERFIELD, ILLINOIS

PREPARED BY

AWD TECHNOLOGIES, INC.
PITTSBURGH, PENNSYLVANIA

AWD PROJECT NUMBER 2396

JANUARY 1994

H

Chemical Waste Management, Inc.
2000 South Batavia Avenue
Geneva, Illinois 60134-3329
708/513-4500 • 800/843-3604

November 23, 1993

Mr. Bob Autio
985 S. US Rt. 421
Zionsville, In. 46077

Dear Mr. Autio,

Attached is the profile for AD3417 for Adams Center Landfill which has been approved. Please sign the profile where indicated and fax to, Tracy Relue (219) 447-0474 at the Adams Center Landfill. All six pages must be sent and received by the site before we may schedule. This signed profile is required as a part of the site permit in addition to any previously signed profile.

Thank you for your assistance.

Respectfully,

Grant Hartmann

Grant Hartmann
National Account
Customer Service Representative

Date Printed 11/22/93 Chemical Waste Management, Inc. ADM AD3417

WASTE PROFILE Profile #

(_) Check here if this is a Recertification LOCATION OF ORIGINAL ADAMS CENTER LANDFILL FT. WYNE

GENERAL INFORMATION

Generator Name: ENV CONSERVATION & CHEM CORP Generator USEPA ID: IND084259951

2. Generator Address: 985 S US RT 421 Billing Address: EMAS SPECIAL SERVICES

(_) Same

2700 KOPPERS BLDG

ZIONSVILLE IN 46077 7TH AVENUE

3. Technical Contact/Phone: CHUCK TRIMBUR / ROY BALL 412/355-0600 PITTSURGH PA 15219

4. Alternate Contact/Phone: Billing Contact/Phone: CHUCK TRIMBUR 412/355-0600

PROPERTIES AND COMPOSITION

5. Process Generating Waste: BOILER USED AS HEAT SOURCE IN SOLVENT RECOVERY PROCESS/CERCLA/SUPERFUND SITE

6. Waste Name: BOILER

7A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes (X) No (_)

B. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D008

State Waste Codes:

8. Physical State @ 70F: A. Solid(X) Liquid(_) Both(_) Gas(_) B. Single Layer (X) Multilayer (_) C. Free liq. range 0 to 0%

9A. pH: Range or Not applicable (X) B. Strong Odor (_);describe

10. Liquid Flash Point: < 73F (_) 73-99F (_) 100-139F (_) 140-199F (_) >= 200F (_) N.A. (X) Closed Cup (X) Open Cup (_)

11. CHEMICAL COMPOSITION: List ALL constituents (incl. halogenated organics) present in any concentration and forward analysis

Constituents	Range	Unit Description
BOILER (WILL BE CUT INTO PIECES TO ELIMINATE	99 to 100	%
VOID CAVITY SPACE)	to	
ASBESTOS (FOUND IN CONNECTING PIPES)	0 to 1	%
FRIABLE/NON-FRIABLE	to	
	to	
	to	
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):	101.000000	

12. OTHER: PCBs if yes, concentration ppm, PCBs regulated by 40 CFR 761 (_). Pyrophoric (_) Explosive (_) Radioactive (_) Benzene if yes, concentration ppm. NESHAP (_) Shock Sensitive (_) Oxidizer (_) Carcinogen (_) Infectious (_) Other

13. If waste subject to the land ban & meets treatment standards, check here: _ & supply analytical results where applicable.

SHIPPING INFORMATION

14. PACKAGING: Bulk Solid (X) Bulk Liquid (_) Drum (_) Type/Size: ROLLOFF Other 20 OR 30 YARD

15. ANTICIPATED ANNUAL VOLUME: 2 Units: ROLLOFF Shipping Frequency: ONE TIME

SAMPLING INFORMATION Sample Tracking Number: 4419654

16a. Sample source (drum, lagoon, pond, tank, vat, etc.):

Date Sampled: Sampler's Name/Company:

16b. Generator's Agent Supervising Sampling: 17. (X) No sample required (See instructions..

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize CWM to obtain a sample from any waste shipment for purposes of recertification.

Signature ROBERT JAMES ANTIC SENIOR PROJECT MGR Name and Title 11/21/93 Date

ROBERT JAMES ANTIC, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

Date Printed 11/22/93

ADM AD3417

Profile #

18. This is a Nonwastewater.

19. If this waste is subject to any California list restrictions enter the letter from below (either A, B.1 or B.2) next to each restriction that is applicable:

___ HOCs, ___ PCBs, ___ Acid, ___ Metals, ___ Cyanides

20. Identify ALL Characteristic and Listed USEPA hazardous waste numbers that apply (as defined by 40 CFR 261). For each waste number, identify the subcategory (as applicable, check none, or write in the description from 40 CFR 268.41, 268.42, and 268.43).

REF #	A. US EPA HAZARDOUS WASTE CODE(S)	B. SUBCATEGORY Enter the subcategory description. If not applicable, simply check none		C. APPLICABLE TREATMENT STANDARDS			D. HOW MUST THE WASTE BE MANAGED? Enter letter from below
				PERFORMANCE-BASED: Check as applicable		SPECIFIED TECHNOLOGY: If applicable enter the 40 CFR 268.42 table 1 treatment code(s)	
		DESCRIPTION	NONE	268.41(a)	268.43(a)	268.42	
1	D008		X	X			C 05/08/94
2							
3							
4							
5							
6							
7							
8							
9							
10							

Management under the land disposal restrictions:

A. RESTRICTED WASTE REQUIRES TREATMENT

B.1 RESTRICTED WASTE TREATED TO PERFORMANCE STANDARDS

B.2 RESTRICTED WASTES FOR WHICH THE TREATMENT STANDARD IS EXPRESSED AS A SPECIFIED TECHNOLOGY (AND THE WASTE HAS BEEN TREATED BY THAT TECHNOLOGY)

B.3 GOOD FAITH ANALYTICAL CERTIFICATION FOR INCINERATED ORGANICS

C. RESTRICTED WASTE SUBJECT TO A VARIANCE

D. RESTRICTED WASTE CAN BE LAND DISPOSED WITHOUT FURTHER TREATMENT

E. NOT CURRENTLY SUBJECT TO LAND DISPOSAL RESTRICTIONS

21. Is this waste a soil and/or debris? No: _ Yes, Soil: _ Yes, Debris: X Yes, Both: _

22. Specific Gravity Range: 1.000 to 5.000

23. Indicate the range of each: Units

Cyanides: _ None to _____ _____ Type (free, total, amenable, etc.) _____

Cyanides: _ None to _____ _____ Type (free, total, amenable, etc.) _____

Sulfides: _ None to _____ _____ Type _____

Optional Phenolics: _ None to _____ _____

24. Identify the waste color _____, DOT physical state Solid,

and physical appearance DISMANTLED BOILER PIECES; 0-1% ASBESTOS

25. COMPLETE ONLY FOR WASTES INTENDED FOR FUELS OR INCINERATION		26. RECLAMATION, FUELS or INCINERATION PARAMETERS (Provide if information is available)
TOTAL		RANGE
Beryllium as Be	ppm	A. Heat Value (Btu/lb): ____-____
Potassium as K	ppm	B. Water: ____
Sodium as Na	ppm	C. Viscosity (cps): ____@____F _ 100 F _ 150 F
Bromine as Br	%	D. Ash: ____ %
Chlorine as Cl	%	E. Settleable solids: ____ %
Fluorine as F	%	F. Vapor Pressure @ STP (mm/Hg): ____
Sulfur as S	%	G. Is this waste a pumpable liquid? Yes _ No _
		H. Can this waste be heated to improve flow? Yes _ No _
		I. Is this waste soluble in water? Yes _ No _
		J. Particle size: Will the solid portion of this waste pass through a 1/8 inch screen? Yes _ No _

27. TRANSPORTATION INFORMATION

A. Is this a DOT Hazardous Material? Yes X No _

B. Proper Shipping Name. . . . . .: HAZARDOUS WASTE, SOLID, N.O.S.

and Additional Description if required: RQ (LEAD, ASBESTOS)

C. DOT Regulations: North America Hazard Class: 9 Misc.Hazardous Mater I.D. NA3077 Packing Group: III

D. CERCLA Reportable Quantity (RQ) and units (Lb, Kg): 1 Lb

E. Non-Bulk code ___ Bulk code ___

F. Special Provisions ___ ___ ___ ___ ___ ___

G. Labels Required CLASS 9

28. SPECIAL HANDLING INFORMATION

ASBESTOS HAS BEEN SEGREGATED AND PACKAGED TO MEET APPLICABLE REGULATIONS.

~~THE BOILER HAS NOT COME IN CONTACT WITH THE SOLVENT RECOVERY PROCESS.~~ Afa 11/29/93

THIS HAZARDOUS DEBRIS IS SUBJECT TO THE ALTERNATE TREATMENT STANDARDS OF 40 CFR 268.45.

_ Material Safety Data Sheets Attached

29. OTHER INFORMATION

Waste is not a dioxin or solvent waste (F020,F021,F022,F023,F026,F027,F028 or F001,F002,F003,F004, F005) as defined by 40 CFR 268.31. Waste does not contain >1000 ppm HOCs from App. III (40 CFR 268). There are no free liquids as by paint filter test. No other codes apply,listed or characteristic,including herbicides,pesticides,TC constituents via derived-from/mixture rule or by any other means.

Above information source is: Generator knowledge

30. CHEMICAL WASTE MANAGEMENT CERTIFICATION

Chemical Waste Management, Inc. has all the necessary permits and licenses for the waste that has been characterized and identified by this approved profile.

Date Printed 11/22/93

ADM AD3417

Profile #

21. OTHER HAZARDOUS CONSTITUENTS Indicate if the waste contains any of the following.

METALS	TCLP Information: Check only ONE for each constituent Use units: ppm, mg/l				TCLP Data	TCA or TOTAL Use units: ppm, mg/l, mg/kg or percent			
						California List			
	Less Than	TC Regulated Level	Equal or More	Waste No.	TCLP Actual	Less Than	Regulated Level	Equal or More	Actual
Arsenic as As	X	5.0 mg/l		D004		X	500 mg/l		
Barium as Ba	X	100.0 mg/l		D005					
Cadmium as Cd	X	1.0 mg/l		D006		X	100 mg/l		
Chromium tot Cr	X	5.0 mg/l		D007					
Lead as Pb		5.0 mg/l	X	D008		X	500 mg/l		
Mercury as Hg	X	.2 mg/l		D009		X	20 mg/l		
Selenium as Se	X	1.0 mg/l		D010		X	100 mg/l		
Silver as Ag	X	5.0 mg/l		D011					
Nickel as Ni	N/A					X	134 mg/l		
Thallium as Tl	N/A					X	130 mg/l		
Chromium Hex	N/A					X	500 mg/l		
Antimony	N/A								
Beryllium	N/A								
Copper	N/A								
Vanadium	N/A								
Zinc	N/A								

32. OTHER HAZARDOUS CONSTITUENTS Indicate if the waste contains any of the following.

ORGANICS	TCLP Information: Check only ONE for each constituent				TCLP Data	TCA or TOTAL Use units: ppm, mg/l or %
	Less Than	Regulated Level	Equal or More	Waste No.	TCLP Analytical Test Results Use units: ppm or mg/l	
Benzene	X	0.5 mg/l		D018		
Carbon Tetrachloride	X	0.5 mg/l		D019		
Chlordane	X	0.03 mg/l		D020		
Chlorobenzene	X	100.0 mg/l		D021		
Chloroform	X	6.0 mg/l		D022		
m-Cresol	X	200 mg/l		D024		
o-Cresol	X	200.0 mg/l		D023		
p-Cresol	X	200.0 mg/l		D025		
Cresol	X	200.0 mg/l		D026		
2,4-D	X	10.0 mg/l		D016		
1,4 Dichlorobenzene	X	7.5 mg/l		D027		
1,2-Dichloroethane	X	0.5 mg/l		D028		
1,1-Dichloroethylene	X	0.7 mg/l		D029		
2,4-Dinitrotoluene	X	0.13 mg/l		D030		
Endrin	X	.02 mg/l		D012		
Heptachlor, & Hydroxide	X	0.008 mg/l		D031		
Hexachloro-1,3 Butadiene	X	0.5 mg/l		D033		
Hexachlorobenzene	X	0.13 mg/l		D032		
Hexachloroethane	X	3.0 mg/l		D034		
Lindane	X	0.4 mg/l		D013		
Methoxychlor	X	10.0 mg/l		D014		
Methyl Ethyl Ketone	X	200.0 mg/l		D035		
Nitrobenzene	X	2.0 mg/l		D036		
Pentachlorophenol	X	100.0 mg/l		D037		
Pyridine	X	5.0 mg/l		D038		
Tetrachloroethylene	X	0.7 mg/l		D039		
Toxaphene	X	0.5 mg/l		D015		
2,4,5-TP Silvex	X	1.0 mg/l		D017		
Trichloroethylene	X	0.5 mg/l		D040		
2,4,5-Trichlorophenol	X	400.0 mg/l		D041		
2,4,6-Trichlorophenol	X	2.0 mg/l		D042		
Vinyl Chloride	X	0.2 mg/l		D043		

WASTE MGMT OF INDPLS ID:3172627014 FEB 25 94 9:56 No.002 P.02

A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11-16-93
TIME IN	TIME OUT
1005	1010

ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
496		

SIGNATURE	COD AMOUNT

DIVISION NUMBER
ACCOUNT NUMBER 0710504
SERVICE TYPE
CUSTOMER EMAS Group
ADDRESS Boone County Resource Recovery
CITY Zionsville

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
D21	1	20 lb (Shop)		305	100		20RLW
11	1	30 (Landfill)		690	[illegible]		
		(Front of Boone County Landfill)		655	[illegible]		

POSTED

was only a delivery

COMMENTS Contact - Chuck Trimbur

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____ CONTRACTOR SIGNATURE Mohcoag

CIMS-0038T (10/90) WHITE — OFFICE YELLOW — CUSTOMER PINK — CONTROL

Printed on recycled paper

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

312462

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
N/A	11-22-93
TIME IN	TIME OUT

ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
409	DAN	

SIGNATURE	COD AMOUNT

DIVISION NUMBER
ACCOUNT NUMBER 0710504
SERVICE TYPE
CUSTOMER EMAS ~~[illegible]~~ Group
ADDRESS ST RD 421
CITY

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
NR	~~0~~ 1	~~30~~ 70		305	100		20RLW
		Box empty		690	1000		
				655	309		

POSTED

COMMENTS "PFFE" CONTACT.

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE [signature] CONTRACTOR SIGNATURE TRENT

CIMS-0038TBK (10/90) WHITE - OFFICE YELLOW - CUSTOMER PINK - CONTROL

Printed on recycled paper

PROJECT RECORD

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

006409

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11/17/93
TIME IN	TIME OUT

DIVISION NUMBER
ACCOUNT NUMBER 0210504
SERVICE TYPE
CUSTOMER EAMS Group
ADDRESS Boone County Land Fill
CITY

ROUTE ID	DISPOSAL	DISPOSAL TICKET
401	Dan	
SIGNATURE	[illegible] AMOUNT	
yes		

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
EX	1	30%	—	308	1.00		20RCW
				690	3000		
				655	2552		

POSTED

COMMENTS

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE [signature]
CONTRACTOR SIGNATURE Hildreth

CIMS-003ST (10/90) WHITE — OFFICE YELLOW — CUSTOMER PINK — CONTROL

Printed on recycled paper

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

190787

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
[redacted]	100	
Boone		

*TYPE OF WASTE

1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

10-17-93
DATE

TWIN BRIDGES RDF
WASTE MANAGEMENT INC.
123 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2879

83580
35508
50070

EAMS

CUSTOMER NO.	TRUCK NO.	OPERATOR	TIME	DATE	SCALE NO.
1000651	401	DB	3:37:52	11/17/93	111711

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

[redacted]

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	25.52	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

PROJECT RECORD

006397

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	[illegible]
	11-18-93
[illegible]	[illegible]
	4.00
[illegible]	DISPOSAL [illegible] / DISPOSAL TICKET
401	Dan
SIGNATURE	COD AMOUNT

DIVISION NUMBER
ACCOUNT NUMBER 0710504
SERVICE TYPE
CUSTOMER EMAS Group
ADDRESS Boone Co. Landfill
CITY

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL [illegible]	[illegible]	BILL QUANTITY	AMOUNT
RT	2	30W		30S	2.00		20RLW
				690	60.00		
				655	34.82	36.87	

COMMENTS At 7:00 am 3 Box no pull

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE [signature]
CONTRACTOR SIGNATURE Hildreth

CIMS-0036T (10/90) WHITE — OFFICE YELLOW — CUSTOMER PINK — CONTROL

Printed on recycled paper

PROJECT RECORD

WASTE MGMT OF INDPLS ID:3172627014 FEB 25 '94 9:39 No.002 P.06

PROJECT RECORD

...GIN OF SOLID WASTE WITHIN INDIANA

190947

...quirement set forth in IC 13-7-22-2.7 (c) (I).

_____ hereby certify under oath
...ATOR

...wledge, the solid waste being transported
...llows:

...R STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
~~[illegible]~~ Boone	100	

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

[signature] SIGNATURE OF VEHICLE OPERATOR

11-18-93 DATE

TWIN BRIDGES RDG
WASTE MANAGEMENT INC.
123 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2878

67840
33000
34840

EMAS

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	SAFER NO.
1000651	401	08	10:59:42	11/18/93	11181

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

MANIFEST NO.
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
665	SLUDGE YARDS	40.00	
756	OTHER FEES (TONS)	17.42	
		---TOTAL---	.0
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

191025

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (I).

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

[signature] SIGNATURE OF VEHICLE OPERATOR

11-18-93 DATE

[illegible]

EMAS

CUSTOMER NO.	TRUCK NO.	INITIALS	TIME	DATE	SAFER NO.
1000651	401	08	[illegible]	11/[illegible]	[illegible]

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

MANIFEST NO.
PERMIT NO.

LOAD CODE	LOAD DESCRIPTION	LOAD QUANTITY	AMOUNT
665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	19.45	
		---TOTAL---	
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/638-2491

007138

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11-18-93
TIME IN	TIME OUT

ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
485	OAL	

SIGNATURE	COD AMOUNT

DIVISION NUMBER

ACCOUNT NUMBER 0710504

SERVICE TYPE

CUSTOMER Ema S Group

ADDRESS Boone Co. Landfill

CITY Zionsville

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
Ex	2	30°F		305	200	~~19.45~~ 20.95	20RLW
				655	39.61	~~17.42~~ 18.66	
				690	6000		

POSTED

COMMENTS Special Waste

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____

CONTRACTOR SIGNATURE Westebuck

CIMS-0038T (10/90) WHITE — OFFICE YELLOW — CUSTOMER PINK — CONTROL

Printed on recycled paper

PROJECT RECORD

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

191084

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

I _____ (NAME OF VEHICLE OPERATOR) hereby certify under oath that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	4

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11-18-9 DATE

TWIN BRIDGES [illegible]
WASTE MANAGEMENT INC
129 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2878

69.34
32.00
37.34

Enviro Group

N900652 | 485 | [illegible]/18/93

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	18.66	
		---TOTAL---	
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

190986

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

I _____ (NAME OF VEHICLE OPERATOR) hereby certify under oath that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	4

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11-8-93 DATE

Enviro Group

[illegible]651

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	20.95	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

006412

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11-19-93
TIME IN	TIME OUT

DIVISION NUMBER	ACCOUNT NUMBER	SERVICE TYPE
	0710504	[redacted]

CUSTOMER: EMAS

ADDRESS: Boone County Landfill

CITY:

ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
485	OAW	

SIGNATURE	COD AMOUNT
	PAID

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
~~EX~~ NR	2	30 yd		303	200	20.77	20RLW
				690	6000	22.98	
		Special Waste					
				[illegible]	1369		

COMMENTS

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____ CONTRACTOR SIGNATURE Rvetebuch

CIMS-0038T (10/90) WHITE — OFFICE YELLOW — CUSTOMER PINK — CONTROL

Printed on recycled paper

PROJECT RECORD

WASTE MGMT OF INDPLS ID:3172627014 FEB 25 '94 9:45 NO.002 P.15

T OF ORIGIN OF SOLID WASTE WITHIN INDIANA

189438

ply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

_____ hereby certify under oath
NAME OF VEHICLE OPERATOR

est of my knowledge, the solid waste being transported
nerated as follows:

OUNTY OR STATE HER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Morgan	100	1

*TYPE OF WASTE

e
Demolition Debris
ther _____

4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

[signature]
SIGNATURE OF VEHICLE OPERATOR

11-19-93
DATE

TWI[illegible]
WAS[illegible] INC
123 [illegible] ROAD
DANV[illegible], IN 46122
(317) 745-2878

TRUCK NO.		TIME	DATE	DATCH NO.
WMM7[illegible]	08	9:32:58	11/19/93	111912

VILLE TRANSFER
BERTHA
POLIS, IN 46222-0000

	LOAD QUANTITY	AMOUNT
ONS	20.71	
THER FEES (TONS)	20.71	
	---TOTAL---	.00
RSS WT LBS 86,800.00		
ARE WT LBS 45,380.00		
ET WT LBS 41,420.00		

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

189628

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	4

*TYPE OF WASTE

1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

[signature]
SIGNATURE OF VEHICLE OPERATOR

11-19-93
DATE

[illegible]

CUSTOMER NO.	TRUCK NO.					
1000651	485	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	22.98	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

PROJECT RECORD

STATEMENT OF ORIGIN

In order to comply with the requ

I _____

NAME OF VEHICLE OPER

that, to the best of my know
herein was generated as follo

COUNTY OR STATI (IF OTHER THAN INDI
Mor

1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____

SIGNATURE OF VEH

TWE
WAST
123
DANV

CUSTOMER NO.	TRUCK NO.
1024518	WMM79

CUSTOMER:

MARTINSVILLE TR
3200 N BERTHA
INDIANAPOLIS, I

650	TONS
756	OTHER FEE
	GRSS WT
	TARE WT
	NET WT

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

311328

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11/19/93
TIME IN	TIME OUT
7:15	
ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
401	Dan	
SIGNATURE	COD AMOUNT

DIVISION NUMBER
ACCOUNT NUMBER 0710504
SERVICE TYPE
CUSTOMER Emas
ADDRESS Boone County Landfill
CITY

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
R/T	2	40		403	2.00	19.19	20 RW
		PAID		655	43.82	24.63	
				690	8000		

COMMENTS 1st Box Emas site (1hr) Dan
2nd " " " (45)

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____ CONTRACTOR SIGNATURE Hildreth

C1MS-0038TBK (10/90) WHITE - OFFICE YELLOW - CUSTOMER PINK - CONTROL

Printed on recycled paper

PROJECT RECORD

ATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

189537

der to comply with the requirement set forth in IC 13-7-22-2.7 (c) (1).

_____ hereby certify under oath
NAME OF VEHICLE OPERATOR

to the best of my knowledge, the solid waste being transported in was generated as follows:

189537

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	4

*TYPE OF WASTE

nicipal Waste
nstruction / Demolition Debris
d Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11-19-93
DATE

TWIN BRIDGES RDF
WASTE MANAGEMENT INC.
1205 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2878

EMAS

00655	401	DB	12:20:52	11/19/93	11911

OMER:

/M OF INDPLS - SPECIAL
200 W BERTHA STREET
NDIANAPOLIS, IN 46222-0000

55	SLUDGE YARDS	40.00	
56	OTHER FEES (TONS)	24.63	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

189430

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (1).

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

189430

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
Boone	100	

*TYPE OF WASTE

1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11-19-93
DATE

EMAS

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	40.00	
756	OTHER FEES (TONS)	19.19	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

WASTE MGMT OF INDPLS ID:3172627014 FEB 25 '94 9:45 NO.002 P.12

PROJECT RECORD

STATEMENT OF

In order to comply wi

I _____

NAME O

that, to the best o
herein was generat

COUNT
(IF OTHER

X

1. Municipal Waste
2. Construction / Demo
3. Solid Waste / Other

CUSTOMER:

W/M OF INI
3200 W BE
INDIANAPO

665	SLU
756	OTHE
	GRS
	TAR
	NET

312256

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

ORDER NUMBER	SERVICE DATE
	11-18-93
TIME IN	TIME OUT

ROUTE ID	DISPOSAL ID	DISPOSAL TICKET
457	DAV	
SIGNATURE	COD AMOUNT	

DIVISION NUMBER
ACCOUNT NUMBER 0710504
SERVICE TYPE
CUSTOMER EMAC
ADDRESS SR 421 Landfill
CITY Zionville Ind

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	BILL CODE	MEASURE	BILL QUANTITY	AMOUNT
EX	2	30yd olt		305	200	25.02	20RLW
				690	60.00	15.37	
				655	40.39		

POSTED

COMMENTS McCl

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____ CONTRACTOR SIGNATURE _____

CIMS-0036TBK (10/90) WHITE - OFFICE YELLOW - CUSTOMER PINK - CONTROL Printed on recycled paper

PROJECT RECORD

TATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

191081

REFERENCE NO. 191081

_____ hereby certify under oath
NAME OF VEHICLE OPERATOR

at, to the best of my knowledge, the solid waste being transported rein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
C Boone		

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11-18-93
DATE

TWIN BRIDGES ROF
WASTE MANAGEMENT INC.
1223 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2878

61600
30860
30860

EMAC

1000551	157	08	3 24 02	11/18/93	191811

TOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	15.37	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

190939

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
MAC		8

*TYPE OF WASTE
1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

DATE

ECdcs

TWIN BRIDGES
WASTE MANAGEMENT INC.
1223 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2878

EMAS

1000551	157	[illegible]	[illegible]	[illegible]	[illegible]

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

665	SLUDGE YARDS	30.00	
756	OTHER FEES (TONS)	25.02	
		---TOTAL---	.00
	GRSS WT LBS .00		
	TARE WT LBS .00		
	NET WT LBS .00		

STATEMENT (

In order to comply

I _____

that, to the best

herein was gener

COUN
(IF OTHE

1. Municipal Waste
2. Construction / Dem
3. Solid Waste / Other

1000 51

CUSTOMER:

W/M OF IN
3200 W BE
INDIANAPO

LOAD CODE	
665	SLU
756	OTH
	GRS
	TARI
	NET

PROJECT RECORD

403112

Waste Management of Indianapolis
A WMI Service Center
3200 West Bertha Street
Indianapolis, Indiana 46222
317/635-2491

SERVICE TICKET AGREEMENT/NON-HAZARDOUS WASTES

[illegible]	11-18-93
TIME IN	TIME OUT
7:00	8:50
ROUTE ID	DISPOSAL ID / DISPOSAL TICKET
492	DW
	COD AMOUNT

[illegible] 2010304 [illegible]

CUSTOMER EMPS Group

ADDRESS [illegible]

CITY Jim

ACTION	ORD QTY	SERVICE DESCRIPTION	WASTE TYPE	[illegible]	[illegible]	[illegible]	AMOUNT
N/A	1	20 oft		205	100	10.74	20RLW
				[illegible]	[illegible]		
				655	10.74		

POSTED

COMMENTS Special Waste

SERVICES ACCEPTED SUBJECT TO THE TERMS AND CONDITIONS ON THE REVERSE SIDE AND PAYMENT AGREED TO BE MADE IN ACCORDANCE WITH THE CONTRACTOR'S CURRENT RATE SCHEDULE.

CUSTOMER SIGNATURE _____ CONTRACTOR SIGNATURE Cripe

C1MB-0038TBK (10/90) WHITE - OFFICE YELLOW - CUSTOMER PINK - CONTROL

Printed on recycled paper

PROJECT RECORD

STATEMENT OF ORIGIN OF SOLID WASTE WITHIN INDIANA

190873

In order to comply with the requirement set forth in IC 13-7-22-2.7 (c) (i).

I _____ hereby certify under oath
NAME OF VEHICLE OPERATOR

that, to the best of my knowledge, the solid waste being transported herein was generated as follows:

COUNTY OR STATE (IF OTHER THAN INDIANA)	PERCENTAGE OF LOAD	TYPE OF WASTE*
		4
X Boone		

*TYPE OF WASTE

1. Municipal Waste
2. Construction / Demolition Debris
3. Solid Waste / Other _____
4. Sludge
5. Medical
6. Asbestos
7. Ash
8. Other Special Waste _____

SIGNATURE OF VEHICLE OPERATOR

11/18/93
DATE

Boone Co.

TWIN BRIDGES RDF
WASTE MANAGEMENT INC
123 TWIN BRIDGES ROAD
DANVILLE, IN 46122
(317) 745-2870

53000
7520
21480

Emas Group

CUSTOMER NO.	TRUCK NO.	SERIAL	TIME	DATE	DATION NO.
1000651	492	08	8:20:29	11/18/93	111812

CUSTOMER:

W/M OF INDPLS - SPECIAL
3200 W BERTHA STREET
INDIANAPOLIS, IN 46222-0000

LOAD CODE	LOAD DESCRIPTION			
665	SLUDGE YARDS		20.00	
756	OTHER FEES (TONS)		10.74	
			---TOTAL---	.00
	GRSS WT LBS	.00		
	TARE WT LBS	.00		
	NET WT LBS	.00		

PROJECT RECORD

11/12/93 10:18 ☎708 513 4389 TOG SCHEDULING 002/002

Date Printed 11/12/93

Chemical Waste Management, Inc.

WASTE PROFILE

Profile #

(_) Check here if this is a Recertification LOCATION OF ORIGINAL MIDWEST REGIONAL LAB

ACL- direct AD3417 #175

GENERAL INFORMATION

1. Generator Name: ENV CONSERVATION & CHEM CORP Generator USEPA ID: IND064259981

2. Generator Address: 985 S US RT 421 Billing Address: (_) Same EMAS SPECIAL SERVICES

3700 KOPPERS BLDG

7TH AVENUE

PITTSBURGH PA 15219

ZIONSVILLE IN 46077

3. Technical Contact/Phone: CHUCK TRIMBUR / ROY BAIL 412/355-0600

4. Alternate Contact/Phone: Billing Contact/Phone: CHUCK TRIMBUR 412/355-0600

PROPERTIES AND COMPOSITION

5. Process Generating Waste: BOILER USED AS HEAT SOURCE IN SOLVENT RECOVERY PROCESS/CERCLA/SUPERFUND SITE

6. Waste Name: BOILER

7A. Is this a USEPA hazardous waste (40 CFR Part 261)? Yes (X) No (_)

B. Identify ALL USEPA listed and characteristic waste code numbers (D,F,K,P,U): D008

State Waste Codes:

8. Physical State @ 70F: A. Solid(X) Liquid(_) Both(_) Gas(_) B. Single Layer (X) Multilayer (_) C. Free liq. range 0 to 0%

9A. pH: Range _____ or Not applicable (X) B. Strong Odor (_):describe

10. Liquid Flash Point: < 73F (_) 73-99F (_) 100-139F (_) 140-199F (_) >= 200F (_) N.A. (X) Closed Cup (X) Open Cup (_)

11. CHEMICAL COMPOSITION: List ALL constituents (incl. halogenated organics) present in any concentration and forward analysis

Constituents	Range	Unit Description
BOILER (WILL BE CUT INTO PIECES TO ELIMINATE	to	
VOID CAVITY SPACE)	to 100 %	
ASBESTOS (FOUND IN CONDUCTING PIPES)	0 to 1 %	
FRIABLE/NON-FRIABLE - Friable	to	
	to	
	to	
TOTAL COMPOSITION (MUST EQUAL OR EXCEED 100%):	101.000000	

12. OTHER: PCBs if yes, concentration _____ ppm, PCBs regulated by 40 CFR 761 (_). Pyrophoric (_) Explosive (_) Radioactive (_) Benzene if yes, concentration _____ ppm. NESHAP (_) Shock Sensitive (_) Oxidizer (_) Carcinogen (_) Infectious (_) Other

13. If waste subject to the land ban a waste treatment standards, check here: _ a supply analytical results where applicable.

SHIPPING INFORMATION

14. PACKAGING: Bulk Solid (X) Bulk Liquid (_) Drum (_) Type/Size: ROLLOFF Other 30 OR 30 YARD

15. ANTICIPATED ANNUAL VOLUME: 2 Units: ROLLOFF Shipping Frequency: ONE TIME

SAMPLING INFORMATION

16a. Sample source (drum, lagoon, pond, tank, vat, etc.):

Date Sampled: _____ Sampler's Name/Company:

16b. Generator's Agent Supervising Sampling: _____ 17. (X) No sample required (See instructions.)

GENERATOR'S CERTIFICATION

I hereby certify that all information submitted in this and all attached documents contains true and accurate descriptions of this waste. Any sample submitted is representative as defined in 40 CFR 261 - Appendix I or by using an equivalent method. All relevant information regarding known or suspected hazards in the possession of the generator has been disclosed. I authorize CWM to obtain a sample from any waste shipment for purposes of recertification.

[signature] ROBERT JAMES AUTIO, SENIOR PROJECT MGR. 11/16/93

Signature Name and Title Date

ROBERT JAMES AUTIO, QRM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

CWM OF INDIANA SUPPLEMENTAL INFORMATION FORM

SEND WITH PROFILE

Profile # AD3417

1. Is this waste a Dioxin listed waste as defined in 40 CFR 261.31 (e.g., F020, F021, F022, F023, F026, F027 or F028)? Yes ___ No X

2. Is this waste a listed solvent waste as defined by 40 CFR 261.31 (F001, F002, F003, F004 or F005)? Yes ___ No X

3. Does this waste contain greater than 1000ppm total halogenated organic compounds from Appendix III of 40 CFR subpart 268? Yes ___ No X

4.a. Does the waste contain free liquids as determined by the paint filter test? Yes ___ No X

b. If yes, give the concentration of cyanides and metals in the liquid portion.

Free cyanides _____
Metals _____

5.a. Are there any other listed or characteristic waste codes (including herbicides, pesticides, and new TC constituents) associated with the waste other than those identified in question 7B of the Waste Profile Sheet? Yes ___ No X

b. If yes, please identify additional waste codes _____

6. What is the source of all the above information?

___generator knowledge ___analysis X both

GENERATOR CONFIRMATION

Robert James Antio — 11/16/93

GENERATOR'S SIGNATURE — DATE

ROBERT JAMES ANTIO, QEM, ON BEHALF OF THE ENVIROCHEM ~~TRUSTEE~~ SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA

CJA. 11/16/93

S CENTER LANDFILL FT. WYNE ***** Receipt # 9301524 ***** Page - 1

Date/Time In 12/03/93 9:35
Load Type Rolloff
Transporter Name CWM TRANS - IN
FORT WAYNE IN

Federal EPA ID ILD099202681

** WEIGHT SUMMARY **
Gross 54080.00
Tare .00
Net .00
Adj. .00
Adj. Net .00

Truck Number CWMT241029 Trailer/Contnr #1 #2 #3

Rcpt Ln#	Doc Ln#	Document Number	Profile Sales	Profile Generator Invoicing Customer	Cnt #	Cnt Code	Total Quan.	W V	DCS Units	PCB	Sched Cat	Federal EPA Waste Status
1	1	INA0833146	AD3417	ENV CONSERVATION & C EMAS SPECIAL SERVICES	1	CN	20.00 P.O. Num	Y	Rolloff		DDBB	Check Restriction

54080 LB 09:42 AM 12/03/93

10:38 Am out

Sampling Hr/Date: 946 12-3-93
Sample #: NA
Sampler Initials: MW

10,280
5.14

FINGERPRINT ANALYSIS REPORT

sical Characteristics:
State: _____ Layers: _____
Color: _____ Odor: _____

Water Mix:
Generation of Gases: Y N
Density: _____

Reactive Sulfide Screen: (Pass Fail N/A)
Radioactivity Screen: (=Backgrnd >Backgrnd)
Paint Filter Test: (Pass Fail N/A)
Topp Change: Y N
Solubility: Soluble Insoluble Slightly Soluble

Reactive Cyanide Screen: (Pass Fail N/A)
Flammability Potential (Positive Negative)
Bulk Container: 100 %Full

Penetrometer: _____
Acceptance Status (Conforming Non-conforming Accepted Rejected)

Comments: Visual Inspection only

Lab Sign Off: MW

MANAGEMENT METHOD

Special Handling Instructions: LARGE PIECES

Destination:
[illegible] - Secure Landfill
S01 - Container Building
T21 - Stabilization

Mix 1 2 3 4 Operator: [illegible]

AT# 01 02 03 Operator: RW

Coordinates: 2-9-U-27

'S CENTER LANDFILL FT. WYNE ***** Receipt # 9301613 ***** Page - 1

Date/Time In 12/07/93 9:32
Load Type Rolloff Federal EPA ID ILD099202681
Transporter Name CWM TRANS - IN 74 a. Copeland CWM Controlled Transporter
FORT WAYNE IN

** WEIGHT SUMMARY **
Gross 53680.00
Tare .00
Net .00
Adj. .00
Adj. Net .00

Truck Number 241052 Trailer/Contnr #1 #2 #3

Rcpt Ln#	Doc Ln#	Document Number	Profile Sales	Profile Generator Invoicing Customer	Cnt #	Cnt Code	Total Quan.	W V	DCS Units	PCB	Sched Cat	Federal EPA Waste Status
1	1	INA0833145	AD3417	ENV CONSERVATION & C EMAS SPECIAL SERVICES	1	CM	30.00	Y	Rolloff		D088	Check Restriction

P.O. Num
Scheduled Date 12/02/93 Time 12:00 42064-1

==========

53680
44940
8740
4.37

Sampling Hr/Date: 12/7/93 3:55
Sample #: NA
Sampler Initials: D.R.

FINGERPRINT ANALYSIS REPORT

Physical Characteristics:
State:_____ Layers:_____
Color:_____ Odor:_____

Water Mix:
Generation of Gasses: Y N
Density:_____

Reactive Sulfide Screen: (Pass Fail N/A)

Radioactivity Screen (=Backgrnd >Backgrnd)

Paint Filter Test: (Pass Fail N/A)

Temp Change: Y N
Solubility: Soluble Insoluble Slightly Soluble

Reactive Cyanide Screen: (Pass Fail N/A)

Flammability Potential (Positive Negative)

Bulk Container: 10% %Full

Penetrometer:_____ pH:_____

Acceptance Status (Conforming Non-conforming Accepted Rejected)

Comments: visual inspection

Lab Sign Off: D.R.

==========

MANAGEMENT METHOD

Special Handling Instructions:

Destination:
D81 - Secure Landfill
F01 - Container Building
[illegible] - Stabilization

Bin: 1 2 3 4 Operator: RW

AT# 01 02 03 Operator: RW

Date: 2-9-94-15

J. TOXICITY CHARACTERISTIC COMPOUNDS CONCENTRATION, COMPLETED BASED ON ☐ KNOWLEDGE OR ☐ TESTING
IF BASED ON TESTING, INCLUDE ANALYTICAL RESULTS

WASTE NO.	COMPOUND	REGULATORY LEVEL (ppM)	CONCENTRATION (ppM) REPORTED AS ☐ TCLP	☐ TOTAL
METALS				
D004	ARSENIC	5.0		
D005	BARIUM	100.0		
D006	CADMIUM	1.0		
D007	CHROMIUM	5.0		
	CHROMIUM CR+6			
D008	LEAD	5.0		
D009	MERCURY	0.2		
D010	SELENIUM	1.0		
D011	SILVER	5.0		
PESTICIDES AND HERBICIDES			☐ TCLP	☐ TOTAL
D012	ENDRIN	0.02		
D013	LINDANE	0.4		
D014	METHOXYCHLOR	10.0		
D015	TOXAPHENE	0.5		
D016	2,4-D	10.0		
D017	2,4,5-TP (SILVEX)	1.0		
D020	CHLORDANE	0.03		
D021	HEPTACHLOR (AND ITS EPOXIDE)	0.008		
VOLATILE ORGANIC COMPOUNDS			☐ TCLP	☐ TOTAL
D018	BENZENE	0.5		
D019	CARBON TETRACHLORIDE	0.5		
D021	CHLOROBENZENE	100.0		
D022	CHLOROFORM	6.0		
D028	1,2-DICHLOROETHANE	0.5		
D029	1,1-DICHLOROETHYLENE	0.7		
D035	METHYL ETHYL KETONE	200.0		
D039	TETRACHLOROETHYLENE	0.7		
D040	TRICHLOROETHYLENE	0.5		
D043	VINYL CHLORIDE	0.2		
SEMI-VOLATILE ORGANIC COMPOUNDS			☐ TCLP	☐ TOTAL
D023	o-CRESOL	200.0		
D024	m-CRESOL	200.0		
D025	p-CRESOL	200.0		
D026	CRESOL (TOTAL)	200.0		
D027	1,4-DICHLOROBENZENE	7.5		
D030	2,4-DINITROTOLUENE	0.13		
D032	HEXACHLOROBENZENE	0.13		
D033	HEXACHLOROBUTADIENE	0.5		
D034	HEXACHLOROETHANE	3.0		
D036	NITROBENZENE	2.0		
D037	PENTACHLOROPHENOL	100.0		
D038	PYRIDINE	5.0		
D041	2,4,5-TRICHLOROPHENOL	400.0		
D042	2,4,6-TRICHLOROPHENOL	2.0		

K. OTHER COMPOUNDS (ppM)

AMMONIA		TIN		TOTAL CYANIDE		HOCs	
BERYLLIUM		COBALT		AMENABLE CYANIDE		PCBs	
THALLIUM		NICKEL		F001-F005 SOLVENTS		CHELATORS	
COPPER		ZINC		SULFIDES			

L. SAMPLE STATUS
A REPRESENTATIVE SAMPLE HAS BEEN SUPPLIED ☒ YES ☐ NO

M. SPECIFIC GENERATOR REQUEST FOR DISPOSAL AND/OR COMMENTS
AREAS E, H, AND J AND K WILL BE FILLED OUT AFTER ANALYSIS IS COMPLETE.
PLEASE ADVISE ON RESULTS OF ANALYSIS.

FOR CLEAN HARBORS USE ONLY
ROBERT JAMES AUTIO GEM, ON BEHALF OF THE ENVIROCHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1919 C, U.S.D.C. SOUTHERN DISTRICT OF INDIANA

GENERATOR'S CERTIFICATION
I hereby certify that all information submitted in this and attached documents is correct to the best of my knowledge. I also certify that any samples submitted are representative of the actual waste.

AUTHORIZED SIGNATURE	NAME (PRINT)	TITLE	DATE
	ROBERT JAMES AUTIO	GEM SENIOR PROJECT MANAGER	11/10/93

Profile Number U 09008

WASTE MATERIAL PROFILE SHEET

(Please complete all areas, leave nothing blank)

A. GENERAL INFORMATION

GENERATOR Enviro. Conservation c. Chem.
FACILITY ADDRESS 985 South US 421
Zionsville, In 46077
SIC NUMBER
GENERATOR USEPA ID# IND 084259951
GENERATOR STATE ID # Cja
TECHNICAL CONTACT ~~Josh Autio~~ Roy Ball
TECHNICAL CONTACT'S PHONE ~~317 769-4770~~ (703)-940-7200

BILL TO: EMAS Special Services
BILL TO ADDRESS 2700 Koppers Build
Pittsburgh Pa 15219
CLEAN HARBORS CONTACT PERSON Terri Cripper
CLEAN HARBORS SERVICE CENTER LOCATION Ind. Ir
SAMPLE APPROVAL P.O. # Verbal W/O #
CUSTOMER CONTACT Chuck Trimbur
CUSTOMER CONTACT'S PHONE 412-355-0600

B. WASTE DESCRIPTION

COMMON NAME FOR WASTE Storage tank Rinse Water
PROCESS GENERATING THE WASTE Decon of on-site Storage tanks

C. PROPERTIES – ESTIMATED CJA 11/16/93

PH ☐ <2 ☐ 2-4 ☒ 6-9 ☐ 10-12.5 ☐ >12.5 ACTUAL
% TOC <10 BTU/POUND <100 % ASH NA % SULFUR NA COLOR BROWN-CLEAR
% TOTAL CHLORINE <10 SPECIFIC GRAVITY/DENSITY 1 ODOR NONE % ACIDITY/ALKALINITY NEUTRAL
FLASHPOINT (°F) ☐ <75° ☐ 75-99° ☐ 100-139° ☐ 140-200° ☐ >200° ☒ NONE
BOILING POINT (°F) ☐ < OR = 95° ☒ >95°

PHYSICAL STATE
☒ LIQUID WITH NO SOLIDS ☐ SOLID WITHOUT FREE LIQUID ☐ MULTILAYERED
☐ THICK VISCOUS LIQUID ☐ POWDER ☐ BILAYERED
☐ LIQUID/SOLID MIXTURE (INDICATE %) ____ % FREE LIQUID ____ % SETTLED SOLIDS ____ % TOTAL SUSPENDED SOLIDS

D. COMPOSITION

Water	100 %		%
	%		%
	%		%
	%		%
	%		%
	%		%

MSDS's ATTACHED ☐ YES ☒ NO

E. DEPARTMENT OF TRANSPORTATION INFORMATION

D.O.T. SHIPPING NAME
D.O.T. HAZARD CLASS OR DIVISION
UN/NA # PACKING GROUP HAZARD ZONE RQ

F. SHIPMENT METHOD

☒ BULK LIQUID ☐ BULK SOLID ☐ DRUM (SIZES)
☐ OTHER (SPECIFY)

G. ANTICIPATED VOLUME

8000 gallons ☒ GALS. ☐ DRUMS ☐ CUBIC YARDS
FREQUENCY ☒ ONE TIME ☐ WEEK ☐ MONTH ☐ QUARTER ☐ YEAR

H. WASTE DISPOSAL STATUS

USEPA HAZARDOUS WASTE ☐ YES ☐ NO
USEPA HAZARDOUS WASTE NUMBER(S)

STATE HAZARDOUS WASTE ☐ YES ☐ NO
STATE HAZARDOUS WASTE NUMBER(S)
IS THIS A RESTRICTED WASTE UNDER THE LAND BAN REGULATIONS? ☐ YES ☐ NO
THIS WASTE IS A ☐ WASTEWATER ☐ NON-WASTEWATER PER USEPA DEFINITION, IN 40 CFR 268.2.
DOES TREATMENT OF THIS WASTE GENERATE A F006 OR F019 SLUDGE? ☐ YES ☐ NO
IS THIS WASTE SUBJECT TO CATEGORICAL PRETREATMENT DISCHARGE STANDARDS? ☐ YES ☐ NO
IF YES SPECIFY POINT SOURCE CATEGORY LISTED IN 40 CFR PART 401.

DOES THE WASTE REQUIRE NOTIFICATION UNDER THE BENZENE NESHAP RULES? ☐ YES ☐ NO

OTHER HAZARDS

	YES	NO		YES	NO		YES	NO
OXIDIZER	☐	☒	INFECTIOUS, ETIOLOGICAL AGENT, PATHOGEN, OR BIOLOGICAL MATERIAL	☐	☒	HERBICIDE	☐	☒
WATER REACTIVE	☐	☒	CARCINOGENS – DEPENDENT ON ANALYSIS	☐	☒	EXPLOSIVE	☐	☒
RADIOACTIVE	☐	☒				PYROPHORIC	☐	☒
DIOXIN	☐	☒						

PESTICIDE

Profile Number U 09008

P.O. BOX 19276 SPRINGFIELD, ILLINOIS 62794-9276 (217) 782-6761

State Form LPC 62 8/81 IL532-0610

FOR SHIPMENT OF HARDOUS AND SPECIAL WASTE

IN 5129

NOTE: FORM DESIGNED TO PRINT 8 LINES PER INCH.

EPA Form 8700-22 (Rev. 6-89)

Form Approved OMB No. 2050-0039 Expires 9-30-92

UNIFORM [redacted] WASTE MANIFEST

1. Generator's US EPA ID No.: IND084259951 — Manifest Document No.: 00001

2. Page 1. 1 of 1

Information in the shaded areas is not required by Federal law, but is required by Illinois Law

3. Generator's Name and Mailing Address: ENVIRONMENTAL CONSERVATION & CHEMICAL CORP, 985 SOUTH U.S. 421, ZIONSVILLE, IN 46077

Location If Different:

4. * 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS * 1-800-645-8265

A. Illinois Manifest Document Number: IL 4710477 — Fee Paid, If Applicable

B. Illinois Generator's ID: 9180115391

5. Transporter 1 Company Name: CLEAN HARBORS ENVIRONMENTAL SERV. INC.

6. US EPA ID Number: MAD039322250

C. Illinois Transporter's ID: 1478

D. 708 720-0700 Transporter's Phone

7. Transporter 2 Company Name:

8. US EPA ID Number:

E. Illinois Transporter's ID:

F. ( ) Transporter's Phone

9. Designated Facility Name and Site Address: CLEAN HARBORS OF CHICAGO, 11800 S STONY ISLAND AVE, CHICAGO, IL 60617

10. US EPA ID Number: ILD000608471

G. Illinois Facility's ID: 0316000051

H. Facility's Phone: 312646-6202

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-HAZARDOUS, NON DOT REGULATED	001	TT	05000	G	EPA HW Number: XX; Authorization Number: 000053
b.					EPA HW Number: XX; Authorization Number:
c.					EPA HW Number: XX; Authorization Number:
d.					EPA HW Number: XX; Authorization Number:

J. Additional Descriptions for Materials Listed Above

[redacted]

K. Handling Codes for Wastes Listed Above In Item # 14

G = Gallons. Y = Cubic Yards

15. Special Handling Instructions and Additional Information

ROBERT JAMES AUTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

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 anf 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 JAMES AUTIO — Signature: [signature] — Date: Month 11 Day 30 Year 93

17. Transporter 1 Acknowledgement of Receipt of Materials

Printed / Typed Name: RANDY H. JARBOE — Signature: [signature] — Date: Month 11 Day 30 Year 93

18. Transporter 2 Acknowledgement of Receipt of Materials

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

19. Discrepancy Indication Space

20. Facility Owner or Operator: Certification of receipt of [redacted] materials covered by this manifest except as noted in item 19.

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

GENERATOR

TRANSPORTER

FACILITY

59237

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2, Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

[illegible] TSD MAIL TO GENERATOR COPY

INS129

P.O. BOX 19276 SPRINGFIELD ILLINOIS 62794-9276 (217) 782-6761 ENVIRONMENTAL PROTECTION AGENCY HAZARDOUS AND SPECIAL WASTE

#356

State Form LPC 62 8/81 IL532-0610

PLEASE TYPE (Form designed for use on elite (12-pitch) typewriter.) EPA Form 8700-22 (Rev. 6-89) Form Approved OMB No. 2050-0039 Expires 9-30-9

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator's US EPA ID No.: IND084259451
Manifest Document No.: 00049
2. Page 1 of 1
Information in the shaded areas is not required by Federal law but is required by Illinois law.

3. Generator's Name and Mailing Address / Location If Different
ENVIRONMENTAL CONSERVATION & CHEMICAL CORP
485 SMITH U.S. 421
ZIONSVILLE, IN 46077

4. 24 HOUR EMERGENCY AND SPILL ASSISTANCE NUMBERS: 1-800-645-8265

A. Illinois Manifest Document Number: IL 4794385 Fee Paid if Applicable
B. Illinois Generator's ID: [redacted]
C. Illinois Transporter's ID: [redacted]
D. Transporter's Phone: 708-720-0700

5. Transporter 1 Company Name: MR FRANKS INC
6. US EPA ID Number: ILD 984775049

7. Transporter 2 Company Name:
8. US EPA ID Number:

E. Illinois Transporter's ID: [redacted]
F. Transporter's Phone: [redacted]

9. Designated Facility Name and Site Address
CLEAN HARBORS ENV. SERVICE, INC
11800 S. STONY ISLAND
CHICAGO ILLINOIS 60617
10. US EPA ID Number: ILD 000608471

G. Illinois Facility's ID: 0316000095
H. Facility's Phone: 312 646 6202

	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.
GENERATOR a.	NON-HAZARDOUS, NON DOT REGULATED	001	TT	03300	G	EPA HW Number: XXXXXXXXXXXX; Authorization Number: 0000000000
b.						EPA HW Number: XXXXXXXXXXXX; Authorization Number: [redacted]
c.						EPA HW Number: XXXXXXXXXXXX; Authorization Number: [redacted]
d.						EPA HW Number: XXXXXXXXXXXX; Authorization Number: [redacted]

[redacted] K. Handling Codes for Wastes Listed Above: [redacted] G = Gallons Y = Cubic Yards

15. Special Handling Instructions and Additional Information
ROBERT JAMES AUTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1414C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA

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 JAMES AUTIO
Signature: [signature]
Date: Month 11 Day 30 Year 93

TRANSPORTER

17. Transporter 1 Acknowledgement of Receipt of Materials
Printed/Typed Name: CRAIG LARSON
Signature: Craig Larson
Date: Month 11 Day 30 Year 93

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

This Agency is authorized to require, pursuant to Illinois Revised Statute, 1989, Chapter 111 1/2 Section 1004 and 1021, that this information be submitted to the Agency. Failure to provide this information may result in a civil penalty against the owner or operator not to exceed $25,000 per day of violation. Falsification of this information may result in a fine up to $50,000 per day of violation and imprisonment up to 5 years. This form has been approved by the Forms Management Center.

COPY 1 TSD MAIL TO GENERATOR

579528

Danville Recycling and Disposal Facility
P.O. Box 17
123 Twin Bridges Road
Danville, Indiana 46122
317/745-2878

A Waste Management Company

November 16, 1993

Mr. Jim Fife
AWD Technologies, Inc.
Penn Center West
Building 111, Suite 300
Pittsburgh, PA 15276

Dear Mr. Fife:

The special waste stream referenced below has been approved for disposal at Twin Bridges Recycling & Disposal Facility. Please note the following information:

Generator:	Environmental Conservation & Chemical
Waste Stream:	Building Demolition, site clearing
Profile No:	242407
Profile Expiration Date:	05-10-94
Special Handling:	Handle as asbestos

Please review the attached Generators Waste Profile Sheet copy. Pay particular attention to any special conditions in Section D as noted by our Technical Manager.

The confidence and trust you have placed in selecting Twin Bridges RDF to manage your disposal needs is greatly appreciated. If you have any questions or need assistance with additional waste disposal, please do not hesitate to contact me.

Sincerely,

Jo Ann Templeton

Jo Ann Templeton
Special Waste Consultant

JT/csc

Enclosure

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code

WMNA 242407

form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only)

Decision Expiration Date: 5/10/94

Contractor Sales Rep#: ____

Service Agr. Renewal Date: / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORP.
2. SIC Code: N/A
3. Facility Address (site of waste generation): 985 SOUTH US 421
4. Generator City, State/Province: ZIONSVILLE, INDIANA
5. Zip/Postal Code: 46077
6. Generator USEPA/Federal ID #: IND084259951
7. State/Province ID #: N/A
8. Technical Contact: ROY O. BALL, PH D, PE
9. Phone: (708) 940-7200

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: BUILDING DEMOLITION, SITE CLEARING/GRUBBING
2. Process Generating Waste: SUPER FUND CLEANUP, DEMOLITION OF "a" FRAME BUILDING, SITE CLEARING
3. Annual Amount/Units: 500 CUBIC YARDS
4. Type A ☒ Type B ☒
5. Special Handling Instructions/Supplemental Information: ALL WASTE MATERIAL WILL BE REMOVED FROM OUTSIDE THE HOT ZONE AND/OR ABOVE GRADE
6. Incidental Waste Types and Amounts: NONE

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other
2. Supplemental Shipping Information: NONE

Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6) 4. Hazard Class/ID #:

5. Reportable Quantity/Units (lb/kg): 6. Shipping Name:

D. TECHNICAL MANAGER DECISION (Check One) ☒ APPROVED ☐ DISAPPROVED ☐ Check if additional information is attached

If Disapproved, Explain:

If Approved, Continue.

1. Management Method(s): Handle as an asbestos waste for all demolition material only... bridge with trash and cover immediately and with soil at the end of the day. 3-D grid locate waste for later customer use, if necessary.
2. Precautions, Conditions, or Limitations on Approval: No free liquids. Subject to IDEM approval and conditions. No air conditioner units allowed unless certifications are produced showing CFC/HCFC removal. No bulk shipments of fluorescent light tubes. No more than 20 pallets per day. Manifest required. All soils shall be from outside the hot zone.

Loads must be covered.

3. For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☒ Attached

If waived, explain why:

4. List Non-WMI Facility that is Approved to Manage this Waste: N/A Date:

Tech. Mgr. Signature: Steve Wolfe Name (Print): Steve Wolfe Date: 11/10/93

E. MANAGEMENT FACILITY INFORMATION / DECISION

1. Proposed Management Facility: TWIN BRIDGES RDF
2. Proposed Intermediate Transfer Facility: N/A
3. Transporter: WM OF INDIANAPOLIS
4. **Management Facility Gen. Mgr. Decision (Check One)** ☒ APPROVED ☐ DISAPPROVED

If Disapproved, Explain:

If Approved, List Precautions, Conditions, or Limitations on Approval:

General Mgr. Signature: [signature] Name (Print): LARRY C. WRIGHT Date: 11-11-93

Turn Page and Complete Side 2 (If Type B Special Waste, only complete Part J of Side 2)

Danville Recycling and Disposal Facility
P.O. Box 17
123 Twin Bridges Road
Danville, Indiana 46122
317/745-2878

A Waste Management Company

November 16, 1993

Mr. Jim Fife
AWD Technologies, Inc.
Penn Center West
Building 111, Suite 300
Pittsburgh, PA 15276

Dear Mr. Fife:

The special waste stream referenced below has been approved for disposal at Twin Bridges Recycling & Disposal Facility. Please note the following information:

Generator:	Environmental Conservation & Chemical
Waste Stream:	Building Demolition
Profile No:	242408
Profile Expiration Date:	05-10-94
Special Handling:	No soils or concrete materials

Please review the attached Generators Waste Profile Sheet copy. Pay particular attention to any special conditions in Section D as noted by our Technical Manager.

The confidence and trust you have placed in selecting Twin Bridges RDF to manage your disposal needs is greatly appreciated. If you have any questions or need assistance with additional waste disposal, please do not hesitate to contact me.

Sincerely,

Jo Ann Templeton

Jo Ann Templeton
Special Waste Consultant

JT/csc

Enclosure

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code

WMNA

form is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only)

Decision Expiration Date: 5/10/94

Contractor Sales Rep#: SW

Service Agr. Renewal Date: / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: ENVIRONMENTAL CONSERVATION & CHEMICAL CORP.
2. SIC Code: N/A
3. Facility Address (site of waste generation): 985 SOUTH US 421
4. Generator City, State/Province: ZIONSVILLE, INDIANA
5. Zip/Postal Code: 46077
6. Generator USEPA/Federal ID #: IND084259951
7. State/Province ID #: N/A
8. Technical Contact: ROY O. BALL, PH D, PE
9. Phone: (708) 940-7200

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: BUILDING DEMOLITION
2. Process Generating Waste: SUPER FUND CLEANUP, DEMOLITION OF PROCESS BLDG. & MISC. DEBRIS
3. Annual Amount/Units: 500 CUBIC YARDS
4. Type A ☒ Type B ☒
5. Special Handling Instructions/Supplemental Information: ALL PROCESS BUILDING DEMOLITION IS FROM WITHIN THE HOT ZONE AND ABOVE GRADE - NO FLOOR MATERIAL IS TO BE INCLUDED.
6. Incidental Waste Types and Amounts: NONE

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☐ Drum/Box ☐ Other
2. Supplemental Shipping Information: NONE

Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6)

4. Hazard Class/ID #:
5. Reportable Quantity/Units (lb/kg):
6. Shipping Name:

D. TECHNICAL MANAGER DECISION (Check One) ☒ **APPROVED** ☐ **DISAPPROVED** ☐ Check if additional information is attached

If Disapproved, Explain:

If Approved, Continue.

1. Management Method(s): Co-dispose with solid waste. Hydrowaste disposal location for total customer use, if requested.
2. Precautions, Conditions, or Limitations on Approval: No soils or concrete materials allowed (unless they were parking blocks). No tanks. No engines (mower or diesel) or combustibles unless emptied of all fluids. Manifest must indicate load contains no wastes with free liquids. Loads must be covered. Subject to all IDEM approval conditions. Loads must be covered.
3. For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☒ Attached

If waived, explain why:

4. List Non-WMI Facility that is Approved to Manage this Waste: N/A Date:

Tech. Mgr. Signature: Steve Wolfe Name (Print): Steve Wolfe Date: 11/10/93

E. MANAGEMENT FACILITY INFORMATION / DECISION

1. Proposed Management Facility: ~~TWIN BRIDGES RDF~~
2. Proposed Intermediate Transfer Facility: ~~N/A~~
3. Transporter: ~~WM OF INDIANAPOLIS~~
4. **Management Facility Gen. Mgr. Decision (Check One)** ☒ **APPROVED** ☐ **DISAPPROVED**

Disapproved, Explain:

Approved, List Precautions, Conditions, or Limitations on Approval:

General Mgr. Signature: Name (Print): LARRY C. WHITT Date: 11-15-93

Turn Page and Complete Side 2 (If Type B Special Waste, only complete Part J of Side 2)

Special Waste Certification Application

Indiana Department of Environmental Management
Office of Solid and Hazardous Waste Management
105 South Meridian Street
Indianapolis, Indiana 46206-6015
Telephone: 317/232-4473

For Office Use Only
Case No. _____
Reviewer _____

1. Generator Information

Generator Facility Location	Generator Mailing Address
Name ENVIRONMENTAL CONSERVATION & CHEMICAL CORP.	Name ERM - NORTH CENTRAL, INC.
Address 985 SOUTH U.S. 421	Address 540 LAKE COOK ROAD
	SUITE 300
ZIONSVILLE, IN, 46077 (City) (State) (Zip)	DEERFIELD, IL, 60015 (City) (State) (Zip)
County BOONE COUNTY	County
Technical Contact and Telephone # ROY O. BALL, PH.D., P.E. (708) 940-7200	Technical Contact and Telephone # ROY O. BALL, PH.D., P.E. (708) 940-7200

EPA Identification Number: IND 084259951

2. Waste Information

Waste Name: BUILDING DEMOLITION, SITE CLEARING/GRUBBING, MISCELLANEOUS DEBRIS (SEE ATTACHED)

Anticipated annual quantity (cubic yards, drums, other): 1000 CUBIC YARDS

Disposal frequency (weekly, monthly, annually, one time, etc.): ONE-TIME DISPOSAL

Type of waste containers (drums, bulk, rolloffs, etc.): ROLLOFFS

Proposed disposal site: WASTE MANAGEMENT, INC. DANVILLE, INDIANA

3. Regulatory Issues

Are any of the following occurring at your facility: (please check)

CERCLIS Clean-up ☑ Hazardous/Solid Waste Enforcement ☐ Corrective Action ☐

Air/Water Issues ☐ Other _____

4. Generator Signature

I hereby certify that the information in this application is true and accurate to the best of my knowledge, and that this waste is not a hazardous waste as defined in 329 IAC 3.1.

Signature ON BEHALF OF ENVIROCHEM / ROBERT JAMES AUTIO (type or print name) / 9/22/93 Date

Title SETTLING DEFENDANTS UNDER CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C U.S.D.C. SOUTHERN DISTRICT OF INDIANA
SENIOR CONTACT MANAGER

5. Contractor Information

Applicant (if other than generator)	Proposed Disposal Site
Name AWD TECHNOLOGIES, INC.	Name WASTE MANAGEMENT, INC. Opp No. 32-2
Address PENN CENTER WEST	Address DANVILLE RECYCLING AND DISPOSAL FACILITY
BUILDING III, SUITE 300	123 TWIN BRIDGES ROAD, P.O. BOX 17
PITTSBURGH | PA | 15276	DANVILLE | IN | 46122
(City) (State) (Zip)	(City) (State) (Zip)
County ALLEGHENY	County HENDRICKS
Technical Contact and Telephone # JAMES AMBROSE (412) 788-2717	Technical Contact and Telephone # LARRY WRIGHT (317) 745-2878

6. Sampling and Laboratory Information

Laboratory	Sample Collector
Name HERITAGE LABORATORIES, INC.	Name SCOTT WEISHAAR
Address 7901 WEST MORRIS STREET	Address AWD TECHNOLOGIES, INC. SUITE 37
	8330 WOODFIELD CROSSING
INDIANAPOLIS | IN | 46231	INDIANAPOLIS | IN | 46240
(City) (State) (Zip)	(City) (State) (Zip)
Technical Contact and Telephone# CURTIS BECK (317) 243-8304	Telephone # (317) 469-0703

7. Renewal Information

Is this application a(n): New Application ? ☑ Renewal ? ☐ Amendment ? ☐

If a renewal, or an amendment, what is the current certification number? N/A

If a renewal, what is the date of the last lab analysis? N/A

Have there been any changes in the process, volumes, or raw materials since the last certification? N/A

Yes ____ No ____ If yes, attach a brief explanation.

Are you aware of any other facts or circumstances which have, or could have, altered the physical characteristics or chemical composition of the waste? Yes ____ No ____ N/A
If yes, provide a brief explanation.

8. Waste Characterization

Physical Characteristics: (attach MSD Sheets if Available)

Physical state: Solid ✓ Semi-solid___ Liquid___ Powder___ Other___

Percent solids 100 %

Fire, explosion, or spontaneous ignition hazard? Yes___ No ✓

Does this waste contain: Free liqiuds? NO PCB's? NO Asbestos? NO Solvents? NO

Odor? None ✓ Mild___ Strong___ Describe:

Analytical Information

Sampling: Date sample was collected: AUGUST 31, 1993 AND SEPTEMBER 7, 1993 Sample type: grab___ composite ✓

Was a sampling plan used? Yes ✓ No___ If so, attach a copy.

Is the sample representative of the waste? YES

Results: attach original laboratory documentation; i.e. TCLP (metal, pesticide, organics), corrosivity, ignitability, reactivity, or other. (QA/QC upon request)

Is the waste a listed hazardous waste as defined in 329 IAC 3.1? Yes___ No ✓

9. Process Description (attach additional pages if necessary)

THE ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION IS A FEDERAL SUPERFUND SITE THAT CLOSED FOR BUSINESS IN MAY, 1982. ECC BEGAN OPERATIONS IN 1977 AND WAS ENGAGED IN THE RECOVERY, RECLAMATION, AND BROKERING OF PRIMARY SOLVENTS, OILS, AND OTHER WASTES. WASTE PRODUCTS WERE RECEIVED IN DRUMS AND BULK CONTAINERS AND THEN PREPARED FOR SUBSEQUENT RECLAMATION OR DISPOSAL. RECLAMATION PROCESSES INCLUDED DISTILLATION, EVAPORATION, AND FRACTIONATION TO RECLAIM SOLVENTS AND OIL.

ALL MATERIAL ON THE ATTACHED INVENTORY SUMMARY TABLES IS BEING REQUESTED SPECIAL WASTE CERTIFICATION FOR ONE-TIME DISPOSAL. IT WAS DETERMINED DURING THE DESIGN PROCESS THAT SPECIAL WASTE CERTIFICATION WOULD BE NEEDED BECAUSE THE MATERIAL IS LOCATED ON A SUPERFUND SITE.

MR. JAMES SMITH (IDEM) HAS REVIEWED AND APPROVED THE FIELD SAMPLING PLAN FOR THIS PROJECT. SAMPLES WERE TAKEN OF THE FORMER PROCESS BUILDING NON-METALLIC MATERIALS, (CONCRETE, FIBERGLASS, STYROFOAM, AND WOOD) POROUS IN NATURE. THE REMAINING MATERIALS ARE PRIMARILY BUILDING DEMOLITION DEBRIS, MISCELLANEOUS DEBRIS, AND SITE CLEARING MATERIALS AS SHOWN ON THE ATTACHED INVENTORY SUMMARY TABLES.

SPECIAL WASTE APPLICATION INSTRUCTIONS (page 1 of 2)

1. **GENERAL INFORMATION**: Provide generator name, facility location, and mailing address. Facility location is the street address of the generating facility. This address will appear on the approval. A mailing address should be provided if different from the facility location. Provide an EPA ID number if applicable (i.e. the applicant generates any hazardous waste).

2. **WASTE INFORMATION**: Provide a waste name, the anticipated volume to be disposed in one year, the frequency of disposal, the type of container used for disposal, and a proposed disposal facility. The IDEM will attempt to approve the disposal site selected by the generator. However, depending on handling concerns and characteristics of the waste(s) and the disposal facility's operational, design, and geological considerations, the generator may be denied access to a particular site.

3. **REGULATORY ISSUES**: Indicate, by checking the appropriate boxes, whether the generating facility has any issues pending with other regulatory programs or agencies. Of particular importance are any activities that may effect the status of this/these waste(s).

4. **GENERATOR SIGNATURE**: A designated responsible individual of the generator's staff shall sign the application. A contractor may prepare the application for the generator, but the application is to be <u>signed by the generator</u>. In lieu of a generator signature, the contractor may sign the application if legal permission to do so is given to the contractor. A letter giving consent, with the original signature of the generator, should be provided with the application in this event. Any application which is unsigned or does not have an <u>original</u> signature will not be approved by the IDEM.

5. **CONTRACTOR INFORMATION**: Provide a name, address, and contact for any contractor or consultant whom may be involved in the application process and the proposed disposal facility. The Operating Plan Permit Number (OPP No.) for the disposal facility must also be included.

6. **SAMPLING AND LABORATORY INFORMATION**: Provide a name, address, and contact for the laboratory which performed any analytical work for the generator. The individual(s) responsible for sample collection should also be included with address and phone number.

7. **RENEWAL INFORMATION**: Indicate whether the application for this/these waste(s) is being submitted for the first time, for renewal of an expired approval, or for an amendment to a current approval. If this is a renewal or amendment, indicate whether there have been any changes in the process or raw materials generating the waste, any other circumstances that may have altered the waste characteristics, or any change in volume to be disposed. If there have been, please explain the change.

8. **WASTE CHARACTERIZATION**:

Physical Characteristics: Provide the requested information.

INSTRUCTIONS (page 2 of 2)

Analytical Information: The generator must demonstrate that a waste is not hazardous under 329 IAC 3.1 in order to dispose of the waste as a Special or Solid Waste. The generator shall indicate that the waste is not hazardous by listing or by characteristics. An analysis is usually required to demonstrate that the waste is not hazardous due to characteristics. Analysis for hazardous characteristics include ignitability (D001), corrosivity (D002), reactivity (D003), Toxicity Characteristic metals, pesticides, and organic compounds (D004-D043). Only those hazardous characteristics that are a potential concern need to be tested. A generator may use their knowledge of the waste stream and generating process to make a waste determination in lieu of testing. In this case, the generator must supply the documentation, such as Material Safety Data Sheets (MSDS), used to make such a determination. However, further analysis shall be required if the IDEM determines that it is necessary in order to properly characterize the waste(s).

Staff may also require other parameters, such as PCB's, other metals, chlorides, phenols, etc. be tested in order to determine the potential hazards associated with the waste and appropriate disposal requirements and facility.

Sampling: Provide the date the sample was collected and the type of sample taken. Include any other information, such as sampling plans, which would demonstrate that the sampling is representative of the waste(s). In order to demonstrate that a waste is non-hazardous, each waste stream shall be sampled independently. If the generator wishes to composite different waste streams into one sample, a written justification for such compositing shall be provided. If the IDEM determines the composite to be inappropriate, re-analysis shall be required.

Results: A copy of <u>original</u> laboratory analyses shall be provided with the application. (Complete QA/QC and chain-of custody shall be provided upon request). Please make sure that all analyses are properly identified. An application will not be reviewed without this information.

If you have any questions concerning sampling and analysis, please contact staff of the Solid Waste Permits Section at (317) 232-4473.

9.Process Description: In order for staff to determine whether an appropriate waste determination has been made, it is required that a comprehensive description of the process generating the waste be provided. Also, include a list of all the raw materials or chemicals used in the process. If needed, attach a separate sheet for this section. (If this waste is the result of a clean-up from a spill or release of a material, provide a complete description of the process that generated material and any sampling plans or site assessments/investigations if performed. Indicate whether the release was reported to the Office of Environmental Response and provide the Incident Number.) Failure to provide this information will result in a delayed review of your application as staff attempt to obtain such information.

Complete Information Will Greatly Enhance The Efficiency Of Your Application's Review. Detach instructions and forward application to the IDEM

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Tecnical Contact:
Mailing Address: Generator Location:

Emergency Response Phone Number:

WASTE CERTIFICATION INFORMATION

Waste Name: Certification Number: Expiration Date:

Description of Waste:

I Hereby certify that the above information is true and accurate to the best of my knowledge.

Name(print or type) Signature Date(MM/DD/YY)

TRANSPORTER INFORMATION

Company Name: Mailing Address:

Driver's Signature Date(MM/DD/YY)

DISPOSAL SITE INFORMATION

Site Name: OPP Number: Amount:

Authorized Signature Date(MM/DD/YY)

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided. The solid waste disposal facility shall also maintain the disposal notifications until such time as certification of post-closure is deemed acceptable for the site.

Pursuant to Solid Waste Rule 329 IAC 2-14-8 (Records and reports), all solid waste disposal facilities shall submit to the commissioner a quarterly report which includes the origin of the solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

TABLE 3

STRUCTURE INVENTORY SUMMARY TABLE
PAGE 1 OF 3

Building	Dimensions (Ft)	Building Materials	Contents
A-Frame House	28 x 20 x 18 H	All wood construction with asphalt shingles; above ground construction; no foundation	
Lower Floor; West Room	12 x 18		~~Ten 50-lb bags of grass fertilizer~~ ~~Eight 50-lb bags of plant food~~ ~~Three gallons of pesticide~~ ~~Two gallons of paint~~ ~~One 55-gallon drum; unknown contents~~ One tire Six milk crates One 5-foot book shelf Ten square feet of rubber matting Several florescent light fixtures (4-foot long) ~~Three boxes of florescent light tubes (4-foot long)~~ Several yard hand tools Other miscellaneous debris
Lower Floor; East Room	12 x 18		5 foot x 3 foot kitchen cabinet unit One kitchen sink One table band saw One wall air conditioning unit Two work tables Three chairs Two lawn fertilizer spreaders 100 feet of 1-inch PVC tubing Several boxes of sorbent pads (24 inch x 24 inch) and 8-inch diameter x 6 feet long sorbent sock One tire One 55-gallon tub Two rolls of carpet pad (6 foot x 20-inch diameter) Miscellaneous 5-gallon buckets of debris ~~Loose fertilizer on floor~~

TABLE 3

STRUCTURE INVENTORY SUMMARY TABLE
PAGE 2 OF 3

Building	Dimensions (Ft)	Building Materials	Contents
Upper Level; One Room	24 x 10	9 inch x 9 inch vinyl floor tile	Three boxes of sorbent pads (24 inch x 24 inch) Miscellaneous debris (basically clean and empty)
Outside; West			One office desk One fertilizer spreader Wood debris Miscellaneous debris
Outside; East			Two air conditioner units One office desk Miscellaneous debris
Process Building	76 x 36/30 x 32 H		
Room 1	30 x 18 x 16 H	One cinder block wall (16 feet high x 30 feet) ~~Eight 8 foot x 8 inch steel beams~~ ~~150 feet of 6 inch channel steel~~ Aluminum sheeting on walls and roof with fiberglass insulation ~~Concrete floor/foundation~~	~~One boiler (16 foot x 6 1/2 foot diameter on 8 inch steel I beam frame)~~ ~~One 5 foot x 3 foot fuel tank~~ One 8 foot x 4 foot electrical panel
Room 2	30 x 27 x 16 H	Two cinder block walls (one between Rooms 1 and 2 accounted for in Room 1 listing (16 feet high x 30 feet) Aluminum walls on east and west sides ~~Eight 8 inch x 20 foot steel beams~~ ~~Two 8 inch to 18 inch x 30 foot main beams~~ ~~Four 8 inch x 12 foot steel upright beams~~ ~~120 feet of 6 inch steel channel beams~~ ~~Concrete floor/foundation~~	~~Various steel piping~~ Three 10 foot x 8 foot book shelves (2 steel/1 wooden) One snowmobile Fifteen 4 foot x 8 foot styrofoam sheeting insulation

TABLE 3

STRUCTURE INVENTORY SUMMARY TABLE
PAGE 3 OF 3

Building	Dimensions (Ft)	Building Materials	Contents
Room 3	36 x 33 x 32 H	Two cinder block walls (between Rooms 2 and 3 accounted for in Room 2); the other wall is 23 feet high x 36 feet Aluminum walls on east and west sides Partially missing aluminum roof Wooden roof supports ~~Concrete floor/foundation~~	One 6-foot exhaust fan built in ceiling Forty florescent light fixtures (4-foot long) Twelve steel bookshelves Six tires Forty 6-inch PVC elbows and tees Rolls of fiberglass insulation Various other debris

Note

1. All concrete floors/foundations will be left intact.
2. There was 2 to 6 inches of water present on the floor of Room 1 of the process building during this inventory. However, the amount of water will fluctuate based on weather conditions.
3. There is a power pole (with two transformers) located outside the northwest corner of Room 1 of the process building.

TABLE 4

MISCELLANEOUS DEBRIS AREA INVENTORY SUMMARY TABLE
(SEE DRAWINGS FOR LOCATIONS)
PAGE 1 OF 2

Miscellaneous Debris Area	Debris Item
1	~~Seven 55-gallon drums - unknown contents~~ One 4 foot x 4 foot utility sink Pile of cardboard Pile of pieces of wood Painting tools
2	Ten 12-foot wood planks ~~One 18-foot x 10-inch steel lifting beam~~ Twelve 10 foot x 3 foot aluminum sheets
3	Scaffolding material - planks, ~~stands~~, ladders One riding lawn mower ~~One 30-gallon fuel tank~~ ~~Fifteen feet of 5-inch steel pipe~~ Four 10 foot x 3 foot aluminum sheets One metal storage box (4 foot x 3 foot x 2 foot) Two rolls of chicken wire (2 1/2 foot x 18 inches) One roll of cyclone fence (4 foot x 20 inches) Two 20-foot aluminum gutters Six prefab roof supports (25 foot x 4 foot)
4	Six tires One lawn mower Four wooden planks One snowmobile carcass
5	10 foot x 10 foot x 2 inch aluminum roof panel ~~Eight 55-gallon drums - contents unknown~~ Wood pile 20 square feet x 4 inches high 600 feet of 1-inch PVC piping 300 feet of 6-inch PVC piping 30 feet of 8-inch PVC piping ~~100 feet of 2-inch galvanized steel pipe~~ 200 feet of 4-inch corrugated flexline pipe 2-inch steel tubing/framework (100 feet total length) One air compressor Seventeen 1-foot sections of terracotta pipe 300 feet of 1-inch PVC well tubing One 30-gallon tank Twelve concrete parking blocks (6 feet long)

TABLE 4

MISCELLANEOUS DEBRIS AREA INVENTORY SUMMARY TABLE
(SEE DRAWINGS FOR LOCATIONS)
PAGE 2 OF 2

Miscellaneous Debris Area	Debris Item
6	Three 3 foot x 15 foot sheets of aluminum One 6 foot x 3 foot book shelf One 10 foot x 12 foot aluminum wall One snowmobile carcass Scattered insulation One diesel truck engine Two truck tires One aluminum box 10 foot x 8 foot x 8 foot (storage shed) 10 foot x 12 foot area of machinery parts ~~One 55-gallon drum - contents unknown~~

TABLE 5

SOIL VAPOR EXTRACTION PILOT STUDY AREA INVENTORY SUMMARY TABLE

Item	Quantity	Debris in Area
Pilot Vapor Extraction System	100 feet of 4-inch exposed PVC pipe 80 feet of 4-inch buried PVC pipe	8 railroad timbers 20 tires 30 feet of 4-inch corrugated flex line

Note

1. Buried pipe not included in this contract.

TABLE 6 OTHER SITE DEBRIS INVENTORY SUMMARY TABLE		
Item	Approximate Quantity	Location
Dismantled modular tanks	450 square feet aluminum and plastic liner	Southern concrete pad
Wood pile	20 feet x 10 feet x 4 feet high	Southern concrete pad
Various pieces of aluminum sheeting	20	Entire site
Bentonite	1 pallet (500 lbs)	Northwest of Process Building

SITE CLEARING / GRUBBING

TREES/SHRUBS

GENERATOR'S WASTE PROFILE SHEET

PLEASE PRINT IN INK OR TYPE

Waste Profile Sheet Code: WMNA 182489

T rm is to be used to comply with the requirements of a waste agreement.

INSTRUCTIONS FOR COMPLETING THIS FORM ARE ATTACHED

(Shaded Areas For Contractor Use Only) **Decision Expiration Date:** / /

Contractor Sales Rep#: **Service Agr. Renewal Date:** / /

A. WASTE GENERATOR INFORMATION

1. Generator Name: Environmental Conservation & Chemical Corp
2. SIC Code:
3. Facility Address (site of waste generation): 985 South U.S. 421
4. Generator City, State/Province: Zionsville IN 46077
5. Zip/Postal Code:
6. Generator USEPA/Federal ID #: IND 084259951
7. State/Province ID #: IN
8. Technical Contact: Roy O. Ball, PhD PE
9. Phone: (708) 940 - 7207

B. WASTE STREAM INFORMATION (See Instructions)

1. Name of Waste: Building Demolition, Site Clearing / Grubbing, Miscellaneous Debris
2. Process Generating Waste: Clean up, all waste was removed from outside Hot Zone
3. Annual Amount/Units: 1000 cu yd.
4. Type A ☐ Type B ☐
5. Special Handling Instructions/Supplemental Information: None
6. Incidental Waste Types and Amounts:

C. TRANSPORTATION INFORMATION

1. Method of Shipment: ☐ Bulk Liquid ☐ Bulk Sludge ☒ Bulk Solid ☒ Drum/Box ☐ Other
2. Supplemental Shipping Information:
3. Is this a DOT hazardous material? ☒ No ☐ Yes (If yes, complete 4, 5 & 6)
4. Hazard Class/ID #:
5. Reportable Quantity/Units (lb/kg):
6. Shipping Name: Construction & Demolition Debris

D. TECHNICAL MANAGER DECISION (Check One) ☐ **APPROVED** ☐ **DISAPPROVED** ☐ Check if additional information is attached

If Disapproved, Explain:

If Approved, Continue.

1. Management Method(s)
2. Precautions, Conditions, or Limitations on Approval:
3. For Type A Wastes, Laboratory Analysis of a Representative Sample Was: ☐ Waived ☐ Attached

If waived, explain why:

4. List Non-WMI Facility that is Approved to Manage this Waste: Date:

Tech. Mgr. Signature: Name (Print): Date:

E. MANAGEMENT FACILITY INFORMATION / DECISION

1. Proposed Management Facility:
2. Proposed Intermediate Transfer Facility: 3. Transporter:
4. **Management Facility Gen. Mgr. Decision (Check One)** ☐ **APPROVED** ☐ **DISAPPROVED**

sapproved, Explain:

pproved, List Precautions, Conditions, or Limitations on Approval:

General Mgr. Signature: Name (Print): Date:

Turn Page and Complete Side 2 (If Type B Special Waste, only complete Part J of Side 2)

Printed on Recycled Paper

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 5
77 WEST JACKSON BOULEVARD
CHICAGO, IL 60604-3590

AWD TECHNOLOGIES
AUG 2
INDIANAPOLIS

TECHNOLOGIES
AUG 3 1993
INDIANAPOLIS

REPLY TO THE ATTENTION OF:

JUL 30 1993

Brad Grow
AWD Technologies, Inc.
Woodfield One, Suite 375
8330 Woodfield Crossing Blvd.
Indianapolis, IN 46240

Dear Brad:

We have completed our review of the Site Preparation and Material Removal Design Documents and hereby approve those documents. Specifically, we are approving:

A) "Technical Specifications, Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana", December 1992.

B) "Quality Assurance Project Plan", Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana" December 1992.

C) "Construction Quality Assurance Plan, Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana", December 1992.

D) "Site Management Plan, Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana" December 1992.

E) "Air Monitoring Plan, Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana", April 1993.

F) "Environmental Control and Maintenance Plan, Site Preparation and Material Removal, Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana", December 1992.

G) "Pre-Final Design, Site Preparation and Material Removal, Enviro-Chem Superfund Site, Zionsville, Indiana" Drawings, December 21, 1992.

These documents also include and incorporate the following amendments:

1) "Response to U.S. EPA Comments on the Site Preparation

and Material Removal Pre-Final Design, Enviro-Chem Superfund Site, Zionsville, Indiana", May 1993.

2) Your letter to me dated May 17, 1993 transmitting supplemental information to number 1 above.

3) Your letter to me dated June 3, 1993 "Response to Your Letter of May 27, 1993".

4) Your letter to me dated July 15, 1993 "Response to USEPA July 1 Comments on the Pre-Final Design".

5) Drawing Number C-3, Revision 1 which was sent to me by Mark Dowiak via Airborne Express on July 15, 1993.

These documents constitute the "project plans, construction contract specifications and revised drawings" referred to in Section XVII.A.2.a. of the Consent Decree. Per Section XVII.A.2.b. of the Decree, completion of the site work described in these documents must be concluded by 4 months from the date of this letter.

We have not received as yet a final printed copy of the approved documents. Please forward copies of the final documents to us as soon as possible. This is especially important for our oversight contractor who will be at the site.

We look forward to the completion of this portion of the Superfund remedy at the Enviro-Chem site. If you have any questions, please feel free to contact me.

Sincerely,

Karen A. Vendl

Karen A. Vendl
Senior Remedial Project Manager
Office of Superfund

cc: Jim Smith, IDEM
Frank Mahuta, CH2M Hill
Thomas Krueger, USEPA

1.0 INTRODUCTION

1.1 Background

This Health and Safety Plan (HASP) has been developed for the site preparation and material removal activities to be conducted at the Environmental Conservation and Chemical Corporation (ECC) Site, located in Zionsville, Indiana. The HASP contains the procedures that are necessary to protect onsite personnel and the general public during this phase of work.

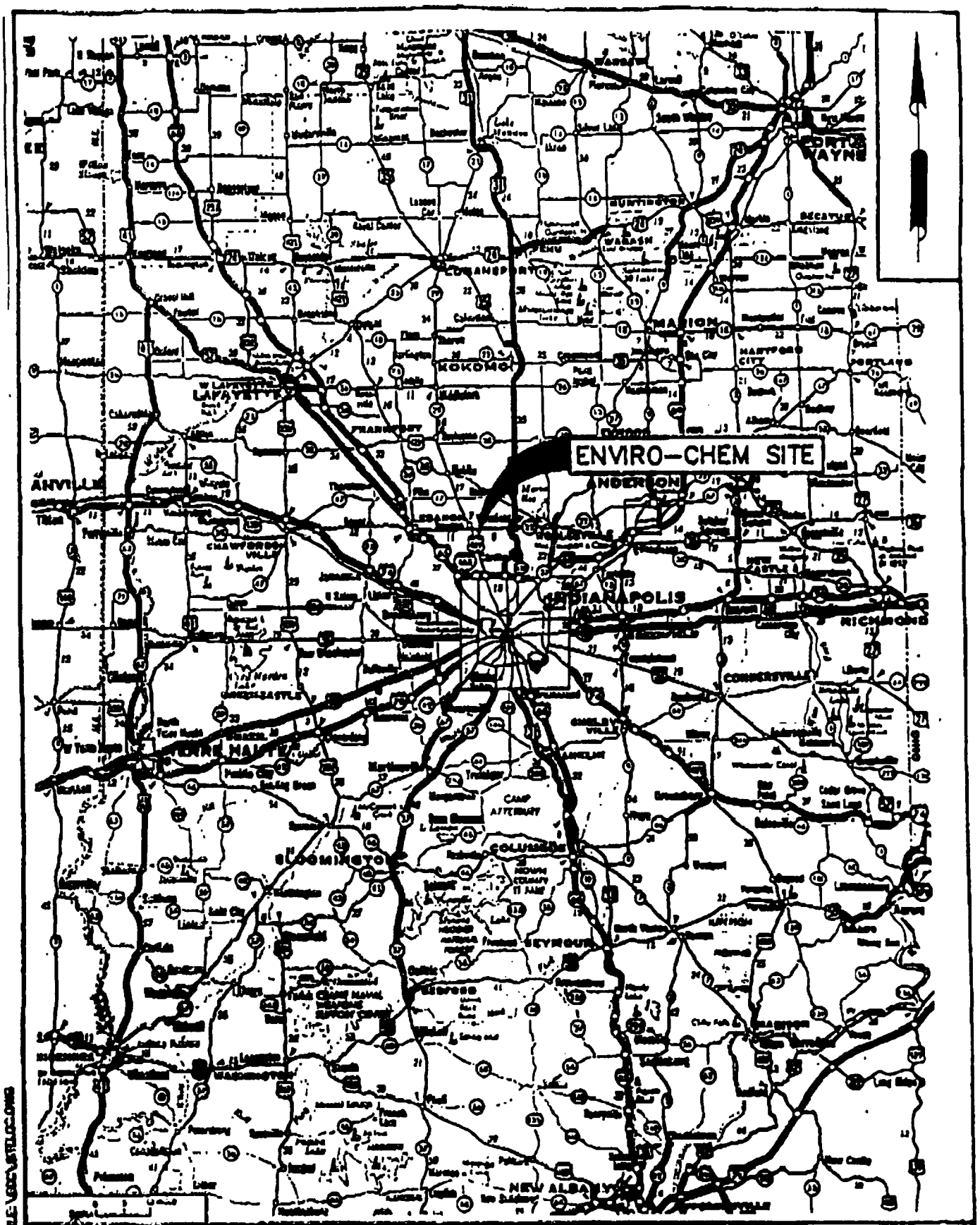
The ECC Site is located in Boone County, approximately 10 miles northwest of Indianapolis, on State Route 421 in Zionsville, Indiana (Figure 1-1). The Site occupies 6.5 acres to the west of the Northside Sanitary Landfill (NSL), a closed solid waste disposal facility. The ECC Site is also bounded on the south and east by NSL property. An unnamed ditch separates the two facilities along the eastern boundary. Several residential homes are located within 1/2 mile of the facility to the north and west (Figure 1-2).

In 1977, ECC began operations at the Site that consisted of the recovery, reclamation, and brokering of primary solvents, oils, and other wastes. Waste products were received in drums and bulk tankers and prepared for subsequent reclamation or disposal. Processes to reclaim solvents and oil included distillation, evaporation, and fractionation.

The U.S. Environmental Protection Agency (U.S. EPA) investigations concerning the accumulation of contaminated storm water onsite, improper drum inventory, and several spill incidents lead to civil law suits, and finally the placement of ECC into receivership in July 1981.

Drum shipments to the Site were halted in February 1982. Surface cleanup activities conducted by U.S. EPA contractors during 1983 and 1984 included the removal of cooling pond waters, waste drums, tank wastes, contaminated soil, and cooling pond sludge.

A Remedial Investigation/Feasibility Study (RI/FS) was conducted by CH2M Hill for the U.S. EPA from 1983 through 1986. The Record of Decision (ROD) for the Site was issued on September 25, 1987 and amended on June 7, 1991, and the Consent Decree for remediation of the Site was entered on September 10, 1991.



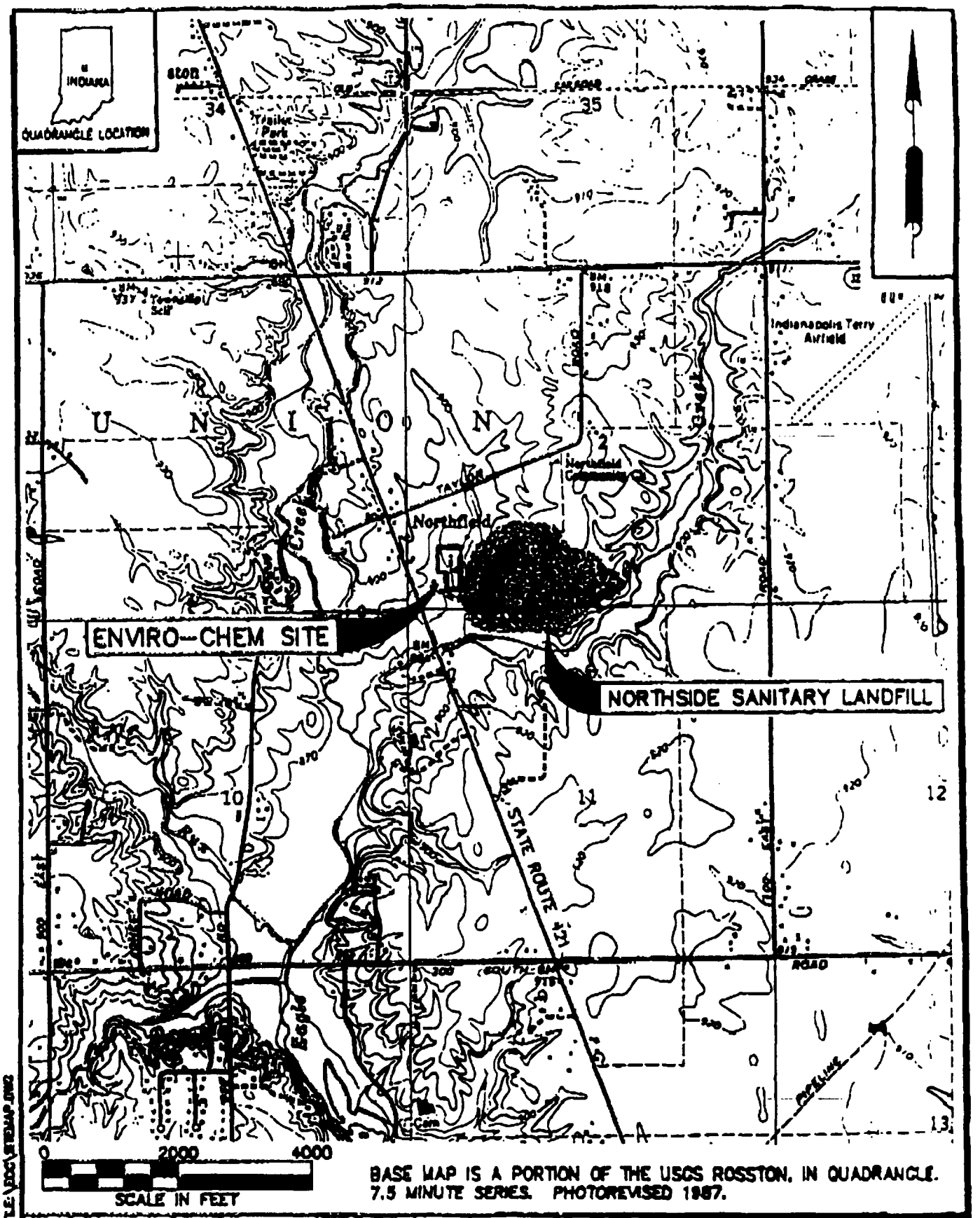
AWD TECHNOLOGIES, INC

AWD

SITE LOCATION MAP

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN

CLIENT: ENVIRONMENTAL CONSERVATION & CHEMICAL CORP. TRUST JOB NUMBER 2259-554



BASE MAP IS A PORTION OF THE USGS ROSSTON, IN QUADRANGLE. 7.5 MINUTE SERIES. PHOTOREVISED 1987.

AWD TECHNOLOGIES, INC

AWD

SITE MAP

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN

CLIENT: ENVIRONMENTAL CONSERVATION & CHEMICAL CORP. TRUST JOB NUMBER 2259-554

TO ENSURE PROPER HANDLING OF SAM[illegible]S PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - № 14513

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: AWD TECHNOLOGIES
Project Name: ENVIRO - CHEM
Quote No.: Z117222 PO No.: 2396

ENVIRONMENTAL PROGRAM:

CWA NPDES_____ IWP_____ SLUDGE_____

RCRA MW_____ SW_____ DISPOSAL_____

SDWA_____ CERCLA/SUPERFUND_____ OTHER_____

Sampled by: SCOTT WEISHAAR

Analyses Requested (Note special detection limits or methods)

Report To:
Co: ~~JIM FIFE~~ AWD TECHNOLOGIES
Add: RESIDENCE INN
3553 FOUNDERS RD ~~Ste 113~~
INDPLS IN 46268
Attn: JIM FIFE
Phone: 317 872-0462

Accelerated Turnaround Requested YES
(Subject to Additional Charge)

Result Request by: 09 / 07 / 93
Mo Day Yr
(Date must be Accepted and Approved by Lab)

Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No. of Containers	RCRA TCLP - CLP SOW OLM01.0 METHOD	CHROMIUM - SW-846 METHOD 7195	TIN - SW-846 METHOD 6010	[illegible]						Remarks:	EMS Sample No
#1	08/31/93	1:00	✓		ECC-04A1-PBM-01 CONCRETE		1	1	1	1	[illegible]							
#2	08/31/93	1:40	✓		ECC-04A1-PBM-02 FIBERGLASS		1	1	1	1	[illegible]							
#3	08/31/93	2:00	✓		ECC-04A1-PBM-03 STYROFOAM		1	1	1	1	[illegible]							
#4	08/31/93	2:15	✓		ECC-04A1-PBM-04 WOOD		1	1	1	1	[illegible]							

Relinquished by: (Signature)	Date /Time	Received by (Signature)	Relinquished by (Signature)	Date /Time	Received by (Signature)
Scott Weishaar	08/31/93 4:30pm	[illegible]		/	
Relinquished by (Signature)	Date /Time	Received by (Signature)	Relinquished by (Signature)	Date /Time	Received by (Signature)
[illegible]	8/31/93 / 5:45			/	
Relinquished by (Signature)	Date /Time	Received for Lab by (Signature)	Date / Time	Remarks	
	/	Steve Asker	8/31/93 5:45		

Distribution: White original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to also be retained by client.

TO ENSURE PROPER HANDLING OF SAMPLES PLEASE COMPLETE THIS ENTIRE FORM

HERITAGE LABORATORIES, INC.

I - № 14514

7901 West Morris Street
Indianapolis, Indiana 46231 (317) 243-0811 Fax (317) 486-5095

Co. Name: AWD TECHNOLOGIES
Project Name: ENVIRO - CHEM
Quote No.: Z 117222 PO No.: 2396

ENVIRONMENTAL PROGRAM:

CWA NPDES_____ IWP_____ SLUDGE_____

RCRA MW_____ SW_____ DISPOSAL_____

SDWA_____ CERCLA/SUPERFUND_____ OTHER_____

Sampled by: SCOTT WEISHAAR

Analyses Requested (Note special detection limits or methods)

Report To:
Co: AWD TECHNOLOGIES
Add: RESIDENCE INN
3553 FOUNDERS RD.
INDPLS IN 46268
Attn: JAMES FIFE
Phone: 317 - 872 - 0462

Accelerated Turnaround Requested YES
(Subject to Additional Charge)

Result Request by: 09 / 14 / 93
Mo Day Yr
(Date must be Accepted and Approved by Lab)

Sample ID:	Date:	Time:	Comp	Grab	Sample Description:	Sample Type (Matrix): DW, GW, WW, Soil, Oil, Sludge, Other	No of Containers	RCRA TCLP METHOD CLP SOW OLM01.0	CHROMIUM VI SW-846 METHOD 7195	T.N SW-846 METHOD 6010							Remarks:	EMS Sample No
02	9/07/93	10:15	✓		ECC-04A1-PBM-02 FIBERGLASS		15	15	15	15								
03	9/07/93	10:30	✓		ECC-04A1-PBM-03 STYROFOAM		15	15	15	15								
04	9/07/93	11:00	✓		ECC-04A1-PBM-04 WOOD		1	1	1	1								

Relinquished by (Signature)	Date /Time	Received by (Signature)	Relinquished by (Signature)	Date /Time	Received by (Signature)
Scott Weishaar	9/07/93 / 12:15pm	James R Fife		/	
Relinquished by (Signature)	Date /Time	Received by (Signature)	Relinquished by (Signature)	Date /Time	Received by (Signature)
James R Fife	9/7/93 / 1:04P	Gary L Scott		/	
Relinquished by (Signature)	Date /Time	Received for Lab by (Signature)	Date / Time	Remarks	
	/		/		

Distribution: White original to be retained by client. Yellow copy to accompany sample to laboratory. Pink copy to be retained by client.

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	2471	A288829
	Complete: 17-SEP-93	PO Number: 92005 *	
	Printed: 17-SEP-93	Sampled: 31-AUG-93 13:00	

Report To

JIM FIFE
AWD TECHNOLOGIES, INC.
3553 FOUNDERS RD
C/O RESIDENCE INN
INDIANAPOLIS, IN 46268

Bill To

ACCOUNTS PAYABLE
AWD TECHNOLOGIES, INC.
BUILDING 3, SUITE 300
PENN CENTER WEST
PITTSBURGH, PA 15276

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-01
DESCRIPTION: CONCRETE
LOCATION: ECC -ZIONSVILLE

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

Analyst: G. WILSON Analysis Date: 03-SEP-93 Test: P108.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	227.5		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLM01

Analyst: G. WILSON Analysis Date: 07-SEP-93 08:32 Instrument: GC/MS VOA Test: 0902.2.0

Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0

Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	100	ug/L
TRICHLOROETHENE	BDL	100	ug/L
DIBROMOCHLOROMETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

 (continued on next page)

HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
BROMOFORM	BDL	100	ug/L
-METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	97		% Rec
TOLUENE-D8	88		% Rec
BROMOFLUOROBENZENE	92		% Rec

1:10 DILUTION.

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: B. HAHN Analysis Date: 02-SEP-93 Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	10.21		Std. Units
ADJUSTED PH	1.96		Std. Units
BUFFER SOLUTION PH	4.92		Std. Units
FINAL PH	6.92		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	8034.4		HRS
FINAL TIME	8050.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLM01

Analyst: C. KING Analysis Date: 09-SEP-93 Test: P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 14-SEP-93 19:05 Instrument: GC/MS SVOA Test: 0901.2.0

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	EST 5	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	16	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L

HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY			
2-FLUOROPHENOL	74		% Rec
PHENOL-D5	80		% Rec
NITROBENZENE-D5	83		% Rec
2-CHLOROPHENOL-D4	87		% Rec
2-FLUOROBIPHENYL	87		% Rec
2,4,6-TRIBROMOPHENOL	92		% Rec
TERPHENYL-D14	86		% Rec
1,2-DICHLOROBENZENE-D4	70		% Rec
ALSO DETECTED			
UNKNOWN	EST 14 RT=6.69		ug/L
1-METHYLETHYL ESTER PROPANOIC ACID	EST 20 RT=6.77		ug/L
UNKNOWN ACID	EST 11 RT=7.2		ug/L
UNKNOWN	EST 5 RT=7.53		ug/L
2-METHYL-1-METHYLETHYL ESTER PROPANOIC ACID	EST 10 RT=7.59		ug/L
UNKNOWN	EST 21 RT=7.68		ug/L
UNKNOWN	EST 6 RT=7.84		ug/L
UNKNOWN ACID	EST 52 RT=8.54		ug/L
UNKNOWN	EST 7 RT=9.53		ug/L
UNKNOWN	EST 29 RT=9.94		ug/L
UNKNOWN	EST 10 RT=11.24		ug/L
UNKNOWN ACID	EST 19 RT=11.47		ug/L
UNKNOWN	EST 6 RT=14.04		ug/L
2-(2-BUTOXYETHOXY)ETHANOL	EST 53 RT=14.74		ug/L
NONANOIC ACID	EST 15 RT=15.74		ug/L
UNKNOWN	EST 6 RT=19.3		ug/L
UNKNOWN	EST 5 RT=19.4		ug/L
UNKNOWN	EST 5 RT=19.97		ug/L
HEXANEDIOIC ACID, DIOCTYL ESTER	EST 4 RT=26.95		ug/L
BENZOIC ACID	EST 12 RT=14.4		ug/L

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.4.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: E. MERRILL Analysis Date: 09-SEP-93 Test: P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: C. COFFEY Analysis Date: 09-SEP-93 Test: P930.6.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: R. BYERS Analysis Date: 09-SEP-93 Test: P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M902.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

ARSENIC GFAA (CLP) ILM01

Analyst: A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.0020	mg/L

BARIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M904.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	0.69	0.010	mg/L

BERYLLIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M905.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M908.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 07-SEP-93 Test: M110.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

ANALYSIS FROM TCLP LEACHATE.

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.022	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	BDL	0.0030	mg/L

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.29	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M922.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.011	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M938.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	0.011	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M959.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	0.47	0.020	mg/L

(EUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: B. HAHN Analysis Date: 02-SEP-93 Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	10.02		Std. Units
FINAL PH	9.23		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	12582.7		Hours
FINAL TIME	12606.7		Hours

CYANIDE DISTILLATION (CLP) ILM01

Analyst: J. STOAKES Analysis Date: 07-SEP-93 Test: P901.4.0
Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER Analysis Date: 07-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

BDL Below Detection Limit
EST Estimated Value
NA Not Applicable
RT Retention Time

Sample chain of custody number 14513.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Quality Assurance Officer: _____

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	2471	A288830
	Complete: 17-SEP-93	PO Number: 92005 *	
	Printed: 17-SEP-93	Sampled: 31-AUG-93 13:40	

Report To

JIM FIFE
AWD TECHNOLOGIES, INC.
3553 FOUNDERS RD
C/O RESIDENCE INN
INDIANAPOLIS, IN 46268

Bill To

ACCOUNTS PAYABLE
AWD TECHNOLOGIES, INC.
BUILDING 3, SUITE 300
PENN CENTER WEST
PITTSBURGH, PA 15276

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-02
DESCRIPTION: FIBERGLASS
LOCATION: ECC -ZIONSVILLE

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

Analyst: G. WILSON Analysis Date: 03-SEP-93 Test: P108.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	7.5		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	7.5		Grams
PHASE ONE VOLUME (REP 0)	147.2		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLM01

Analyst: G. WILSON Analysis Date: 07-SEP-93 09:19 Instrument: GC/MS VOA Test: 0902.2.0
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0

Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	100	ug/L
TRICHLOROETHENE	BDL	100	ug/L
DIBROMOCHLOROMETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288830

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
BROMOFORM	BDL	100	ug/L
4-METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	113		% Rec
TOLUENE-D8	100		% Rec
BROMOFLUOROBENZENE	105		% Rec

1:10 DILUTION.

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: B. HAHN Analysis Date: 08-SEP-93 Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	3.77		Std. Units
ADJUSTED PH	NA		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	4.86		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	22		Degrees C
INITIAL TIME	8086.6		HRS
FINAL TIME	8102.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLM01

Analyst: C. KING Analysis Date: 09-SEP-93 Test: P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

HERITAGE LABORATORIES, INC. Lab Sample ID: A288830

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 14-SEP-93 15:43 Instrument: GC/MS SVOA Test: 0901.2.0

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	12	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	13	10	ug/L

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY			
2-FLUOROPHENOL	76		% Rec
PHENOL-D5	79		% Rec
NITROBENZENE-D5	91		% Rec
2-CHLOROPHENOL-D4	83		% Rec
2-FLUOROBIPHENYL	97		% Rec
2,4,6-TRIBROMOPHENOL	95		% Rec
TERPHENYL-D14	135		% Rec
1,2-DICHLOROBENZENE-D4	65		% Rec
ALSO DETECTED			
UNKNOWN	EST 83 RT=7.09		ug/L
UNKNOWN	EST 116 RT=9.1		ug/L
UNKNOWN	EST 96 RT=11.7		ug/L
UNKNOWN	EST 120 RT=16.66		ug/L
UNKNOWN	EST 40 RT=16.73		ug/L
4-HYDROXY-BENZALDEHYDE	EST 150 RT=17.16		ug/L
UNKNOWN ACID	EST 56 RT=18.03		ug/L
4-METHYL-1,2-BENZENEDICARBOXYLIC ACID	EST 46 RT=18.25		ug/L
UNKNOWN	EST 79 RT=19.27		ug/L
UNKNOWN	EST 41 RT=19.34		ug/L
UNKNOWN	EST 78 RT=19.54		ug/L
UNKNOWN	EST 120 RT=19.84		ug/L
UNKNOWN	EST 45 RT=19.96		ug/L
UNKNOWN	EST 38 RT=20.08		ug/L
UNKNOWN	EST 44 RT=20.28		ug/L
UNKNOWN	EST 66 RT=20.37		ug/L
NONANEDIOIC ACID	EST 160 RT=20.51		ug/L
UNKNOWN	EST 37 RT=23.76		ug/L
1,8-NAPHTHALIC ANHYDRIDE	EST 36 RT=24.58		ug/L

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 15-SEP-93 14:05 Instrument: GC/MS SVOA Test: 0901.2.1

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L

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Parameter	Result	Det. Limit	Units
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	14	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY	BDL		

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Parameter	Result	Det. Limit	Units
----------	BDL		
2-FLUOROPHENOL	10		% Rec
PHENOL-D5	44		% Rec
NITROBENZENE-D5	54		% Rec
2-CHLOROPHENOL-D4	43		% Rec
2-FLUOROBIPHENYL	80		% Rec
2,4,6-TRIBROMOPHENOL	107		% Rec
TERPHENYL-D14	137		% Rec
1,2-DICHLOROBENZENE-D4	54		% Rec

TICS ARE NOT QUANTIFIED ON RE-ANALYSIS.

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: E. MERRILL Analysis Date: 09-SEP-93 Test: P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: C. COFFEY Analysis Date: 09-SEP-93 Test: P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Analyst: R. BYERS Analysis Date: 09-SEP-93 Test: P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M902.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	0.047	0.030	mg/L

ARSENIC GFAA (CLP) ILM01

Analyst: A. ROBERTSON Analysis Date: 10-SEP-93 Instrument: GFAA Test: M903.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.020	mg/L

1:4 DILUTION

BARIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M904.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	0.90	0.010	mg/L

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BERYLLIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 13-SEP-93 08:00 Instrument: ICP Test: M905.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M908.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	0.21	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 15-SEP-93 Test: M110.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.05	mg/L

1:5 dilution due to color interference.

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.048	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	0.36	0.12	mg/L

1:40 DILUTION

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	2.2	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

HERITAGE LABORATORIES, INC. Lab Sample ID: A288830

NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M922.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.14	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.010	mg/L

1:2 DILUTION

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M938.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M939.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	40.	0.020	mg/L

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: B. HAHN Analysis Date: 08-SEP-93 Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	3.99		Std. Units
FINAL PH	4.34		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL

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HERITAGE LABORATORIES, INC.

Lab Sample ID: A288830

Parameter	Result	Det. Limit	Units
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01

Analyst: J. STOAKES Analysis Date: 10-SEP-93 Test: P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE WAS RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS SAMPLED ON 09/07/93 AT 10:15AM. DCE

BDL Below Detection Limit
EST Estimated Value
NA Not Applicable
RT Retention Time

Sample chain of custody number 14513.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Quality Assurance Officer: _____

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	2471	A288944
	Complete	PO Number	
	17-SEP-93	92005 *	
	Printed	Sampled	
	17-SEP-93	31-AUG-93 14:40	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-03
DESCRIPTION: STYROFOAM
LOCATION: ECC -ZIONSVILLE

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

Analyst: G. WILSON Analysis Date: 03-SEP-93 Test: P108.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	8.9		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	8.9		Grams
PHASE ONE VOLUME (REP 0)	171.4		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLM01

Analyst: G. WILSON Analysis Date: 07-SEP-93 10:08 Instrument: GC/MS VOA Test: 0902.2.0
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0

Parameter	Result	Det. Limit	Units
CHLOROMETHANE	200	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	100	ug/L
TRICHLOROETHENE	BDL	100	ug/L
DIBROMOCHLOROMETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
BROMOFORM	BDL	100	ug/L
4-METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	114		% Rec
TOLUENE-D8	95		% Rec
BROMOFLUOROBENZENE	102		% Rec

1:10 DILUTION.

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: B. HAHN Analysis Date: 08-SEP-93 Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	7.30		Std. Units
ADJUSTED PH	1.41		Std. Units
BUFFER SOLUTION PH	4.95		Std. Units
FINAL PH	5.15		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	22		Degrees C
INITIAL TIME	8086.6		HRS
FINAL TIME	8102.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLM01

Analyst: C. KING Analysis Date: 09-SEP-93 Test: P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 14-SEP-93 16:33 Instrument: GC/MS SVOA Test: 0901.2.0

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	EST 6	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
'ENZ(A)ANTHRACENE	BDL	10	ug/L
.HRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY			

2-FLUOROPHENOL	81		% Rec
PHENOL-D5	85		% Rec
NITROBENZENE-D5	91		% Rec
2-CHLOROPHENOL-D4	90		% Rec
2-FLUOROBIPHENYL	101		% Rec
2,4,6-TRIBROMOPHENOL	98		% Rec
TERPHENYL-D14	102		% Rec
1,2-DICHLOROBENZENE-D4	66		% Rec

ALSO DETECTED			

3-HYDROXY-2-BUTANONE	EST 33 RT=6.65		ug/L
UNKNOWN	EST 14 RT=6.83		ug/L
UNKNOWN	EST 31 RT=6.9		ug/L
INKNOWN	EST 85 RT=7.09		ug/L
UNKNOWN ACID	EST 43 RT=7.82		ug/L
UNKNOWN	EST 13 RT=8.11		ug/L
UNKNOWN ACID	EST 13 RT=8.45		ug/L
UNKNOWN	EST 13 RT=8.68		ug/L
UNKNOWN	EST 21 RT=8.84		ug/L
UNKNOWN ACID	EST 28 RT=11.49		ug/L
ACETOPHENONE	EST 26 RT=13.01		ug/L
METHYL ESTER 3-FURANCARBOXYLIC ACID	EST 48 RT=13.23		ug/L
UNKNOWN	EST 19 RT=17.99		ug/L
NONANOIC ACID	EST 16 RT=15.79		ug/L
UNKNOWN	EST 15 RT=18.02		ug/L
UNKNOWN	EST 12 RT=18.11		ug/L
UNKNOWN	EST 20 RT=18.41		ug/L
UNKNOWN	EST 24 RT=19.24		ug/L
UNKNOWN	EST 11 RT=21.52		ug/L
BENZOIC ACID	EST 290 RT=14.76		ug/L

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 15-SEP-93 13:14 Instrument: GC/MS SVOA Test: 0901.2.1

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	EST 5	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L

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HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

Parameter	Result	Det. Limit	Units
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

Parameter	Result	Det. Limit	Units
SURROGATE RECOVERY	BDL		
2-FLUOROPHENOL	10		% Rec
PHENOL-D5	44		% Rec
NITROBENZENE-D5	54		% Rec
2-CHLOROPHENOL-D4	43		% Rec
2-FLUOROBIPHENYL	80		% Rec
2,4,6-TRIBROMOPHENOL	107		% Rec
TERPHENYL-D14	137		% Rec
1,2-DICHLOROBENZENE-D4	54		% Rec

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: E. MERRILL Analysis Date: 09-SEP-93 Test: P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: C. COFFEY Analysis Date: 09-SEP-93 Test: P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: R. BYERS Analysis Date: 09-SEP-93 Test: P951.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01
Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M902.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

ARSENIC GFAA (CLP) ILM01
Analyst: A. ROBERTSON Analysis Date: 10-SEP-93 Instrument: GFAA Test: M903.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	BDL	0.020	mg/L

1:4 DILUTION

BARIUM ICP (CLP) ILM01
Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M904.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	1.3	0.010	mg/L

HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

BERYLLIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 13-SEP-93 08:00 Instrument: ICP Test: M905.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M908.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	0.027	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 15-SEP-93 Test: M110.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.01	mg/L

Observed low spike recovery. Spike analyzed twice.

CHROMIUM ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	BDL	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	0.032	0.0060	mg/L

1:2 DILUTION

MANGANESE ICP (CLP) ILM01

Analyst: N. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.56	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. HAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

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NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M922.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	0.031	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M938.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M939.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	4.4	0.020	mg/L

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: B. HAHN Analysis Date: 08-SEP-93 Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	6.21		Std. Units
FINAL PH	6.24		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours

 (continued on next page)

HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

Parameter	Result	Det. Limit	Units
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01

Analyst: J. STOAKES Analysis Date: 10-SEP-93 Test: P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE WAS RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS SAMPLED ON 09/07/93 AT 10:30AM. DCE

BDL Below Detection Limit
EST Estimated Value
NA Not Applicable
RT Retention Time

Sample chain of custody number 14513.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Quality Assurance Officer: _____

CERTIFICATE OF ANALYSIS

Service Location	Received	Project	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	2471	A288945
	Complete	PO Number	
	17-SEP-93	92005 *	
	Printed	Sampled	
	17-SEP-93	31-AUG-93 14:15	

Report To	Bill To
JIM FIFE AWD TECHNOLOGIES, INC. 3553 FOUNDERS RD C/O RESIDENCE INN INDIANAPOLIS, IN 46268	ACCOUNTS PAYABLE AWD TECHNOLOGIES, INC. BUILDING 3, SUITE 300 PENN CENTER WEST PITTSBURGH, PA 15276

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-04
DESCRIPTION: WOOD
LOCATION: ECC -ZIONSVILLE

ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

Analyst: G. WILSON Analysis Date: 03-SEP-93 Test: P108.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	25.0		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
LIQUID PORTION	NA		mL
EXTRACTED SAMPLE	25.0		Grams
PHASE ONE VOLUME (REP 0)	423.5		mL
PHASE TWO VOLUME (REP 1)	NA		mL

CLP VOLATILE ORGANICS OLM01

Analyst: G. WILSON Analysis Date: 07-SEP-93 10:56 Instrument: GC/MS VOA Test: 0902.2.0
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311 P108.1.0

Parameter	Result	Det. Limit	Units
CHLOROMETHANE	BDL	100	ug/L
BROMOMETHANE	BDL	100	ug/L
VINYL CHLORIDE	BDL	100	ug/L
CHLOROETHANE	BDL	100	ug/L
METHYLENE CHLORIDE	BDL	100	ug/L
ACETONE	BDL	100	ug/L
CARBON DISULFIDE	BDL	100	ug/L
1,1-DICHLOROETHENE	BDL	100	ug/L
1,1-DICHLOROETHANE	BDL	100	ug/L
1,2-DICHLOROETHENE (TOTAL)	BDL	100	ug/L
CHLOROFORM	BDL	100	ug/L
1,2-DICHLOROETHANE	BDL	100	ug/L
2-BUTANONE	BDL	100	ug/L
1,1,1-TRICHLOROETHANE	BDL	100	ug/L
CARBON TETRACHLORIDE	BDL	100	ug/L
BROMODICHLOROMETHANE	BDL	100	ug/L
1,2-DICHLOROPROPANE	BDL	100	ug/L
CIS-1,3-DICHLOROPROPENE	BDL	100	ug/L
TRICHLOROETHENE	BDL	100	ug/L
DIBROMOCHLOROMETHANE	BDL	100	ug/L
1,1,2-TRICHLOROETHANE	BDL	100	ug/L
BENZENE	BDL	100	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288945

Parameter	Result	Det. Limit	Units
TRANS-1,3-DICHLOROPROPENE	BDL	100	ug/L
BROMOFORM	BDL	100	ug/L
-METHYL-2-PENTANONE	BDL	100	ug/L
2-HEXANONE	BDL	100	ug/L
TETRACHLOROETHENE	BDL	100	ug/L
TOLUENE	BDL	100	ug/L
1,1,2,2-TETRACHLOROETHANE	BDL	100	ug/L
CHLOROBENZENE	BDL	100	ug/L
ETHYLBENZENE	BDL	100	ug/L
STYRENE	BDL	100	ug/L
XYLENE (TOTAL)	BDL	100	ug/L
SURROGATE RECOVERY			
DICHLOROETHANE-D4	109		% Rec
TOLUENE-D8	97		% Rec
BROMOFLUOROBENZENE	101		% Rec

1:10 DILUTION.

TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

Analyst: S. CARDWELL Analysis Date: 03-SEP-93 Test: P107.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
NITIAL PH	3.91		Std. Units
ADJUSTED PH	NA		Std. Units
BUFFER SOLUTION PH	4.93		Std. Units
FINAL PH	4.88		Std. Units
VOLUME BUFFERED SOLUTION	2000		mL
VOLUME EXTRACT FILTERED	2000		mL
LIQUID FRACTION	0		mL
TOTAL VOLUME FILTRATE	2000		mL
AMBIENT TEMPERATURE	23		Degrees C
INITIAL TIME	8050.9		HRS
FINAL TIME	8068.9		HRS
PHASE 0 VOLUME (REP 0)	NA		mL
PHASE 0 WEIGHT	NA		Grams
PHASE 0 DENSITY	NA		g/mL
PHASE 1 VOLUME (REP 1)	NA		mL
PHASE 1 WEIGHT	NA		Grams
PHASE 1 DENSITY	NA		g/mL

CLP SEMI-VOLATILE EXTRACTION OLM01

Analyst: C. KING Analysis Date: 09-SEP-93 Test: P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	1000		mL
FINAL VOLUME	1.0		mL

HERITAGE LABORATORIES, INC. Lab Sample ID: A288945

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 14-SEP-93 17:24 Instrument: GC/MS SVOA Test: 0901.2.0

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L

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HERITAGE LABORATORIES, INC. Lab Sample ID: A288945

Parameter	Result	Det. Limit	Units
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY			
2-FLUOROPHENOL	76		% Rec
PHENOL-D5	48		% Rec
NITROBENZENE-D5	55		% Rec
2-CHLOROPHENOL-D4	70		% Rec
2-FLUOROBIPHENYL	89		% Rec
2,4,6-TRIBROMOPHENOL	95		% Rec
TERPHENYL-D14	64		% Rec
1,2-DICHLOROBENZENE-D4	67		% Rec
ALSO DETECTED			
1-METHYLETHYL ESTER PROPANOIC ACID	EST 67 RT=6.92		ug/L
2-METHYLPROPANOIC ACID	EST 10 RT=7.3		ug/L
BUTANOIC ACID	EST 31 RT=7.74		ug/L
BUTENOIC ACID	EST 11 RT=7.87		ug/L
2-METHYLETHYL ESTER BUTANOIC ACID	EST 8 RT=8.46		ug/L
UNKNOWN ACID	EST 20 RT=8.54		ug/L
UNKNOWN ACID	EST 12 RT=8.74		ug/L
UNKNOWN	EST 7 RT=10.51		ug/L
UNKNOWN KETONE	EST 11 RT=11.53		ug/L
UNKNOWN	EST 10 RT=13.2		ug/L
UNKNOWN	EST 13 RT=16.67		ug/L
UNKNOWN	EST 12 RT=16.88		ug/L
UNKNOWN	EST 7 RT=17.27		ug/L
UNKNOWN	EST 62 RT=17.45		ug/L
4-HYDROXY-3-METHOXY-BENZALDEHYDE	EST 8 RT=17.65		ug/L
2,5-DIMETHOXY-3,6-DI..2,5-CYCLOHEXADIENE-1,4-DIO	EST 10 RT=17.99		ug/L
UNKNOWN	EST 10 RT=18.07		ug/L
UNKNOWN	EST 7 RT=19.68		ug/L
UNKNOWN	EST 9 RT=19.76		ug/L
8-HYDROXY-6-METHOXY-3-METHYL-1H-2-BENZOPYRAN-1-O	EST 13 RT=22.52		ug/L
UNKNOWN	EST 10 RT=22.88		ug/L

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst: A. BRADBURN Analysis Date: 15-SEP-93 14:55 Instrument: GC/MS SVOA Test: 0901.2.1

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01 P901.2.0

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
PHENOL	BDL	10	ug/L
BIS(2-CHLOROETHYL)ETHER	BDL	10	ug/L
2-CHLOROPHENOL	BDL	10	ug/L
1,3-DICHLOROBENZENE	BDL	10	ug/L
1,4-DICHLOROBENZENE	BDL	10	ug/L
1,2-DICHLOROBENZENE	BDL	10	ug/L

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HERITAGE LABORATORIES, INC.

Lab Sample ID: A288945

Parameter	Result	Det. Limit	Units
2-METHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROISOPROPYL)ETHER	BDL	10	ug/L
4-METHYLPHENOL	BDL	10	ug/L
N-NITROSO-DI-N-PROPYLAMINE	BDL	10	ug/L
HEXACHLOROETHANE	BDL	10	ug/L
NITROBENZENE	BDL	10	ug/L
ISOPHORONE	BDL	10	ug/L
2-NITROPHENOL	BDL	10	ug/L
2,4-DIMETHYLPHENOL	BDL	10	ug/L
BIS(2-CHLOROETHOXY)METHANE	BDL	10	ug/L
2,4-DICHLOROPHENOL	BDL	10	ug/L
1,2,4-TRICHLOROBENZENE	BDL	10	ug/L
NAPHTHALENE	BDL	10	ug/L
4-CHLOROANILINE	BDL	10	ug/L
HEXACHLOROBUTADIENE	BDL	10	ug/L
4-CHLORO-3-METHYLPHENOL	BDL	10	ug/L
2-METHYLNAPHTHALENE	BDL	10	ug/L
HEXACHLOROCYCLOPENTADIENE	BDL	10	ug/L
2,4,6-TRICHLOROPHENOL	BDL	10	ug/L
2,4,5-TRICHLOROPHENOL	BDL	25	ug/L
2-CHLORONAPHTHALENE	BDL	10	ug/L
2-NITROANILINE	BDL	25	ug/L
DIMETHYLPHTHALATE	BDL	10	ug/L
ACENAPHTHYLENE	BDL	10	ug/L
2,6-DINITROTOLUENE	BDL	10	ug/L
3-NITROANILINE	BDL	25	ug/L
ACENAPHTHENE	BDL	10	ug/L
2,4-DINITROPHENOL	BDL	25	ug/L
4-NITROPHENOL	BDL	25	ug/L
DIBENZOFURAN	BDL	10	ug/L
2,4-DINITROTOLUENE	BDL	10	ug/L
DIETHYLPHTHALATE	BDL	10	ug/L
4-CHLOROPHENYLPHENYLETHER	BDL	10	ug/L
FLUORENE	BDL	10	ug/L
4-NITROANILINE	BDL	25	ug/L
4,6-DINITRO-2-METHYLPHENOL	BDL	25	ug/L
N-NITROSO-DIPHENYLAMINE	BDL	10	ug/L
4-BROMOPHENYLPHENYLETHER	BDL	10	ug/L
HEXACHLOROBENZENE	BDL	10	ug/L
PENTACHLOROPHENOL	BDL	25	ug/L
PHENANTHRENE	BDL	10	ug/L
ANTHRACENE	BDL	10	ug/L
CARBAZOLE	BDL	10	ug/L
DI-N-BUTYLPHTHALATE	BDL	10	ug/L
FLOURANTHENE	BDL	10	ug/L
PYRENE	BDL	10	ug/L
BENZYLBUTYLPHTHALATE	BDL	10	ug/L
3,3'-DICHLOROBENZIDINE	BDL	10	ug/L
BENZ(A)ANTHRACENE	BDL	10	ug/L
CHRYSENE	BDL	10	ug/L
BIS(2-ETHYLHEXYL)PHTHALATE	BDL	10	ug/L
DI-N-OCTYLPHTHALATE	BDL	10	ug/L
BENZO(B)FLUORANTHENE	BDL	10	ug/L
BENZO(K)FLUORANTHENE	BDL	10	ug/L
BENZO(A)PYRENE	BDL	10	ug/L
INDENO(1,2,3-CD)PYRENE	BDL	10	ug/L
DIBENZ(A,H)ANTHRACENE	BDL	10	ug/L

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Parameter	Result	Det. Limit	Units
BENZO(G,H,I)PERYLENE	BDL	10	ug/L
SURROGATE RECOVERY	BDL		
2-FLUOROPHENOL	23		% Rec
PHENOL-D5	50		% Rec
NITROBENZENE-D5	58		% Rec
2-CHLOROPHENOL-D4	51		% Rec
2-FLUOROBIPHENYL	87		% Rec
2,4,6-TRIBROMOPHENOL	86		% Rec
TERPHENYL-D14	68		% Rec
1,2-DICHLOROBENZENE-D4	61		% Rec

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: E. MERRILL Analysis Date: 09-SEP-93 Test: P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: S. CARDWELL Analysis Date: 04-SEP-93 Test: P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: C. COFFEY Analysis Date: 09-SEP-93 Test: P930.6.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	50		mL
FINAL WEIGHT OR VOLUME	50		mL

MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Analyst: R. BYERS Analysis Date: 09-SEP-93 Test: P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	100		mL
FINAL VOLUME	100		mL

ANTIMONY ICP (CLP) ILM01
Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M902.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ANTIMONY	BDL	0.030	mg/L

ARSENIC GFAA (CLP) ILM01

Analyst: A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ARSENIC	0.029	0.0020	mg/L

BARIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M904.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BARIUM	3.9	0.010	mg/L

BERYLLIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M905.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
BERYLLIUM	BDL	0.0050	mg/L

CADMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M906.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CADMIUM	BDL	0.0050	mg/L

HEXAVALENT CHROMIUM SW846-7196A

Analyst: S. PFEFFER Analysis Date: 07-SEP-93 Test: M110.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
HEXAVALENT CHROMIUM	BDL	0.05	mg/L

1:5 dilution due to color interference.

CHROMIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M910.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
CHROMIUM	0.011	0.010	mg/L

LEAD GFAA (CLP) ILM01

Analyst: J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
LEAD	0.0072	0.0060	mg/L

1:2 DILUTION

MANGANESE ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M919.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MANGANESE	0.53	0.010	mg/L

MERCURY CVAA (CLP) ILM01

Analyst: G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P931.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
MERCURY	BDL	0.00050	mg/L

NICKEL ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M922.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
NICKEL	BDL	0.010	mg/L

TIN ICP SW846-6010A

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M135.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
TIN	BDL	0.050	mg/L

SILVER ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 10-SEP-93 08:00 Instrument: ICP Test: M930.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.1
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SILVER	BDL	0.010	mg/L

SELENIUM GFAA (CLP) ILM01

Analyst: M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.6.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
SELENIUM	BDL	0.0050	mg/L

VANADIUM ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M938.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
VANADIUM	BDL	0.010	mg/L

ZINC ICP (CLP) ILM01

Analyst: M. JAO Analysis Date: 07-SEP-93 08:00 Instrument: ICP Test: M939.3.0
Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01 P930.4.0
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311 P107.1.0

Parameter	Result	Det. Limit	Units
ZINC	3.9	0.020	mg/L

HERITAGE LABORATORIES, INC. Lab Sample ID: A288945

NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

Analyst: B. HAHN Analysis Date: 08-SEP-93 Test: P105.1.0

Parameter	Result	Det. Limit	Units
TOTAL SAMPLE WEIGHT	100		Grams
LIQUID FRACTION (GRAMS)	NA		Grams
EXTRACTED SAMPLE	100		Grams
SOLIDS	100		Percent
9.5 MM SIEVE TEST			Passed
INITIAL PH	4.86		Std. Units
FINAL PH	4.46		Std. Units
INITIAL DI ADDED	1600		mL
FINAL DI ADDED	2000		mL
TOTAL ACID ADDED	NA		mL
VOLUME LIQUID (ADD BACK)	NA		mL
TOTAL VOLUME FILTRATE	2000		mL
INITIAL TIME	10104.4		Hours
FINAL TIME	10128.3		Hours

CYANIDE DISTILLATION (CLP) ILM01

Analyst: J. STOAKES Analysis Date: 10-SEP-93 Test: P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
INITIAL WEIGHT OR VOLUME	500		mL
FINAL VOLUME	250		mL

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst: J. WILDER Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Prep: CYANIDE DISTILLATION (CLP) ILM01 P901.4.0

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD) P105.1.0

Parameter	Result	Det. Limit	Units
CYANIDE	BDL	0.005	mg/L

Sample Comments

ADDITIONAL SAMPLE RECEIVED INTO THE LABORATORY ON 09/07/93. IT WAS SAMPLED ON 09/07/93 AT 11:00AM. DCE

BDL Below Detection Limit
EST Estimated Value
NA Not Applicable
RT Retention Time

Sample chain of custody number 14513.

This Certificate shall not be reproduced, except in full, without the written approval of the lab.

Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location	Received	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	A288829
	Complete 17-SEP-93	PO Number 92005 *
	Printed 17-SEP-93	Sampled 31-AUG-93 13:00

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-01
DESCRIPTION: CONCRETE
LOCATION: ECC -ZIONSVILLE

CLP VOLATILE ORGANICS OLM01

Analyst : G. WILSON — Analysis Date: 07-SEP-93 — Instrument: GC/MS VOA — Test: 0902.2.0
Reviewer: A. BRADBURN — Review Date: 08-SEP-93 — File ID: >0530C — Run: R196156

Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288829		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN — Analysis Date: 14-SEP-93 — Instrument: GC/MS SVOA — Test: 0901.2.0
Reviewer: S. BROTHERTON — Review Date: 17-SEP-93 — File ID: >4475F — Run: R196847

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

: Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
AMPLE	A288829		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M902.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ANTIMONY	0.400		0.400	mg/L	100	
DUP02	Q773991	A288829	ANTIMONY	0		BDL	mg/L		
SPI02	Q773989	A288829	ANTIMONY	0	0.500	0.496	mg/L	99	
CDL01	Q776642	PERKIN ELM	ANTIMONY	0.120		0.125	mg/L	104	
CCV	Q776492	INORGANIC	ANTIMONY	1.00		1.04	mg/L	104	
BLA01	Q776486	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q773987	SPEX	ANTIMONY	5.00		4.90	mg/L	98	
BLA02	Q773988	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ANTIMONY	1.00		1.02	mg/L	102	
BLA01	Q776371	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q776706	PERKIN ELM	ANTIMONY	0.120		0.134	mg/L	112	

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
Reviewer: S. O'NEAL Review Date: 08-SEP-93 File ID: 026936 Run: R196195

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q777328		ARSENIC	.01		.0103	mg/L	103	
DUP02	Q773986	A288829	ARSENIC	.002		< .002	mg/L		0
SPI02	Q773984	A288829	ARSENIC	0	.04	.0343	mg/L	85.8	
CCV	Q777330		ARSENIC	.02		.0187	mg/L	93.5	
BLA01	Q777331		ARSENIC			< .0008	mg/L		
CDL01	Q777332		ARSENIC	.01		.0096	mg/L	96	
LCS	Q773982		ARSENIC	.02		.0196	mg/L	98	
BLA02	Q773983		ARSENIC			< .0008	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CDL01	Q777339		ARSENIC	.01		.0091	mg/L	91	
CCV	Q777340		ARSENIC	.02		.0183	mg/L	91.5	
BLA01	Q777341		ARSENIC			< .0008	mg/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M904.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776663	PERKIN ELM	BARIUM	2.00		2.02	mg/L	101	
DUP02	Q773991	A288829	BARIUM	0.689		0.731	mg/L		6
SPI02	Q773989	A288829	BARIUM	0.689	2.00	2.52	mg/L	92	
CDL01	Q776641	INORGANIC	BARIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BARIUM	0.500		0.478	mg/L	96	
CCV	Q776492	INORGANIC	BARIUM	5.00		5.16	mg/L	103	
BLA01	Q776486	NA	BARIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	BARIUM	20.0		16.1	mg/L	81	
BLA02	Q773988	NA	BARIUM			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BARIUM	5.00		4.99	mg/L	100	
BLA01	Q776371	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q776705	PERKIN ELM	BARIUM	0.500		0.475	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M905.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	BERYLLIUM	0.400		0.403	mg/L	101	
DUP02	Q773991	A288829	BERYLLIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	BERYLLIUM	0	0.050	0.0435	mg/L	87	
CDL01	Q776641	INORGANIC	BERYLLIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	
CCV	Q776492	INORGANIC	BERYLLIUM	5.00		5.15	mg/L	103	
BLA01	Q776486	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	BERYLLIUM	0.500		0.406	mg/L	81	
BLA02	Q773988	NA	BERYLLIUM			< 0.002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q776371	NA	BERYLLIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	BERYLLIUM	0.010		0.00711	mg/L	71	
ICS-A	Q776705	PERKIN ELM	BERYLLIUM	0.500		0.472	mg/L	94	

CADMIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M908.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	CADMIUM	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	CADMIUM	0		BDL	mg/L		
PI02	Q773989	A288829	CADMIUM	0	0.050	0.0433	mg/L	87	
CDL01	Q776641	INORGANIC	CADMIUM	10		10.3	mg/L	103	
ICS-A	Q776640	PERKIN ELM	CADMIUM	1.00		0.919	mg/L	92	
CCV	Q776492	INORGANIC	CADMIUM	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	CADMIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	CADMIUM	0.500		0.407	mg/L	81	
BLA02	Q773988	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	CADMIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	CADMIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	CADMIUM	0.010		0.0107	mg/L	107	
ICS-A	Q776705	PERKIN ELM	CADMIUM	1.00		0.925	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A

Analyst : S. PFEFFER Analysis Date: 07-SEP-93 Test: M110.6.0
Reviewer: B. SHRAKE Review Date: 07-SEP-93 File ID: 2151-2152 Run: R196027

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776132		HEXAVALENT CHROMIUM	.178		.165	mg/L	92.7	
ICV01	Q776139		HEXAVALENT CHROMIUM	.178		.154	mg/L	86.5	
SPI01	Q776136	A288829	HEXAVALENT CHROMIUM	0	.2	.202	mg/L	101	
DUP01	Q776137	A288945	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
BLA01	Q776130		HEXAVALENT CHROMIUM			-.003	mg/L		
CDL01	Q776131		HEXAVALENT CHROMIUM	.05		.051	mg/L	102	
CCV	Q776135		HEXAVALENT CHROMIUM	.2		.204	mg/L	102	
MPLE	A288829		See Certificate of Analysis						
LA01	Q776138		HEXAVALENT CHROMIUM			0	mg/L		
CCV	Q776140		HEXAVALENT CHROMIUM	.2		.209	mg/L	104.5	

EMS HERITAGE LABORATORIES, INC. Lab Sample ID: A288829

CHROMIUM ICP (CLP) ILM01

Analyst : N. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M910.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
CCV	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
BLA01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE Analysis Date: 10-SEP-93 Instrument: GFAA Test: M916.2.0
Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026950 Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CDL01	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
BLA01	Q780037		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01

Analyst : N. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M919.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. HAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Reviewer: R. BYERS Review Date: 13-SEP-93 File ID: 026958 Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M922.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	NICKEL	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	NICKEL	0.0112		0.0117	mg/L		4
SPI02	Q773989	A288829	NICKEL	0.0112	0.500	0.514	mg/L	101	
CDL01	Q776641	INORGANIC	NICKEL	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	NICKEL	1.00		0.896	mg/L	90	
CCV	Q776492	INORGANIC	NICKEL	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	NICKEL			< 0.004	mg/L		
LCS	Q773987	SPEX	NICKEL	5		4	mg/L	80	
BLA02	Q773988	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	NICKEL	5.00		5.05	mg/L	101	
BLA01	Q776371	NA	NICKEL			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	NICKEL	0.080		0.0853	mg/L	107	
ICS-A	Q776705	PERKIN ELM	NICKEL	1.00		0.911	mg/L	91	

TIN ICP SW846-6010A

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M135.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
IP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
LA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M930.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SPI01	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
CS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst : M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Reviewer: S. O'NEAL Review Date: 14-SEP-93 File ID: 026964 Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
CDL01	Q780575		SELENIUM	.005		.0058	mg/L	116	
CCV	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
BLA01	Q780577		SELENIUM			< .002	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CDL01	Q780578		SELENIUM	.005		.0051	mg/L	102	
CCV	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M938.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	VANADIUM	0.400		0.404	mg/L	101	
DUP02	Q773991	A288829	VANADIUM	0.0113		0.0128	mg/L		12
SPI02	Q773989	A288829	VANADIUM	0.0113	0.500	0.465	mg/L	91	
CDL01	Q776641	INORGANIC	VANADIUM	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	VANADIUM	0.500		0.462	mg/L	92	
CCV	Q776492	INORGANIC	VANADIUM	5.00		5.30	mg/L	106	
BLA01	Q776486	NA	VANADIUM			< 0.004	mg/L		

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288829

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
LCS	Q773987	SPEX	VANADIUM	5.00		4.02	mg/L	80	
LA02	Q773988	NA	VANADIUM			< 0.004	mg/L		
AMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	VANADIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	VANADIUM	0.100		0.101	mg/L	101	
ICS-A	Q776705	PERKIN ELM	VANADIUM	0.500		0.469	mg/L	94	

ZINC ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M939.3.0

Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ZINC	0.400		0.428	mg/L	107	
DUP02	Q773991	A288829	ZINC	0.467		0.482	mg/L		3
SPI02	Q773989	A288829	ZINC	0.467	0.500	0.926	mg/L	92	
CDL01	Q776641	INORGANIC	ZINC	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	ZINC	1.00		0.963	mg/L	96	
CCV	Q776492	INORGANIC	ZINC	5		5.51	mg/L	110	
BLA01	Q776486	NA	ZINC			< 0.008	mg/L		
LCS	Q773987	SPEX	ZINC	5		3.99	mg/L	80	
BLA02	Q773988	NA	ZINC			.0301	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ZINC	5.00		5.18	mg/L	104	
BLA01	Q776371	NA	ZINC			< 0.008	mg/L		
CDL01	Q776706	PERKIN ELM	ZINC	0.040		0.0735	mg/L	184	
CS-A	Q776705	PERKIN ELM	ZINC	1.00		0.993	mg/L	99	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst : J. WILDER Analysis Date: 07-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Reviewer: B. SHRAKE Review Date: 08-SEP-93 File ID: 1034 Run: R196118

Prep: CYANIDE DISTILLATION (CLP) ILM01

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776758		CYANIDE	.205		.168	mg/L	82	
ICV01	Q776796		CYANIDE	.205		.17	mg/L	82.9	
DUP01	Q776791	L101282	CYANIDE	.1		< .1	mg/kg		0
DPS02	Q776775	A288849	CYANIDE	0	2.5	2.2	mg/kg	88	2.3
SPI02	Q776776	A288849	CYANIDE	0	2.5	2.15	mg/kg	86	
DUP02	Q776760	A288829	CYANIDE	.005		< .005	mg/L		0
CDL01	Q776757		CYANIDE	.01		.011	mg/L	110	
BLA01	Q776759		CYANIDE			.002	mg/L		
LCS	Q776761		CYANIDE	.3		.244	mg/L	81.3	
BLA02	Q776762		CYANIDE			.003	mg/L		
SAMPLE	A288829		See Certificate of Analysis						
CDL01	Q776763		CYANIDE	.005		.007	mg/L	140	
CCV	Q776764		CYANIDE	.1		.111	mg/L	111	
BLA01	Q776765		CYANIDE			.002	mg/L		
BLA02	Q776766		CYANIDE			.004	mg/L		
LCS	Q776767		CYANIDE	.3		.255	mg/L	85	

Notes

BDL *Below Detection Limit*

< *Less Than Lower Detection Limit*

Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location	Received	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	A288830
	Complete 17-SEP-93	PO Number 92005 *
	Printed 17-SEP-93	Sampled 31-AUG-93 13:40

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-02
DESCRIPTION: FIBERGLASS
LOCATION: ECC -ZIONSVILLE

CLP VOLATILE ORGANICS OLM01

Analyst : G. WILSON — Analysis Date: 07-SEP-93 — Instrument: GC/MS VOA — Test: 0902.2.0
Reviewer: A. BRADBURN — Review Date: 08-SEP-93 — File ID: >0531C — Run: R196156
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288830		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN — Analysis Date: 14-SEP-93 — Instrument: GC/MS SVOA — Test: 0901.2.0
Reviewer: S. BROTHERTON — Review Date: 17-SEP-93 — File ID: >4471F — Run: R196847
Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

C Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288830		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN Analysis Date: 15-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.1
Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4484F Run: R197020

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
CV	Q783407		See Attached Report g4480f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288830		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : N. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M902.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ANTIMONY	0.400		0.398	mg/L	100	
DUP01	Q779600	A289027	ANTIMONY	0		BDL	mg/L		
DUP02	Q776735	A288944	ANTIMONY	0		BDL	mg/L		
SPI02	Q776733	A288944	ANTIMONY	0	0.500	0.533	mg/L	107	
CDL01	Q779675	PERKIN ELM	ANTIMONY	0.120		0.132	mg/L	110	
CCV	Q779641	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779642	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q776731	SPEX	ANTIMONY	5.00		4.94	mg/L	99	
BLA02	Q776732	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779668	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q779616	PERKIN ELM	ANTIMONY	0.120		0.127	mg/L	106	

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON Analysis Date: 10-SEP-93 Instrument: GFAA Test: M903.2.0
Reviewer: S. O'NEAL Review Date: 13-SEP-93 File ID: 026951 Run: R196572

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780020		ARSENIC	.01		.0099	mg/L	99	
DUP02	Q776569	A288944	ARSENIC	.02		< .02	mg/L		0
SPI02	Q776567	A288944	ARSENIC	0	.04	.0312	mg/L	78	
CDL01	Q780047		ARSENIC	.01		.0109	mg/L	109	
CCV	Q780048		ARSENIC	.02		.0201	mg/L	100.5	
BLA01	Q780049		ARSENIC			< .002	mg/L		
LCS	Q776565		ARSENIC	.02		.0187	mg/L	93.5	
BLA02	Q776566		ARSENIC			< .002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780054		ARSENIC	.01		.0096	mg/L	96	
CCV	Q780055		ARSENIC	.02		.0202	mg/L	101	
BLA01	Q780056		ARSENIC			< .002	mg/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M904.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	BARIUM	2.00		1.98	mg/L	99	
SPI01	Q779599	A289027	BARIUM	0	2.00	2.14	mg/L	107	
DUP01	Q779600	A289027	BARIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	BARIUM	1.28		1.28	mg/L		0
SPI02	Q776733	A288944	BARIUM	1.28	2.00	3.16	mg/L	94	
CDL01	Q779673	INORGANIC	BARIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	BARIUM	0.500		0.474	mg/L	95	
CCV	Q779641	INORGANIC	BARIUM	5.00		4.95	mg/L	99	
BLA01	Q779642	NA	BARIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	BARIUM	20.0		18.3	mg/L	92	
BLA02	Q776732	NA	BARIUM			.0135	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	BARIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q779615	PERKIN ELM	BARIUM	0.500		0.476	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 13-SEP-93 Instrument: ICP Test: M905.3.0
Reviewer: S. ENDERSEN Review Date: 14-SEP-93 File ID: Run: R196609

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780384	PERKIN ELM	BERYLLIUM	0.400		0.402	mg/L	101	
DUP02	Q776735	A288944	BERYLLIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	BERYLLIUM	0	0.050	0.0434	mg/L	87	
CDL01	Q780372	INORGANIC	BERYLLIUM	10		10.0	mg/L	100	
ICS-A	Q780362	PERKIN ELM	BERYLLIUM	0.500		0.474	mg/L	95	
CCV	Q780518	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q780516	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q776731	SPEX	BERYLLIUM	0.500		0.469	mg/L	94	
BLA02	Q776732	NA	BERYLLIUM			< 0.002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q780431	INORGANIC	BERYLLIUM	5.00		5.10	mg/L	102	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288830

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q780424	NA	BERYLLIUM			< 0.002	mg/L		
ICS-A	Q780525	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	

CADMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M908.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CADMIUM	0.400		0.414	mg/L	104	
SPI01	Q779599	A289027	CADMIUM	0	0.050	0.0559	mg/L	112	
DUP01	Q779600	A289027	CADMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CADMIUM	0.0234		0.0249	mg/L		6
SPI02	Q776733	A288944	CADMIUM	0.0234	0.050	0.0702	mg/L	94	
CDL01	Q779673	INORGANIC	CADMIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CADMIUM	1.00		0.893	mg/L	89	
CCV	Q779641	INORGANIC	CADMIUM	5.00		4.96	mg/L	99	
BLA01	Q779642	NA	CADMIUM			< 0.002	mg/L		
LCS	Q776731	SPEX	CADMIUM	0.500		0.474	mg/L	95	
BLA02	Q776732	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CADMIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	CADMIUM			.00511	mg/L		
CDL01	Q779616	PERKIN ELM	CADMIUM	0.010		0.0136	mg/L	136	
ICS-A	Q779615	PERKIN ELM	CADMIUM	1.00		0.927	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A

Analyst : S. PFEFFER — Analysis Date: 15-SEP-93 — Test: M110.6.0

Reviewer: B. SHRAKE — Review Date: 16-SEP-93 — File ID: 2162, 2163 — Run: R196865

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q782321		HEXAVALENT CHROMIUM	.178		.155	mg/L	87.1	
DUP01	Q782322	A288830	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
SPI01	Q782323	A288944	HEXAVALENT CHROMIUM	0	.2	.122	mg/L	61	
DPS01	Q782324	A288944	HEXAVALENT CHROMIUM	0	.2	.124	mg/L	62	1.6
BLA01	Q782319		HEXAVALENT CHROMIUM			-.002	mg/L		
CDL01	Q782320		HEXAVALENT CHROMIUM	.05		.05	mg/L	100	
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q782328		HEXAVALENT CHROMIUM	.2		.207	mg/L	103.5	

CHROMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M910.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
CCV	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
BLA01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		

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Lab Sample ID: A288830

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
LA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE — Analysis Date: 10-SEP-93 — Instrument: GFAA — Test: M916.2.0

Reviewer: S. O'NEAL — Review Date: 13-SEP-93 — File ID: 026950 — Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
BLA01	Q780037		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M919.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

EMS HERITAGE LABORATORIES, INC. Lab Sample ID: A288830

MERCURY CVAA (CLP) ILM01

Analyst : G. HAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Reviewer: R. BYERS Review Date: 13-SEP-93 File ID: 026958 Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M922.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	NICKEL	0.400		0.408	mg/L	102	
SPI01	Q779599	A289027	NICKEL	0	0.500	0.532	mg/L	106	
DUP01	Q779600	A289027	NICKEL	0		BDL	mg/L		
DUP02	Q776735	A288944	NICKEL	0.0289		0.0284	mg/L		2
SPI02	Q776733	A288944	NICKEL	0.0289	0.500	0.491	mg/L	92	
DL01	Q779673	INORGANIC	NICKEL	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	NICKEL	1.00		0.868	mg/L	87	
CCV	Q779641	INORGANIC	NICKEL	5.00		4.89	mg/L	98	
BLA01	Q779642	NA	NICKEL			< 0.004	mg/L		
LCS	Q776731	SPEX	NICKEL	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	NICKEL	5.00		4.92	mg/L	98	
BLA01	Q779668	NA	NICKEL			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	NICKEL	0.080		0.0867	mg/L	108	
ICS-A	Q779615	PERKIN ELM	NICKEL	1.00		0.897	mg/L	90	

TIN ICP SW846-6010A

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M135.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288830

SILVER ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M930.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SPI01	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst : M. BAUER — Analysis Date: 13-SEP-93 — Instrument: GFAA — Test: M928.2.0

Reviewer: S. O'NEAL — Review Date: 14-SEP-93 — File ID: 026964 — Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SPI02	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
CDL01	Q780578		SELENIUM	.005		.0051	mg/L	102	
CCV	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM	.02		.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CDL01	Q780581		SELENIUM	.005		.006	mg/L	120	
CCV	Q780582		SELENIUM	.02		.0211	mg/L	105.5	
BLA01	Q780583		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M938.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	VANADIUM	0.400		0.397	mg/L	99	
SPI01	Q779599	A289027	VANADIUM	0	0.500	0.540	mg/L	108	
DUP01	Q779600	A289027	VANADIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	VANADIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	VANADIUM	0	0.500	0.482	mg/L	96	
CDL01	Q779673	INORGANIC	VANADIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	VANADIUM	0.500		0.452	mg/L	90	
CCV	Q779641	INORGANIC	VANADIUM	5.00		4.98	mg/L	100	
BLA01	Q779642	NA	VANADIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	VANADIUM	5.00		4.56	mg/L	91	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288830

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q776732	NA	VANADIUM			< 0.004	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	VANADIUM	5.00		5.01	mg/L	100	
BLA01	Q779668	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	VANADIUM	0.100		0.102	mg/L	102	
ICS-A	Q779615	PERKIN ELM	VANADIUM	0.500		0.465	mg/L	93	

ZINC ICP (CLP) ILM01

Analyst : N. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M939.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ZINC	0.400		0.424	mg/L	106	
SPI01	Q779599	A289027	ZINC	0	0.500	0.563	mg/L	113	
DUP01	Q779600	A289027	ZINC	0		BDL	mg/L		
DUP02	Q776735	A288944	ZINC	4.44		4.30	mg/L		3
CDL01	Q779673	INORGANIC	ZINC	10		9.93	mg/L	99	
ICS-A	Q779674	PERKIN ELM	ZINC	1.00		0.960	mg/L	96	
CCV	Q779641	INORGANIC	ZINC	5.00		5.00	mg/L	100	
BLA01	Q779642	NA	ZINC			< 0.008	mg/L		
LCS	Q776731	SPEX	ZINC	5.00		4.60	mg/L	92	
BLA02	Q776732	NA	ZINC			.0357	mg/L		
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ZINC	5.00		5.05	mg/L	101	
BLA01	Q779668	NA	ZINC			< 0.008	mg/L		
CDL01	Q779616	PERKIN ELM	ZINC	0.040		0.0496	mg/L	124	
ICS-A	Q779615	PERKIN ELM	ZINC	1.00		0.968	mg/L	97	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst : J. WILDER — Analysis Date: 10-SEP-93 — Instrument: AUTO-ANALYZER — Test: G901.4.0

Reviewer: B. SNRAKE — Review Date: 14-SEP-93 — File ID: 1036 — Run: R196627

Prep: CYANIDE DISTILLATION (CLP) ILM01

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780624		CYANIDE	.205		.183	mg/L	89.3	
ICV01	Q780665		CYANIDE	.205		.18	mg/L	87.8	
ICV01	Q780687		CYANIDE	.205		.168	mg/L	82	
ICV01	Q780689		CYANIDE	.205		.172	mg/L	83.9	
DUP02	Q780649	A288830	CYANIDE	.005		< .005	mg/L		0
SPI02	Q780650	A288944	CYANIDE	0	.06	.062	mg/L	103.3	
CDL01	Q780623		CYANIDE	.01		.01	mg/L	100	
CCV	Q780643		CYANIDE	.1		.115	mg/L	115	
BLA01	Q780644		CYANIDE			0	mg/L		
BLA02	Q780651		CYANIDE			0	mg/L		
LCS	Q780652		CYANIDE	.3		.31	mg/L	103.3	
SAMPLE	A288830		See Certificate of Analysis						
CCV	Q780655		CYANIDE	.1		.112	mg/L	112	
BLA01	Q780656		CYANIDE			0	mg/L		
BLA02	Q780668		CYANIDE			0	mg/L		
LCS	Q780658		CYANIDE	.3		.296	mg/L	98.7	

Notes

BDL Below Detection Limit

< Less Than Lower Detection Limit

Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location	Received	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	A288944
	Complete 17-SEP-93	PO Number 92005 *
	Printed 17-SEP-93	Sampled 31-AUG-93 14:40

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-03
DESCRIPTION: STYROFOAM
LOCATION: ECC -ZIONSVILLE

CLP VOLATILE ORGANICS OLM01

Analyst : G. WILSON — Analysis Date: 07-SEP-93 — Instrument: GC/MS VOA — Test: 0902.2.0
Reviewer: A. BRADBURN — Review Date: 08-SEP-93 — File ID: >0532C — Run: R196156
Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288944		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN — Analysis Date: 14-SEP-93 — Instrument: GC/MS SVOA — Test: 0901.2.0
Reviewer: S. BROTHERTON — Review Date: 17-SEP-93 — File ID: >4472F — Run: R196847
Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288944		See Certificate of Analysis						

EMS HERITAGE LABORATORIES, INC. Lab Sample ID: A288944

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN Analysis Date: 15-SEP-93 Instrument: GC/MS SVOA Test: 0901.2.1

Reviewer: S. BROTHERTON Review Date: 17-SEP-93 File ID: >4483f Run: R197020

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
CCV	Q783407		See Attached Report g4480f.ind						
LA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288944		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : N. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M902.3.0

Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ANTIMONY	0.400		0.398	mg/L	100	
DUP01	Q779600	A289027	ANTIMONY	0		BDL	mg/L		
DUP02	Q776735	A288944	ANTIMONY	0		BDL	mg/L		
SPI02	Q776733	A288944	ANTIMONY	0	0.500	0.533	mg/L	107	
CDL01	Q779675	PERKIN ELM	ANTIMONY	0.120		0.132	mg/L	110	
CCV	Q779641	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779642	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q776731	SPEX	ANTIMONY	5.00		4.94	mg/L	99	
BLA02	Q776732	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ANTIMONY	1.00		0.971	mg/L	97	
BLA01	Q779668	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q779616	PERKIN ELM	ANTIMONY	0.120		0.127	mg/L	106	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON — Analysis Date: 10-SEP-93 — Instrument: GFAA — Test: M903.2.0

Reviewer: S. O'NEAL — Review Date: 13-SEP-93 — File ID: 026951 — Run: R196572

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780020		ARSENIC	.01		.0099	mg/L	99	
DUP02	Q776569	A288944	ARSENIC	.02		< .02	mg/L		0
SPI02	Q776567	A288944	ARSENIC	0	.04	.0312	mg/L	78	
CDL01	Q780038		ARSENIC	.01		.0104	mg/L	104	
CCV	Q780039		ARSENIC	.02		.0195	mg/L	97.5	
BLA01	Q780040		ARSENIC			< .002	mg/L		
LCS	Q776565		ARSENIC	.02		.0187	mg/L	93.5	
BLA02	Q776566		ARSENIC			< .002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780047		ARSENIC	.01		.0109	mg/L	109	
CCV	Q780048		ARSENIC	.02		.0201	mg/L	100.5	
BLA01	Q780049		ARSENIC			< .002	mg/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M906.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	BARIUM	2.00		1.98	mg/L	99	
SPI01	Q779599	A289027	BARIUM	0	2.00	2.14	mg/L	107	
DUP01	Q779600	A289027	BARIUM	0		BDL	mg/L		
JP02	Q776735	A288944	BARIUM	1.28		1.28	mg/L		0
'I02	Q776733	A288944	BARIUM	1.28	2.00	3.16	mg/L	94	
CDL01	Q779673	INORGANIC	BARIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	BARIUM	0.500		0.474	mg/L	95	
CCV	Q779641	INORGANIC	BARIUM	5.00		4.95	mg/L	99	
BLA01	Q779642	NA	BARIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	BARIUM	20.0		18.3	mg/L	92	
BLA02	Q776732	NA	BARIUM			.0135	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	BARIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q779615	PERKIN ELM	BARIUM	0.500		0.476	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 13-SEP-93 — Instrument: ICP — Test: M905.3.0

Reviewer: S. ENDERSEN — Review Date: 14-SEP-93 — File ID: — Run: R196609

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780384	PERKIN ELM	BERYLLIUM	0.400		0.402	mg/L	101	
DUP02	Q776735	A288944	BERYLLIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	BERYLLIUM	0	0.050	0.0434	mg/L	87	
CDL01	Q780372	INORGANIC	BERYLLIUM	10		10.0	mg/L	100	
ICS-A	Q780362	PERKIN ELM	BERYLLIUM	0.500		0.474	mg/L	95	
CCV	Q780518	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
LA01	Q780516	NA	BERYLLIUM			< 0.002	mg/L		
S	Q776731	SPEX	BERYLLIUM	0.500		0.469	mg/L	94	
BLA02	Q776732	NA	BERYLLIUM			< 0.002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q780431	INORGANIC	BERYLLIUM	5.00		5.10	mg/L	102	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA01	Q780424	NA	BERYLLIUM			< 0.002	mg/L		
ICS-A	Q780525	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	

CADMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M908.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CADMIUM	0.400		0.414	mg/L	104	
SPI01	Q779599	A289027	CADMIUM	0	0.050	0.0559	mg/L	112	
DUP01	Q779600	A289027	CADMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CADMIUM	0.0234		0.0249	mg/L		6
SPI02	Q776733	A288944	CADMIUM	0.0234	0.050	0.0702	mg/L	94	
CDL01	Q779673	INORGANIC	CADMIUM	10		10.0	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CADMIUM	1.00		0.893	mg/L	89	
CCV	Q779641	INORGANIC	CADMIUM	5.00		4.96	mg/L	99	
BLA01	Q779642	NA	CADMIUM			< 0.002	mg/L		
LCS	Q776731	SPEX	CADMIUM	0.500		0.474	mg/L	95	
BLA02	Q776732	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	CADMIUM	5.00		4.98	mg/L	100	
BLA01	Q779668	NA	CADMIUM			.00511	mg/L		
CDL01	Q779616	PERKIN ELM	CADMIUM	0.010		0.0136	mg/L	136	
ICS-A	Q779615	PERKIN ELM	CADMIUM	1.00		0.927	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A

Analyst : S. PFEFFER — Analysis Date: 15-SEP-93 — Test: M110.6.0

Reviewer: B. SHRAKE — Review Date: 16-SEP-93 — File ID: 2162, 2163 — Run: R196865

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q782321		HEXAVALENT CHROMIUM	.178		.155	mg/L	87.1	
DUP01	Q782322	A288830	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
SPI01	Q782323	A288944	HEXAVALENT CHROMIUM	0	.2	.122	mg/L	61	
DPS01	Q782324	A288944	HEXAVALENT CHROMIUM	0	.2	.124	mg/L	62	1.6
BLA01	Q782319		HEXAVALENT CHROMIUM			-.002	mg/L		
CDL01	Q782320		HEXAVALENT CHROMIUM	.05		.05	mg/L	100	
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q782328		HEXAVALENT CHROMIUM	.2		.207	mg/L	103.5	

CHROMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M910.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
V	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
_A01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SAMPLE	A288944		See Certificate of Analysis						
CV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE — Analysis Date: 10-SEP-93 — Instrument: GFAA — Test: M916.2.0

Reviewer: S. O'NEAL — Review Date: 13-SEP-93 — File ID: 026950 — Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CCV	Q780017		LEAD	.02		.0214	mg/L	107	
BLA01	Q780018		LEAD			< .0012	mg/L		
CDL01	Q780019		LEAD	.003		.0034	mg/L	113.3	
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780025		LEAD	.003		.0033	mg/L	110	
CCV	Q780026		LEAD	.02		.0219	mg/L	109.5	
BLA01	Q780027		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M919.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. MAPP Analysis Date: 10-SEP-93 Instrument: CVAA Test: M920.2.0
Reviewer: R. BYERS Review Date: 13-SEP-93 File ID: 026958 Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M922.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	NICKEL	0.400		0.408	mg/L	102	
SPI01	Q779599	A289027	NICKEL	0	0.500	0.532	mg/L	106	
DUP01	Q779600	A289027	NICKEL	0		BDL	mg/L		
DUP02	Q776735	A288944	NICKEL	0.0289		0.0284	mg/L		2
SPI02	Q776733	A288944	NICKEL	0.0289	0.500	0.491	mg/L	92	
CDL01	Q779673	INORGANIC	NICKEL	10		9.96	mg/L	100	
CS-A	Q779674	PERKIN ELM	NICKEL	1.00		0.868	mg/L	87	
CCV	Q779641	INORGANIC	NICKEL	5.00		4.89	mg/L	98	
BLA01	Q779642	NA	NICKEL			< 0.004	mg/L		
LCS	Q776731	SPEX	NICKEL	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	NICKEL	5.00		4.92	mg/L	98	
BLA01	Q779668	NA	NICKEL			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	NICKEL	0.080		0.0867	mg/L	108	
ICS-A	Q779615	PERKIN ELM	NICKEL	1.00		0.897	mg/L	90	

TIN ICP SW846-6010A

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M135.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M930.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SPI01	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CCV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst : M. BAUER Analysis Date: 13-SEP-93 Instrument: GFAA Test: M928.2.0
Reviewer: S. O'NEAL Review Date: 14-SEP-93 File ID: 026964 Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
DUP02	Q776569	A288944	SELENIUM	.005		< .005	mg/L		0
SPI02	Q776567	A288944	SELENIUM	0	.01	.0076	mg/L	76	
CDL01	Q780572		SELENIUM	.005		.0053	mg/L	106	
CCV	Q780573		SELENIUM	.02		.0195	mg/L	97.5	
BLA01	Q780574		SELENIUM			< .002	mg/L		
LCS	Q776565		SELENIUM	.02		.0204	mg/L	102	
BLA02	Q776566		SELENIUM			< .002	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CDL01	Q780575		SELENIUM	.005		.0058	mg/L	116	
CCV	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
BLA01	Q780577		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 10-SEP-93 Instrument: ICP Test: M938.3.0
Reviewer: S. ENDERSEN Review Date: 13-SEP-93 File ID: Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	VANADIUM	0.400		0.397	mg/L	99	
SPI01	Q779599	A289027	VANADIUM	0	0.500	0.540	mg/L	108	
DUP01	Q779600	A289027	VANADIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	VANADIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	VANADIUM	0	0.500	0.482	mg/L	96	
CDL01	Q779673	INORGANIC	VANADIUM	10		10.0	mg/L	100	
CS-A	Q779674	PERKIN ELM	VANADIUM	0.500		0.452	mg/L	90	
CCV	Q779641	INORGANIC	VANADIUM	5.00		4.98	mg/L	100	
BLA01	Q779642	NA	VANADIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	VANADIUM	5.00		4.56	mg/L	91	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288944

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
BLA02	Q776732	NA	VANADIUM			< 0.004	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	VANADIUM	5.00		5.01	mg/L	100	
BLA01	Q779668	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	VANADIUM	0.100		0.102	mg/L	102	
ICS-A	Q779615	PERKIN ELM	VANADIUM	0.500		0.465	mg/L	93	

ZINC ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M939.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	ZINC	0.400		0.424	mg/L	106	
SPI01	Q779599	A289027	ZINC	0	0.500	0.563	mg/L	113	
DUP01	Q779600	A289027	ZINC	0		BDL	mg/L		
DUP02	Q776735	A288944	ZINC	4.44		4.30	mg/L		3
CDL01	Q779673	INORGANIC	ZINC	10		9.93	mg/L	99	
ICS-A	Q779674	PERKIN ELM	ZINC	1.00		0.960	mg/L	96	
CCV	Q779641	INORGANIC	ZINC	5.00		5.00	mg/L	100	
BLA01	Q779642	NA	ZINC			< 0.008	mg/L		
LCS	Q776731	SPEX	ZINC	5.00		4.60	mg/L	92	
BLA02	Q776732	NA	ZINC			.0357	mg/L		
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q779670	INORGANIC	ZINC	5.00		5.05	mg/L	101	
BLA01	Q779668	NA	ZINC			< 0.008	mg/L		
CDL01	Q779616	PERKIN ELM	ZINC	0.040		0.0496	mg/L	124	
ICS-A	Q779615	PERKIN ELM	ZINC	1.00		0.968	mg/L	97	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst : J. WILDER — Analysis Date: 10-SEP-93 — Instrument: AUTO-ANALYZER — Test: G901.4.0

Reviewer: B. SHRAKE — Review Date: 14-SEP-93 — File ID: 1036 — Run: R196627

Prep: CYANIDE DISTILLATION (CLP) ILM01

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780624		CYANIDE	.205		.183	mg/L	89.3	
ICV01	Q780665		CYANIDE	.205		.18	mg/L	87.8	
ICV01	Q780687		CYANIDE	.205		.168	mg/L	82	
ICV01	Q780689		CYANIDE	.205		.172	mg/L	83.9	
DUP02	Q780649	A288830	CYANIDE	.005		< .005	mg/L		0
SPI02	Q780650	A288944	CYANIDE	0	.06	.062	mg/L	103.3	
CDL01	Q780623		CYANIDE	.01		.01	mg/L	100	
CCV	Q780643		CYANIDE	.1		.115	mg/L	115	
BLA01	Q780644		CYANIDE			0	mg/L		
BLA02	Q780651		CYANIDE			0	mg/L		
LCS	Q780652		CYANIDE	.3		.31	mg/L	103.3	
SAMPLE	A288944		See Certificate of Analysis						
CCV	Q780655		CYANIDE	.1		.112	mg/L	112	
BLA01	Q780656		CYANIDE			0	mg/L		
BLA02	Q780668		CYANIDE			0	mg/L		
LCS	Q780658		CYANIDE	.3		.296	mg/L	98.7	

Notes

BDL *Below Detection Limit*

< *Less Than Lower Detection Limit*

Quality Assurance Officer: _____

QUALITY ASSURANCE REPORT

Service Location	Received	Lab ID
HERITAGE LABORATORIES, INC. 7901 W. MORRIS ST. INDIANAPOLIS, IN 46231 (317)243-8305	31-AUG-93	A288945
	Complete 17-SEP-93	PO Number 92005 *
	Printed 17-SEP-93	Sampled 31-AUG-93 14:15

Sample Description

SAMPLE I.D.: ECC-04A1-PBM-04
DESCRIPTION: WOOD
LOCATION: ECC -ZIONSVILLE

CLP VOLATILE ORGANICS OLM01

Analyst : G. WILSON — Analysis Date: 07-SEP-93 — Instrument: GC/MS VOA — Test: 0902.2.0
Reviewer: A. BRADBURN — Review Date: 08-SEP-93 — File ID: >0533C — Run: R196156

Prep: ZERO HEADSPACE EXTRACTION (TCLP) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q777112		See Attached Report x0520c.ind						
BLA01	Q777113		See Attached Report x0521c.ind						
SAMPLE	A288945		See Certificate of Analysis						

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN — Analysis Date: 14-SEP-93 — Instrument: GC/MS SVOA — Test: 0901.2.0
Reviewer: S. BROTHERTON — Review Date: 17-SEP-93 — File ID: >4473F — Run: R196847

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
CCV	Q782234		See Attached Report g4465f.ind						
BLA02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288945		See Certificate of Analysis						

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288945

CLP SEMI-VOLATILE ORGANICS OLM01

Analyst : A. BRADBURN — Analysis Date: 15-SEP-93 — Instrument: GC/MS SVOA — Test: 0901.2.1

Reviewer: S. BROTHERTON — Review Date: 17-SEP-93 — File ID: >4485F — Run: R197020

Prep: CLP SEMI-VOLATILE EXTRACTION OLM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
SPI02	Q777405	A288829	PHENOL	5	200	120	ug/L	57.5	
SPI02	Q777405	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	77	ug/L	77	
SPI02	Q777405	A288829	1,2,4-TRICHLOROBENZENE	0	100	80	ug/L	80	
SPI02	Q777405	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	
SPI02	Q777405	A288829	ACENAPHTHENE	0	100	76	ug/L	76	
SPI02	Q777405	A288829	4-NITROPHENOL	0	200	140	ug/L	70	
SPI02	Q777405	A288829	2,4-DINITROTOLUENE	0	100	78	ug/L	78	
SPI02	Q777405	A288829	PENTACHLOROPHENOL	0	200	190	ug/L	95	
SPI02	Q777405	A288829	PYRENE	0	100	96	ug/L	96	
DPS02	Q777406	A288829	PHENOL	5	200	130	ug/L	62.5	8.3
DPS02	Q777406	A288829	2-CHLOROPHENOL	0	200	140	ug/L	70	0
DPS02	Q777406	A288829	1,4-DICHLOROBENZENE (P-DICHLOROBENZE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	N-NITROSO-DI-N-PROPYLAMINE	0	100	54	ug/L	54	35.1
DPS02	Q777406	A288829	1,2,4-TRICHLOROBENZENE	0	100	69	ug/L	69	14.8
DPS02	Q777406	A288829	4-CHLORO-3-METHYLPHENOL	0	200	110	ug/L	55	0
DPS02	Q777406	A288829	ACENAPHTHENE	0	100	66	ug/L	66	14.1
DPS02	Q777406	A288829	4-NITROPHENOL	0	200	120	ug/L	60	15.4
DPS02	Q777406	A288829	2,4-DINITROTOLUENE	0	100	62	ug/L	62	22.9
DPS02	Q777406	A288829	PENTACHLOROPHENOL	0	200	160	ug/L	80	17.1
DPS02	Q777406	A288829	PYRENE	0	100	73	ug/L	73	27.2
^CV	Q783407		See Attached Report g4480f.ind						
_A02	Q782235		See Attached Report g4470f.ind						
SAMPLE	A288945		See Certificate of Analysis						

ANTIMONY ICP (CLP) ILM01

Analyst : N. JAO — Analysis Date: 07-SEP-93 — Instrument: ICP — Test: M902.3.0

Reviewer: S. ENDERSEN — Review Date: 08-SEP-93 — File ID: — Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ANTIMONY	0.400		0.400	mg/L	100	
DUP02	Q773991	A288829	ANTIMONY	0		BDL	mg/L		
SPI02	Q773989	A288829	ANTIMONY	0	0.500	0.496	mg/L	99	
CDL01	Q776642	PERKIN ELM	ANTIMONY	0.120		0.125	mg/L	104	
CCV	Q776492	INORGANIC	ANTIMONY	1.00		1.04	mg/L	104	
BLA01	Q776486	NA	ANTIMONY			< 0.012	mg/L		
LCS	Q773987	SPEX	ANTIMONY	5.00		4.90	mg/L	98	
BLA02	Q773988	NA	ANTIMONY			< 0.012	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ANTIMONY	1.00		1.02	mg/L	102	
BLA01	Q776371	NA	ANTIMONY			< 0.012	mg/L		
CDL01	Q776706	PERKIN ELM	ANTIMONY	0.120		0.134	mg/L	112	

ARSENIC GFAA (CLP) ILM01

Analyst : A. ROBERTSON Analysis Date: 07-SEP-93 Instrument: GFAA Test: M903.2.0
Reviewer: S. O'NEAL Review Date: 08-SEP-93 File ID: 026936 Run: R196195

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q777328		ARSENIC	.01		.0103	mg/L	103	
DUP02	Q773986	A288829	ARSENIC	.002		< .002	mg/L		0
SPI02	Q773984	A288829	ARSENIC	0	.04	.0343	mg/L	85.8	
CDL01	Q777339		ARSENIC	.01		.0091	mg/L	91	
CCV	Q777340		ARSENIC	.02		.0183	mg/L	91.5	
BLA01	Q777341		ARSENIC			< .0008	mg/L		
LCS	Q773982		ARSENIC	.02		.0196	mg/L	98	
BLA02	Q773983		ARSENIC			< .0008	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CDL01	Q777342		ARSENIC	.01		.0093	mg/L	93	
CCV	Q777343		ARSENIC	.02		.0181	mg/L	90.5	
BLA01	Q777344		ARSENIC			< .0008	mg/L		

BARIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M904.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776663	PERKIN ELM	BARIUM	2.00		2.02	mg/L	101	
DUP02	Q773991	A288829	BARIUM	0.689		0.731	mg/L		6
SPI02	Q773989	A288829	BARIUM	0.689	2.00	2.52	mg/L	92	
CDL01	Q776641	INORGANIC	BARIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BARIUM	0.500		0.478	mg/L	96	
CCV	Q776492	INORGANIC	BARIUM	5.00		5.16	mg/L	103	
BLA01	Q776486	NA	BARIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	BARIUM	20.0		16.1	mg/L	81	
BLA02	Q773988	NA	BARIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BARIUM	5.00		4.99	mg/L	100	
BLA01	Q776371	NA	BARIUM			< 0.004	mg/L		
ICS-A	Q776705	PERKIN ELM	BARIUM	0.500		0.475	mg/L	95	

BERYLLIUM ICP (CLP) ILM01

Analyst : M. JAO Analysis Date: 07-SEP-93 Instrument: ICP Test: M905.3.0
Reviewer: S. ENDERSEN Review Date: 08-SEP-93 File ID: Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01
Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	BERYLLIUM	0.400		0.403	mg/L	101	
DUP02	Q773991	A288829	BERYLLIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	BERYLLIUM	0	0.050	0.0435	mg/L	87	
CDL01	Q776641	INORGANIC	BERYLLIUM	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	BERYLLIUM	0.500		0.476	mg/L	95	
CCV	Q776492	INORGANIC	BERYLLIUM	5.00		5.15	mg/L	103	
BLA01	Q776486	NA	BERYLLIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	BERYLLIUM	0.500		0.406	mg/L	81	
BLA02	Q773988	NA	BERYLLIUM			< 0.002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	BERYLLIUM	5.00		5.02	mg/L	100	
BLA01	Q776371	NA	BERYLLIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	BERYLLIUM	0.010		0.00711	mg/L	71	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICS-A	Q776705	PERKIN ELM	BERYLLIUM	0.500		0.472	mg/L	94	

CADMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 07-SEP-93 — Instrument: ICP — Test: M908.3.0

Reviewer: S. ENDERSEN — Review Date: 08-SEP-93 — File ID: — Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	CADMIUM	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	CADMIUM	0		BDL	mg/L		
SPI02	Q773989	A288829	CADMIUM	0	0.050	0.0433	mg/L	87	
CDL01	Q776641	INORGANIC	CADMIUM	10		10.3	mg/L	103	
ICS-A	Q776640	PERKIN ELM	CADMIUM	1.00		0.919	mg/L	92	
CCV	Q776492	INORGANIC	CADMIUM	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	CADMIUM			< 0.002	mg/L		
LCS	Q773987	SPEX	CADMIUM	0.500		0.407	mg/L	81	
BLA02	Q773988	NA	CADMIUM			< 0.002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	CADMIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	CADMIUM			< 0.002	mg/L		
CDL01	Q776706	PERKIN ELM	CADMIUM	0.010		0.0107	mg/L	107	
ICS-A	Q776705	PERKIN ELM	CADMIUM	1.00		0.925	mg/L	93	

HEXAVALENT CHROMIUM SW846-7196A

Analyst : S. PFEFFER — Analysis Date: 07-SEP-93 — Test: M110.6.0

Reviewer: B. SHRAKE — Review Date: 07-SEP-93 — File ID: 2151-2152 — Run: R196027

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CV01	Q776132		HEXAVALENT CHROMIUM	.178		.165	mg/L	92.7	
ICV01	Q776139		HEXAVALENT CHROMIUM	.178		.154	mg/L	86.5	
DUP01	Q776137	A288945	HEXAVALENT CHROMIUM	.05		< .05	mg/L		0
SPI01	Q776136	A288829	HEXAVALENT CHROMIUM	0	.2	.202	mg/L	101	
BLA01	Q776130		HEXAVALENT CHROMIUM			-.003	mg/L		
CDL01	Q776131		HEXAVALENT CHROMIUM	.05		.051	mg/L	102	
CCV	Q776135		HEXAVALENT CHROMIUM	.2		.204	mg/L	102	
SAMPLE	A288945		See Certificate of Analysis						
BLA01	Q776138		HEXAVALENT CHROMIUM			0	mg/L		
CCV	Q776140		HEXAVALENT CHROMIUM	.2		.209	mg/L	104.5	

CHROMIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M910.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	CHROMIUM	0.400		0.401	mg/L	100	
SPI01	Q779599	A289027	CHROMIUM	0	0.200	0.211	mg/L	106	
DUP01	Q779600	A289027	CHROMIUM	0		BDL	mg/L		
DUP02	Q776735	A288944	CHROMIUM	0		BDL	mg/L		
SPI02	Q776733	A288944	CHROMIUM	0	0.200	0.197	mg/L	99	
CDL01	Q779673	INORGANIC	CHROMIUM	10		9.98	mg/L	100	
ICS-A	Q779674	PERKIN ELM	CHROMIUM	0.500		0.437	mg/L	87	
CCV	Q779641	INORGANIC	CHROMIUM	5.00		4.93	mg/L	99	
BLA01	Q779642	NA	CHROMIUM			< 0.004	mg/L		
LCS	Q776731	SPEX	CHROMIUM	2.00		1.83	mg/L	92	
BLA02	Q776732	NA	CHROMIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288945

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q779670	INORGANIC	CHROMIUM	5.00		4.96	mg/L	99	
BLA01	Q779668	NA	CHROMIUM			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	CHROMIUM	0.020		0.0197	mg/L	99	
ICS-A	Q779615	PERKIN ELM	CHROMIUM	0.500		0.452	mg/L	90	

LEAD GFAA (CLP) ILM01

Analyst : J. WALLACE — Analysis Date: 10-SEP-93 — Instrument: GFAA — Test: M916.2.0

Reviewer: S. O'NEAL — Review Date: 13-SEP-93 — File ID: 026950 — Run: R196571

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780015		LEAD	.01		.0106	mg/L	106	
DUP01	Q780070	A287207	LEAD	.005		< .005	mg/L		0
DUP02	Q776569	A288944	LEAD	.032		< .032	mg/L		0
SPI02	Q776567	A288944	LEAD	.032	.02	.052	mg/L	100	
CDL01	Q780028		LEAD	.003		.0033	mg/L	110	
CCV	Q780029		LEAD	.02		.0203	mg/L	101.5	
BLA01	Q780030		LEAD			< .0012	mg/L		
LCS	Q776565		LEAD	.02		.022	mg/L	110	
BLA02	Q776566		LEAD			< .0012	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CDL01	Q780035		LEAD	.003		.0028	mg/L	93.3	
CCV	Q780036		LEAD	.02		.0207	mg/L	103.5	
BLA01	Q780037		LEAD			< .0012	mg/L		

MANGANESE ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M919.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779575	PERKIN ELM	MANGANESE	0.400		0.403	mg/L	101	
SPI01	Q779599	A289027	MANGANESE	0	0.500	0.543	mg/L	109	
DUP01	Q779600	A289027	MANGANESE	0		BDL	mg/L		
DUP02	Q776735	A288944	MANGANESE	0.565		0.552	mg/L		2
SPI02	Q776733	A288944	MANGANESE	0.565	0.500	1.00	mg/L	87	
CDL01	Q779673	INORGANIC	MANGANESE	10		9.96	mg/L	100	
ICS-A	Q779674	PERKIN ELM	MANGANESE	0.500		0.456	mg/L	91	
CCV	Q779641	INORGANIC	MANGANESE	5.00		4.91	mg/L	98	
BLA01	Q779642	NA	MANGANESE			< 0.004	mg/L		
LCS	Q776731	SPEX	MANGANESE	5.00		4.50	mg/L	90	
BLA02	Q776732	NA	MANGANESE			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	MANGANESE	5.00		4.94	mg/L	99	
BLA01	Q779668	NA	MANGANESE			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	MANGANESE	0.030		0.0310	mg/L	103	
ICS-A	Q779615	PERKIN ELM	MANGANESE	0.500		0.470	mg/L	94	

MERCURY CVAA (CLP) ILM01

Analyst : G. MAPP — Analysis Date: 10-SEP-93 — Instrument: CVAA — Test: M920.2.0

Reviewer: R. BYERS — Review Date: 13-SEP-93 — File ID: 026958 — Run: R196597

Prep: MERCURY CVAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780253		MERCURY	.002		.00195	mg/L	97.5	
DUP02	Q776579	A288830	MERCURY	.0005		< .0005	mg/L		0
SPI02	Q776577	A288830	MERCURY	0	.001	.00111	mg/L	111	

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CCV	Q780339		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780340		MERCURY			< .0002	mg/L		
LCS	Q776575		MERCURY	.003		.00292	mg/L	97.3	
BLA02	Q776576		MERCURY			< .0002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q780341		MERCURY	.003		.00268	mg/L	89.3	
BLA01	Q780342		MERCURY			< .00026	mg/L		

NICKEL ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 07-SEP-93 — Instrument: ICP — Test: M922.3.0

Reviewer: S. ENDERSEN — Review Date: 08-SEP-93 — File ID: — Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	NICKEL	0.400		0.417	mg/L	104	
DUP02	Q773991	A288829	NICKEL	0.0112		0.0117	mg/L		4
SPI02	Q773989	A288829	NICKEL	0.0112	0.500	0.514	mg/L	101	
CDL01	Q776641	INORGANIC	NICKEL	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	NICKEL	1.00		0.896	mg/L	90	
CCV	Q776492	INORGANIC	NICKEL	5.00		5.26	mg/L	105	
BLA01	Q776486	NA	NICKEL			< 0.004	mg/L		
LCS	Q773987	SPEX	NICKEL	5		4	mg/L	80	
BLA02	Q773988	NA	NICKEL			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	NICKEL	5.00		5.05	mg/L	101	
BLA01	Q776371	NA	NICKEL			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	NICKEL	0.080		0.0853	mg/L	107	
ICS-A	Q776705	PERKIN ELM	NICKEL	1.00		0.911	mg/L	91	

TIN ICP SW846-6010A

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M135.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
DUP01	Q779600	A289027	TIN	0		BDL	mg/L		
DUP02	Q776735	A288944	TIN	0		BDL	mg/L		
SPI02	Q776733	A288944	TIN	0	2.00	1.92	mg/L	96	
CCV	Q779641	INORGANIC	TIN	5.00		4.87	mg/L	97	
BLA01	Q779642	NA	TIN			< 0.02	mg/L		
LCS	Q776731	SPEX	TIN	2.00		1.90	mg/L	95	
BLA02	Q776732	NA	TIN			< 0.02	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	TIN	5.00		4.89	mg/L	98	
BLA01	Q779668	NA	TIN			< 0.02	mg/L		

SILVER ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 10-SEP-93 — Instrument: ICP — Test: M930.3.0

Reviewer: S. ENDERSEN — Review Date: 13-SEP-93 — File ID: — Run: R196508

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q779576	PERKIN ELM	SILVER	2.00		1.97	mg/L	99	
SPI01	Q779599	A289027	SILVER	0	0.050	0.0605	mg/L	121	
DUP01	Q779600	A289027	SILVER	0		BDL	mg/L		
DUP02	Q776735	A288944	SILVER	0		BDL	mg/L		
SPI02	Q776733	A288944	SILVER	0	0.050	0.0547	mg/L	109	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288945

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q779673	INORGANIC	SILVER	2		2.00	mg/L	100	
ICS-A	Q779674	PERKIN ELM	SILVER	1.00		0.933	mg/L	93	
CV	Q779641	INORGANIC	SILVER	1.00		0.990	mg/L	99	
BLA01	Q779642	NA	SILVER			< 0.004	mg/L		
LCS	Q776731	SPEX	SILVER	0.500		0.436	mg/L	87	
BLA02	Q776732	NA	SILVER			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q779670	INORGANIC	SILVER	1.00		0.993	mg/L	99	
BLA01	Q779668	NA	SILVER			< 0.004	mg/L		
CDL01	Q779616	PERKIN ELM	SILVER	0.020		0.0201	mg/L	101	
ICS-A	Q779615	PERKIN ELM	SILVER	1.00		0.947	mg/L	95	

SELENIUM GFAA (CLP) ILM01

Analyst : M. BAUER — Analysis Date: 13-SEP-93 — Instrument: GFAA — Test: M928.2.0

Reviewer: S. O'NEAL — Review Date: 14-SEP-93 — File ID: 026964 — Run: R196623

Prep: GFAA ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780567		SELENIUM	.01		.0106	mg/L	106	
CDL01	Q780575		SELENIUM	.005		.0058	mg/L	116	
CCV	Q780576		SELENIUM	.02		.0197	mg/L	98.5	
BLA01	Q780577		SELENIUM			< .002	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CDL01	Q780578		SELENIUM	.005		.0051	mg/L	102	
CCV	Q780579		SELENIUM	.02		.02	mg/L	100	
BLA01	Q780580		SELENIUM			< .002	mg/L		

VANADIUM ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 07-SEP-93 — Instrument: ICP — Test: M938.3.0

Reviewer: S. ENDERSEN — Review Date: 08-SEP-93 — File ID: — Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	VANADIUM	0.400		0.404	mg/L	101	
DUP02	Q773991	A288829	VANADIUM	0.0113		0.0128	mg/L		12
SPI02	Q773989	A288829	VANADIUM	0.0113	0.500	0.465	mg/L	91	
CDL01	Q776641	INORGANIC	VANADIUM	10		10.2	mg/L	102	
ICS-A	Q776640	PERKIN ELM	VANADIUM	0.500		0.462	mg/L	92	
CCV	Q776492	INORGANIC	VANADIUM	5.00		5.30	mg/L	106	
BLA01	Q776486	NA	VANADIUM			< 0.004	mg/L		
LCS	Q773987	SPEX	VANADIUM	5.00		4.02	mg/L	80	
BLA02	Q773988	NA	VANADIUM			< 0.004	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	VANADIUM	5.00		5.08	mg/L	102	
BLA01	Q776371	NA	VANADIUM			< 0.004	mg/L		
CDL01	Q776706	PERKIN ELM	VANADIUM	0.100		0.101	mg/L	101	
ICS-A	Q776705	PERKIN ELM	VANADIUM	0.500		0.469	mg/L	94	

ZINC ICP (CLP) ILM01

Analyst : M. JAO — Analysis Date: 07-SEP-93 — Instrument: ICP — Test: M939.3.0

Reviewer: S. ENDERSEN — Review Date: 08-SEP-93 — File ID: — Run: R196048

Prep: FAA OR ICP ACID DIGESTION OF AQUEOUS SAMPLES (CLP) ILM01

Prep: TOX CHAR LEACHING PROCEDURE (TCLP W/ ORGANICS) SW846-1311

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q776664	PERKIN ELM	ZINC	0.400		0.428	mg/L	107	
DUP02	Q773991	A288829	ZINC	0.467		0.482	mg/L		3
SPI02	Q773989	A288829	ZINC	0.467	0.500	0.926	mg/L	92	

EMS HERITAGE LABORATORIES, INC.

Lab Sample ID: A288945

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
CDL01	Q776641	INORGANIC	ZINC	10		10.1	mg/L	101	
ICS-A	Q776640	PERKIN ELM	ZINC	1.00		0.963	mg/L	96	
CV	Q776492	INORGANIC	ZINC	5		5.51	mg/L	110	
BLA01	Q776486	NA	ZINC			< 0.008	mg/L		
LCS	Q773987	SPEX	ZINC	5		3.99	mg/L	80	
BLA02	Q773988	NA	ZINC			.0301	mg/L		
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q776377	INORGANIC	ZINC	5.00		5.18	mg/L	104	
BLA01	Q776371	NA	ZINC			< 0.008	mg/L		
CDL01	Q776706	PERKIN ELM	ZINC	0.040		0.0735	mg/L	184	
ICS-A	Q776705	PERKIN ELM	ZINC	1.00		0.993	mg/L	99	

CYANIDE, TOTAL (AUTOMATED) (CLP) ILM01

Analyst : J. WILDER Analysis Date: 10-SEP-93 Instrument: AUTO-ANALYZER Test: G901.4.0

Reviewer: B. SHRAKE Review Date: 14-SEP-93 File ID: 1036 Run: R196627

Prep: CYANIDE DISTILLATION (CLP) ILM01

Prep: NEUTRAL WATER LEACHING METHOD (SW846-1310 MODIFIED) SW846-1310(MOD)

QC Type	Identifier	Source	Parameter	True/Sampl	Spike Val	Observed	Units	% Rec	RPD
ICV01	Q780624		CYANIDE	.205		.183	mg/L	89.3	
ICV01	Q780665		CYANIDE	.205		.18	mg/L	87.8	
ICV01	Q780687		CYANIDE	.205		.168	mg/L	82	
ICV01	Q780689		CYANIDE	.205		.172	mg/L	83.9	
DUP02	Q780649	A288830	CYANIDE	.005		< .005	mg/L		0
SPI02	Q780650	A288944	CYANIDE	0	.06	.062	mg/L	103.3	
CDL01	Q780623		CYANIDE	.01		.01	mg/L	100	
CCV	Q780643		CYANIDE	.1		.115	mg/L	115	
BLA01	Q780644		CYANIDE			0	mg/L		
BLA02	Q780651		CYANIDE			0	mg/L		
CS	Q780652		CYANIDE	.3		.31	mg/L	103.3	
SAMPLE	A288945		See Certificate of Analysis						
CCV	Q780655		CYANIDE	.1		.112	mg/L	112	
BLA01	Q780656		CYANIDE			0	mg/L		
BLA02	Q780668		CYANIDE			0	mg/L		
LCS	Q780658		CYANIDE	.3		.296	mg/L	98.7	

Notes

BDL Below Detection Limit

< Less Than Lower Detection Limit

Quality Assurance Officer: _____

EMS Heritage Laboratories, Indianapolis
SW846-8240 Volatile Continuing Calibration Check

File ID : >0520C Inj Time : 930906 23:50 ID File : CLPVOL::A2

Analyst : GREG Calibration File : CLPCAL::A2

Mass Spec ID : GCMS#3 Last Calibration File Update : 930427 13:10

Calibration
Data Files: 20 uG/L->7572C 50 uG/L->7580C
100 uG/L->7574C 150 uG/L->7575C 200 uG/L->7576C

Minimum $\overline{RF}$ for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
Acrolein	.03791	.01888	50.21			(Conc=300.00)
Acrylonitrile	.25747	.62481	142.67			(Conc=300.00)
Chloromethane	.46473	.40592	12.66		**	
Bromomethane	1.23062	1.26069	2.44			
Vinyl Chloride	.78656	.80304	2.09	*		
Dichlorodifluoromethane	.97248	1.28853	32.50			
Chloroethane	.50889	.53228	4.60			
Methylene Chloride	1.26465	1.31577	4.04			
Acetone	.52412	.58713	12.02			
Carbon Disulfide	2.19291	2.43929	11.24			
Trichlorofluoromethane	4.26114	2.87052	32.63			
1,1-Dichloroethene	1.06881	1.18689	11.05	*		
1,1-Dichloroethane	2.49933	2.27337	9.04		**	
[Tetrahydrofuran]	.30373	.33048	8.81			(Conc=125.00)
1,2-Dichloroethene (total)	1.27695	1.33692	4.70			(Conc=100.00)
Diethyl Ether	.73197	.68455	6.48			
Chloroform	4.57810	4.05677	11.39	*		
Trichloro-trifluoroethane	2.64979	2.51515	5.08			
1,2-Dichloroethane-d4	3.85703	2.84090	26.34			
2-Butanone	.67453	.67970	.77			
1,2-Dichloroethane	3.99280	3.17448	20.49			
Methyl-t-butyl ether	1.17331	1.02719	12.45			
1,1,1-Trichloroethane	1.32047	1.10075	16.64			
Carbon Tetrachloride	1.52478	1.24633	18.26			
Vinyl Acetate	.50081	.38326	23.47			
Bromodichloromethane	1.36202	1.11881	17.86			
1,2-Dichloropropane	.35661	.34312	3.78	*		
cis-1,3-Dichloropropene	.82416	.75236	8.71			
Trichloroethene	.54845	.59785	9.01			
Diisopropyl Ether	.88798	.87647	1.30			
2-Chloroethyl Vinyl Ether	.24179	.20548	15.02			
Dibromochloromethane	1.34716	1.22380	9.16			

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

EMS Heritage Laboratories, Indianapolis
SW846-8240 Volatile Continuing Calibration Check

File ID : >0520C Inj Time : 930906 23:50 ID File : CLPVOL::A2

Analyst : GREG Calibration File : CLPCAL::A2

Mass Spec ID : GCMS#3 Last Calibration File Update : 930427 13:10

Calibration
Data Files: 20 uG/L->7572C 50 uG/L->7580C
100 uG/L->7574C 150 uG/L->7575C 200 uG/L->7576C

Minimum $\overline{RF}$ for SPCC is .30 Maximum % Diff for CCC is 25%

Compound	$\overline{RF}$	RF	%Diff	CCC	SPCC	
1,1,2-Trichloroethane	.47195	.44690	5.31			
Benzene	.80018	.86332	7.89	*		
trans-1,3-Dichloropropene	.79098	.68887	12.91			
Bromoform	1.09178	.98358	9.91		**	
4-Methyl-2-Pentanone	.49437	.49291	.29			
2-Hexanone	.39601	.40190	1.49			
Tetrachloroethene	.57476	.58821	2.34			
1,1,2,2-Tetrachloroethane	.86359	.83697	3.08		**	
Toluene-d8	1.22415	1.13252	7.49			
Toluene	.66882	.73481	9.87	*		
Chlorobenzene	1.03491	1.03995	.49		**	
Ethylbenzene	.45467	.48089	5.77	*		
Bromofluorobenzene	1.24872	1.07446	13.95			
Styrene	.98172	1.00350	2.22			
m-Xylene	.57225	.65621	14.67			
o,p-Xylene	.56307	.58818	4.46			(Conc=100.00)
m-Dichlorobenzene	1.26062	1.21119	3.92			
o,p-Dichlorobenzene	1.17866	1.22315	3.77			(Conc=100.00)

RF - Response Factor from daily standard file at 50.00 ug/L
RF - Average Response Factor from Initial Calibration Form VI
%Diff - % Difference from original average or curve

CCC - Calibration Check Compounds (*) SPCC - System Performance Check Compounds (**)

HERITAGE LABORATORIES, INC
VOLATILES ANALYSIS- WATER METHOD BLANK
ANALYSIS METHOD: OLM01

'ASS SPEC FILE: >0521C
NALYSIS DATE/TIME: 9/7/93 00:58

COMPOUND NAME	RESULT	LIMIT	UNITS
CHLOROMETHANE	BDL	10	UG/L
BROMOMETHANE	BDL	10	UG/L
VINYL CHLORIDE	BDL	10	UG/L
CHLOROETHANE	BDL	10	UG/L
METHYLENE CHLORIDE	BDL	10	UG/L
ACETONE	BDL	10	UG/L
CARBON DISULFIDE	BDL	10	UG/L
1,1-DICHLOROETHENE	BDL	10	UG/L
1,1-DICHLOROETHANE	BDL	10	UG/L
1,2-DICHLOROETHENE (TOTAL)	BDL	10	UG/L
CHLOROFORM	BDL	10	UG/L
1,2-DICHLOROETHANE	BDL	10	UG/L
2-BUTANONE	BDL	10	UG/L
1,1,1-TRICHLOROETHANE	BDL	10	UG/L
CARBON TETRACHLORIDE	BDL	10	UG/L
BROMODICHLOROMETHANE	BDL	10	UG/L
1,2-DICHLOROPROPANE	BDL	10	UG/L
CIS-1,3-DICHLOROPROPENE	BDL	10	UG/L
TRICHLOROETHENE	BDL	10	UG/L
DIBROMOCHLOROMETHANE	BDL	10	UG/L
1,1,2-TRICHLOROETHANE	BDL	10	UG/L
BENZENE	BDL	10	UG/L
RANS-1,3-DICHLOROPROPENE	BDL	10	UG/L
BROMOFORM	BDL	10	UG/L
4-METHYL-2-PENTANONE	BDL	10	UG/L
2-HEXANONE	BDL	10	UG/L
TETRACHLOROETHENE	BDL	10	UG/L
TOLUENE	BDL	10	UG/L
1,1,2,2-TETRACHLOROETHANE	BDL	10	UG/L
CHLOROBENZENE	BDL	10	UG/L
ETHYLBENZENE	BDL	10	UG/L
STYRENE	BDL	10	UG/L
XYLENE (TOTAL)	BDL	10	UG/L

SURROGATE RECOVERY

DICHLOROETHANE-D4	105	% RECOVERY
TOLUENE-D8	100	% RECOVERY
BROMOFLUOROBENZENE	101	% RECOVERY

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 14 Sep 93 10:29 am
`ata File: C:\F091493\4465F.D GCMS#6
ısc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#		Compound	AvgRRF	CCRRF	%Dev
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0
2		N-nitroso-dimethylamine	0.576	0.615	6.7
3		Pyridine	0.904	1.010	11.7
4		2-Picoline	1.096	1.175	7.2
5	S	2-Fluorophenol	0.990	1.141	15.3
6		Aniline	1.632	1.838	12.6
7	S	Phenol-d5	1.235	1.397	13.2
8	MC	Phenol	1.297	1.450	11.8#
9		bis(2-Chloroethyl)ether	1.153	1.327	15.1
10	S	2-Chlorophenol-d4	1.072	1.170	9.1
11	MC	2-Chlorophenol	1.173	1.328	13.3#
12		1,3-Dichlorobenzene	1.292	1.445	11.8
13	MC	1,4-Dichlorobenzene	1.323	1.477	11.6#
14	S	1,2-Dichlorobenzene-d4	1.373	1.535	11.9
15		1,2-Dichlorobenzene	1.259	1.423	13.1
16		Benzyl alcohol	0.664	0.755	13.8
17		2-Methylphenol	0.870	0.996	14.4
18		bis(2-chloroisopropyl)ether	1.935	2.194	13.4
19	MP	n-Nitroso-di-n-propylamine	0.789	0.875	10.9
20		4-Methylphenol	0.910	1.061	16.5
21		Hexachloroethane	0.566	0.634	12.0
22	I	Naphthalene-d8	1.000	1.000	0.0
23	S	Nitrobenzene-d5	0.334	0.370	10.8
24		Nitrobenzene	0.344	0.389	12.9
25		Isophorone	0.659	0.706	7.1
26	C	2-Nitrophenol	0.234	0.250	6.7#
27		2,4-Dimethylphenol	0.321	0.351	9.4
28		bis(2-Chloroethoxy)methane	0.414	0.475	14.7
29	C	2,4-Dichlorophenol	0.312	0.332	6.5#
30		Benzoic acid	0.230	0.235	2.3
31	M	1,2,4-Trichlorobenzene	0.302	0.311	3.1
32		Naphthalene	0.902	1.019	13.0
33		4-Chloroaniline	0.385	0.490	27.1#
34		Toluenediamine	0.000	0.001	113.5#
35	C	Hexachlorobutadiene	0.171	0.168	1.8#
36	MC	4-Chloro-3-methylphenol	0.288	0.309	7.2#
37		2-Methylnaphthalene	0.597	0.658	10.2
38	I	Acenaphthene-d10	1.000	1.000	0.0
39	P	Hexachlorocyclopentadiene	0.306	0.277	9.7
40		1,2,4,5-Tetrachlorobenzene	0.528	0.502	4.8
41	C	2,4,6-Trichlorophenol	0.377	0.368	2.4#
42		2,4,5-Trichlorophenol	0.387	0.379	2.0
43	S	2-Fluorobiphenyl	1.126	1.147	1.9

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 14 Sep 93 10:29 am
ıta File: C:\F091493\4465F.D GCMS#6
ısc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#		Compound	AvgRRF	CCRRF	%Dev
44		2-Chloronaphthalene	1.090	1.196	9.7
45		2-Nitroaniline	0.366	0.398	8.9
46		Dimethylphthalate	1.251	1.332	6.4
47		1,3-Dinitrobenzene	0.260	0.241	7.3
48		2,6-Dinitrotoluene	0.371	0.376	1.3
49		Acenaphthylene	1.752	1.934	10.4
50		3-Nitroaniline	0.417	0.440	5.4
51	MC	Acenaphthene	1.044	1.167	11.8#
52	P	2,4-Dinitrophenol	0.214	0.193	9.9
53	MP	4-Nitrophenol	0.148	0.144	2.5
54		Dibenzofuran	1.511	1.579	4.5
55	M	2,4-Dinitrotoluene	0.500	0.491	1.6
56		2,3,4,6-Tetrachlorophenol	0.324	0.283	12.6
57		Diethylphthalate	1.303	1.376	5.6
58		Fluorene	1.081	1.189	10.0
59		4-Chlorophenyl-phenylether	0.570	0.585	2.5
60		4-Nitroaniline	0.412	0.412	0.2
61	I	Phenanthrene-d10	1.000	1.000	0.0
62		4,6-Dinitro-2-methylphenol	0.172	0.167	2.9
63	C	n-Nitrosodiphenylamine	0.456	0.479	5.1#
64	S	2,4,6-Tribromophenol	0.135	0.134	0.2
65		alpha-BHC	0.132	0.145	10.2
66		4-Bromophenyl-phenylether	0.202	0.204	1.0
67		Hexachlorobenzene	0.254	0.260	2.3
68		beta-BHC	0.103	0.110	7.2
69	MC	Pentachlorophenol	0.170	0.165	3.3#
70		gamma-BHC	0.112	0.120	7.6
71		Phenanthrene	0.952	1.065	11.8
72		Anthracene	0.912	1.061	16.3
73		delta-BHC	0.090	0.096	6.9
74		Carbazole	0.763	0.881	15.5
75		Heptachlor	0.115	0.121	5.3
76		Di-n-butylphthalate	1.240	1.451	17.0
77		Aldrin	0.081	0.083	3.4
78		Heptachlor epoxide	0.035	0.043	21.5
79	C	Fluoranthene	1.093	1.182	8.1#
80	I	Chrysene-d12	1.000	1.000	0.0
81		Benzidine	0.419	0.477	13.8
82	M	Pyrene	1.120	1.129	0.8
83		alpha-Endosulfan	0.028	0.028	1.5
84		p,p'-DDE	0.221	0.225	2.1
85	S	Terphenyl-d14	0.780	0.801	2.7
86		Dieldrin	0.144	0.170	17.6

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 14 Sep 93 10:29 am
ata File: C:\F091493\4465F.D GCMS#6
isc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#	Compound	AvgRRF	CCRRF	%Dev
87	Endrin	0.009	0.009	0.3
88	Endrin aldehyde	0.004	0.008	130.7#
89	beta-Endosulfan	0.040	0.040	0.7
90	p,p'-DDD	0.401	0.382	4.8
91	Butylbenzylphthalate	0.588	0.640	8.8
92	Endosulfan sulfate	0.084	0.080	4.6
93	p,p'-DDT	0.335	0.327	2.1
94	Benzo[a]anthracene	1.096	1.106	1.0
95	3,3'-Dichlorobenzidine	0.329	0.370	12.4
96	Chrysene	1.031	1.089	5.6
97	bis(2-Ethylhexyl)phthalate	0.789	0.895	13.4
98 I	Perylene-d12	1.000	1.000	0.0
99 C	Di-n-octylphthalate	1.352	1.301	3.8#
100	Benzo[b]fluoranthene	1.109	1.026	7.5
101	Benzo[k]fluoranthene	1.076	0.987	8.2
102 C	Benzo[a]pyrene	1.063	1.082	1.8#
103	Indeno[1,2,3-cd]pyrene	1.018	1.185	16.4
104	Dibenz[a,h]anthracene	0.832	0.936	12.5
105	Benzo[g,h,i]perylene	0.837	0.990	18.4

(#) = Out of Range SPCC's out = 0 CCC's out = 14
4480F.D CALPEST.M Wed Sep 15 16:17:20 1993 RPT1

HERITAGE LABORATORIES, INC
SEMI-VOLATILES ANALYSIS- WATER METHOD BLANK
ANALYSIS METHOD: OLM01

MASS SPEC FILE: >4470F SVL# 645-685

ANALYSIS DATE/TIME: 9/14/93 14:52

PREP DATE: 9/9/93

CAS No.	Compound	Result	Units	Detection limit
108-95-2	Phenol	BDL	uG/L	10
111-44-4	bis(2-Chloroethyl)ether	BDL	uG/L	10
95-57-8	2-Chlorophenol	BDL	uG/L	10
541-57-1	1,3-Dichlorobenzene	BDL	uG/L	10
106-46-7	1,4-Dichlorobenzene	BDL	uG/L	10
95-50-1	1,2-Dichlorobenzene	BDL	uG/L	10
95-48-7	2-Methylphenol	BDL	uG/L	10
108-60-1	bis(2-Chloroisopropyl)ether	BDL	uG/L	10
106-44-5	4-Methylphenol	BDL	uG/L	10
621-64-7	n-Nitroso-di-n-propylamine	BDL	uG/L	10
67-72-1	Hexachloroethane	BDL	uG/L	10
98-95-3	Nitrobenzene	BDL	uG/L	10
78-59-1	Isophorone	BDL	uG/L	10
88-75-5	2-Nitrophenol	BDL	uG/L	10
105-67-9	2,4-Dimethylphenol	BDL	uG/L	10
111-91-1	bis(2-Chloroethoxy)methane	BDL	uG/L	10
120-83-2	2,4-Dichlorophenol	BDL	uG/L	10
120-82-1	1,2,4-Trichlorobenzene	BDL	uG/L	10
91-20-3	Naphthalene	BDL	uG/L	10
106-47-8	4-Chloroaniline	BDL	uG/L	10
87-68-3	Hexachlorobutadiene	BDL	uG/L	10
59-50-7	4-Chloro-3-methylphenol	BDL	uG/L	10
91-57-6	2-Methylnaphthalene	BDL	uG/L	10
77-47-4	Hexachlorocyclopentadiene	BDL	uG/L	10
88-06-2	2,4,6-Trichlorophenol	BDL	uG/L	10
95-95-4	2,4,5-Trichlorophenol	BDL	uG/L	10
91-58-7	2-Chloronaphthalene	BDL	uG/L	10
88-74-4	2-Nitroaniline	BDL	uG/L	25
131-11-3	Dimethylphthalate	BDL	uG/L	10
208-96-8	Acenaphthylene	BDL	uG/L	10
606-20-2	2,6-Dinitrotoluene	BDL	uG/L	10
99-09-2	3-Nitroaniline	BDL	uG/L	25
83-32-9	Acenaphthene	BDL	uG/L	10
51-28-5	2,4-Dinitrophenol	BDL	uG/L	25
100-02-7	4-Nitrophenol	BDL	uG/L	25
132-64-9	Dibenzofuran	BDL	uG/L	10
121-14-2	2,4-Dinitrotoluene	BDL	uG/L	10
84-66-2	Diethylphthalate	BDL	uG/L	10
7005-72-3	4-Chlorophenyl-phenylether	BDL	uG/L	10
86-73-7	Fluorene	BDL	uG/L	10
100-01-6	4-Nitroaniline	BDL	uG/L	25

MASS SPEC FILE:

CAS	Compound	Result	Units	Detection Limit
534-52-1	4,6-Dinitro-2-methylphenol	BDL	uG/L	25
83-30-6	n-Nitrosodiphenylamine (1)	BDL	uG/L	10
101-55-3	4-Bromophenyl-phenylether	BDL	uG/L	10
118-74-1	Hexachlorobenzene	BDL	uG/L	10
87-86-5	Pentachlorophenol	BDL	uG/L	25
85-01-8	Phenanthrene	BDL	uG/L	10
120-12-7	Anthracene	BDL	uG/L	10
86-74-8	Carbazole	BDL	uG/L	10
84-74-2	Di-n-butylphthalate	BDL	uG/L	10
206-44-0	Fluoranthene	BDL	uG/L	10
129-00-0	Pyrene	BDL	uG/L	10
85-68-7	Butylbenzylphthalate	BDL	uG/L	10
91-94-1	3,3'-Dichlorobenzidine	BDL	uG/L	10
56-55-3	Benzo(a)anthracene	BDL	uG/L	10
218-01-9	Chrysene	BDL	uG/L	10
117-81-7	Bis(2-Ethylhexyl)phthalate	BDL	uG/L	10
117-84-0	Di-n-octylphthalate	BDL	uG/L	10
205-99-2	Benzo(b)fluoranthene	BDL	uG/L	10
207-08-9	Benzo(k)fluoranthene	BDL	uG/L	10
50-32-8	Benzo(a)pyrene	BDL	uG/L	10
193-39-5	Indeno(1,2,3-cd)pyrene	BDL	uG/L	10
53-70-3	Dibenz(a,h)anthracene	BDL	uG/L	10

SURROGATE LIST

2-Fluorophenol..... 73 % Recovery
Phenol..... 78 % Recovery
Nitrobenzene-d5..... 80 % Recovery
2-Chlorophenol-d4..... 80 % Recovery
2-Fluorobiphenyl..... 91 % Recovery
2,4,6-tribomophenol..... 75 % Recovery
Terphenyl-d14..... 81 % Recovery
1,2-Dichlorobenzene-d4... 65 % Recovery

ALSO DETECTED	EST. CONC.	R.T.
2-Ethoxy-2-methyl-butane	16	4.95
4-Hydroxy-4-methyl-2-pentanone	6	8.39

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 15 Sep 93 9:34 am
Data File: C:\F091593\4480F.D GCMS#6
Misc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#		Compound	AvgRRF	CCRRF	%Dev
1	I	1,4-Dichlorobenzene-d4	1.000	1.000	0.0
2		N-nitroso-dimethylamine	0.576	0.561	2.7
3		Pyridine	0.904	1.004	11.1
4		2-Picoline	1.096	1.145	4.5
5	S	2-Fluorophenol	0.990	1.108	11.9
6		Aniline	1.632	1.704	4.4
7	S	Phenol-d5	1.235	1.310	6.1
8	MC	Phenol	1.297	1.516	16.9#
9		bis(2-Chloroethyl)ether	1.153	1.357	17.7
10	S	2-Chlorophenol-d4	1.072	1.128	5.3
11	MC	2-Chlorophenol	1.173	1.284	9.5#
12		1,3-Dichlorobenzene	1.292	1.454	12.5
13	MC	1,4-Dichlorobenzene	1.323	1.474	11.4#
14	S	1,2-Dichlorobenzene-d4	1.373	1.530	11.5
15		1,2-Dichlorobenzene	1.259	1.428	13.4
16		Benzyl alcohol	0.664	0.727	9.6
17		2-Methylphenol	0.870	0.939	7.9
18		bis(2-chloroisopropyl)ether	1.935	1.995	3.1
19	MP	n-Nitroso-di-n-propylamine	0.789	0.756	4.1
20		4-Methylphenol	0.910	0.975	7.1
21		Hexachloroethane	0.566	0.642	13.4
22	I	Naphthalene-d8	1.000	1.000	0.0
23	S	Nitrobenzene-d5	0.334	0.327	2.1
24		Nitrobenzene	0.344	0.358	3.8
25		Isophorone	0.659	0.643	2.5
26	C	2-Nitrophenol	0.234	0.213	9.3#
27		2,4-Dimethylphenol	0.321	0.313	2.4
28		bis(2-Chloroethoxy)methane	0.414	0.457	10.3
29	C	2,4-Dichlorophenol	0.312	0.283	9.1#
30		Benzoic acid	0.230	0.171	25.4#
31	M	1,2,4-Trichlorobenzene	0.302	0.296	2.0
32		Naphthalene	0.902	1.015	12.6
33		4-Chloroaniline	0.385	0.400	3.8
34		Toluenediamine	0.000	0.001	146.4#
35	C	Hexachlorobutadiene	0.171	0.155	9.0#
36	MC	4-Chloro-3-methylphenol	0.288	0.269	6.8#
37		2-Methylnaphthalene	0.597	0.589	1.4
38	I	Acenaphthene-d10	1.000	1.000	0.0
39	P	Hexachlorocyclopentadiene	0.306	0.280	8.5
40		1,2,4,5-Tetrachlorobenzene	0.528	0.540	2.4
41	C	2,4,6-Trichlorophenol	0.377	0.367	2.6#
42		2,4,5-Trichlorophenol	0.387	0.346	10.7
43	S	2-Fluorobiphenyl	1.126	1.233	9.5

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 15 Sep 93 9:34 am
Data File: C:\F091593\4480F.D GCMS#6
Misc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#		Compound	AvgRRF	CCRRF	%Dev
44		2-Chloronaphthalene	1.090	1.271	16.6
45		2-Nitroaniline	0.366	0.350	4.3
46		Dimethylphthalate	1.251	1.290	3.1
47		1,3-Dinitrobenzene	0.260	0.205	21.2
48		2,6-Dinitrotoluene	0.371	0.352	5.2
49		Acenaphthylene	1.752	1.896	8.2
50		3-Nitroaniline	0.417	0.416	0.3
51	MC	Acenaphthene	1.044	1.164	11.5#
52	P	2,4-Dinitrophenol	0.214	0.135	36.8#
53	MP	4-Nitrophenol	0.148	0.122	17.6
54		Dibenzofuran	1.511	1.669	10.4
55	M	2,4-Dinitrotoluene	0.500	0.449	10.2
56		2,3,4,6-Tetrachlorophenol	0.324	0.294	9.2
57		Diethylphthalate	1.303	1.489	14.3
58		Fluorene	1.081	1.311	21.2
59		4-Chlorophenyl-phenylether	0.570	0.642	12.7
60		4-Nitroaniline	0.412	0.396	3.9
61	I	Phenanthrene-d10	1.000	1.000	0.0
62		4,6-Dinitro-2-methylphenol	0.172	0.128	25.5#
63	C	n-Nitrosodiphenylamine	0.456	0.498	9.2#
64	S	2,4,6-Tribromophenol	0.135	0.132	1.9
65		alpha-BHC	0.132	0.144	9.1
66		4-Bromophenyl-phenylether	0.202	0.219	8.5
67		Hexachlorobenzene	0.254	0.258	1.7
68		beta-BHC	0.103	0.112	9.1
69	MC	Pentachlorophenol	0.170	0.152	10.9#
70		gamma-BHC	0.112	0.119	6.3
71		Phenanthrene	0.952	1.064	11.8
72		Anthracene	0.912	1.080	18.5
73		delta-BHC	0.090	0.101	12.4
74		Carbazole	0.763	0.947	24.0
75		Heptachlor	0.115	0.126	9.0
76		Di-n-butylphthalate	1.240	1.466	18.2
77		Aldrin	0.081	0.088	9.6
78		Heptachlor epoxide	0.035	0.044	25.0
79	C	Fluoranthene	1.093	1.180	8.0#
80	I	Chrysene-d12	1.000	1.000	0.0
81		Benzidine	0.419	0.340	18.8
82	M	Pyrene	1.120	1.172	4.6
83		alpha-Endosulfan	0.028	0.030	6.9
84		p,p'-DDE	0.221	0.217	1.9
85	S	Terphenyl-d14	0.780	0.795	1.9
86		Dieldrin	0.144	0.159	9.8

Heritage Laboratory, Indianapolis
Semi-volatile Continuing Calibration Report

Operator ID: Date Acquired: 15 Sep 93 9:34 am
Data File: C:\F091593\4480F.D GCMS#6
Misc. 50 ug/mL
Method: CALPEST.M Title: CLP BNA Calibration
Last Calibration Update: Wed Sep 15 11:24:47 1993

C = CCC Max Dev = 25% P = SPCC Min RF = 0.05
S = Surrogate I = ISTD M = Matrix Spike Compound
cal20 = 4448F.D cal50 = 4444F.D cal80 = 4447F.D
cal120 = 4446F.D cal160 = 4445F.D

PK#		Compound	AvgRRF	CCRRF	%Dev
87		Endrin	0.009	0.010	9.2
88		Endrin aldehyde	0.004	0.003	7.9
89		beta-Endosulfan	0.040	0.041	1.6
90		p,p'-DDD	0.401	0.391	2.5
91		Butylbenzylphthalate	0.588	0.627	6.6
92		Endosulfan sulfate	0.084	0.085	1.3
93		p,p'-DDT	0.335	0.318	5.0
94		Benzo[a]anthracene	1.096	1.106	0.9
95		3,3'-Dichlorobenzidine	0.329	0.356	8.2
96		Chrysene	1.031	1.065	3.3
97		bis(2-Ethylhexyl)phthalate	0.789	0.871	10.3
98	I	Perylene-d12	1.000	1.000	0.0
99	C	Di-n-octylphthalate	1.352	1.427	5.5#
100		Benzo[b]fluoranthene	1.109	1.062	4.3
101		Benzo[k]fluoranthene	1.076	1.097	2.0
102	C	Benzo[a]pyrene	1.063	1.092	2.7#
103		Indeno[1,2,3-cd]pyrene	1.018	1.154	13.3
104		Dibenz[a,h]anthracene	0.832	0.940	13.0
105		Benzo[g,h,i]perylene	0.837	0.970	15.9

(#) = Out of Range SPCC's out = 0 CCC's out = 14
4480F.D CALPEST.M Thu Sep 16 10:27:38 1993 RPT1

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live

Evan Bayh
Governor
Kathy Prosser
Commissioner

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

Office of Solid and Hazardous Waste Management
Special Waste Certification No. 31016

Pursuant to 329 IAC 2-21-11, the following generator:

Environmental Conservation and Chemical Corp.
985 South U.S. 421
Zionsville, Indiana 46077

has received certification from the Indiana Department of Environmental Management, Office of Solid and Hazardous Waste Management, for the following waste stream(s):

building demolition, site clearing/grubbing, miscellaneous debris from clean-up of Superfund site

These wastes may be disposed at any sanitary landfill specified under 329 IAC 2-21-3 as an acceptable site for the disposal of waste which is certified as special waste. A list of acceptable disposal sites is available from the Solid Waste Permit Section at the above address or by calling 317/232-4473. General and Special Conditions that apply to this certification are indicated on the reverse side.

This certification shall expire on September 30, 1994.

Patrick Carroll, Chief
Solid Waste Permit Branch
Office of Solid and Hazardous Waste Management

10/7/93
Date

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Printed on Recycled Paper

General Conditions That Apply To All Special Waste Approvals:

1. The generator and/or hauler shall provide the landfill with a copy of this certification along with advanced notification of intended disposal and provide a disposal notification form with each load disposed.
2. If nuisance or pollution conditions are created, immediate corrective action shall be taken.
3. Waste material(s) accepted under this certification shall be included on the Special Waste Monthly Report submitted to this Office by the landfill.
4. Special waste(s) may not be disposed at any landfill subject to corrective action under 329 IAC 2-16-9 or at any landfill which fails to maintain compliance with 329 IAC 2.
5. It is the generator's responsibility to properly dispose of all wastes at acceptable sites. Also, it is the responsibility of the disposal site to notify generators if the site's disposal status changes.
6. Any change in the raw materials, the process(es) generating the waste, or the characteristics of the waste stream(s) shall be reported in writing to the IDEM and the disposal site prior to further disposal. If it is determined that the change is substantial, this certification shall be voided by written notification from the IDEM.
7. The waste(s) shall not contain free liquids.
8. The waste(s) shall not present a fire or explosion hazard.

Special Conditions That Are Required For Disposal of The Waste(s) Will Be Indicated By The Reviewer's Initials:

____ 1. At least one end of the container shall be completely opened so the waste(s) may be readily identified.

____ 2. A new analysis of each waste shall be provided to IDEM at the time of renewal of this approval.

____ 3. In addition to landfills specified under 329 IAC 2-21-3, waste(s) specified on this certification may also be disposed pursuant to 329 IAC 2-21-12 at the following landfill(s):

Anticipated Disposal Quantity: 1000 cubic yards.

TWS 10/5/93	DC 2 10/5/93	
Reviewer/Date	Senior Env.Mgr./Date	Section Chief/Date

cc: Boone County Health Department
Boone County Solid Waste Management District
Robert Autio, Quality Environmental Management, Inc.
ERM-North Central, Inc., 540 Lake Cook Rd., Suite 300, Deerfield, IL 60015

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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105 South Meridian Street
P.O. Box 6015
Indianapolis, Indiana 46206-6015
Telephone 317-232-8603
Environmental Helpline 1-800-451-6027

SPECIAL WASTE LANDFILLS

DATE: August 24, 1993

The following is a list of sanitary landfills approved under 329 IAC 2-21-3 as acceptable for the disposal of special waste. This listing was current as of the date typed above, and is subject to change without notice if a landfill enters corrective action under 329 IAC 2-16-9 or fails to maintain compliance with 329 IAC 2. Inclusion on this list at a previous point in time does not imply the site is currently acceptable for the disposal of special waste. The Commissioner may reevaluate the acceptability of any site relative to the conditions of 329 IAC 2-21-13 and the general requirements of 329 IAC 2. It is the waste generator's responsibility to ensure all special waste is properly disposed in accordance with all conditions imposed by the waste certification. For additional information or an updated listing, please contact the Solid Waste Permit Section at the above address or by phone at 317/232-4473.

LANDFILL	OPP. NO.	COUNTY	PHONE NO.
Bartholomew County	03-3	Bartholomew	812/379-4941
Blackfoot	63-4	Pike	812/922-3226
Byers	09-2	Cass	219/722-5771
Chemical Waste Management	NA	Allen	219/447-5585
Danville	32-2	Hendricks	317/745-2878
Decatur Hills	16-3	Decatur	812/663-6703
Earthmovers	20-3	Elkhart	219/293-8534
Jay County	38-1	Jay	219/726-2871
Laidlaw Waste Systems	84-2	Vigo	812/466-1211
LaPorte County	42-1	LaPorte	219/879-4653
Laubscher Meadows	82-2	Vanderburgh	812/963-6151
Prairie View	71-7	St. Joseph	219/546-4475
Randolph Farms	68-1	Randolph	317/853-5714
Rumpke-Medora	36-1	Jackson	812/966-2017
South Side	49-1	Marion	317/247-6808

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Tecnical Contact:
Mailing Address: Generator Location:

Emergency Response Phone Number:

WASTE CERTIFICATION INFORMATION

Waste Name: Certification Number: Expiration Date:

Description of Waste:

I Hereby certify that the above information is true and accurate to the best of my knowledge.

Name(print or type) Signature Date(MM/DD/YY)

TRANSPORTER INFORMATION

Company Name: Mailing Address:

Driver's Signature Date(MM/DD/YY)

DISPOSAL SITE INFORMATION

Site Name: OPP Number: Amount:

Authorized Signature Date(MM/DD/YY)

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided. The solid waste disposal facility shall also maintain the disposal notifications unul such time as certification of post-closure is deemed acceptable for the site.

Pursuant to Solid Waste Rule 329 IAC 2-14-8 (Records and reports), all solid waste disposal facilites shall submit to the commissioner a quarterly report which includes the origin of the solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

SPECIAL WASTE DISPOSAL NOTIFICATION

001

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Ball
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO 11/18/93
Name (print or type) Signature Date
ROBERT JAMES AUTIO, REM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11/18/93
Driver's Signature Date

DISPOSAL SITE INFORMATION

19.45 tons

Site Name: Twin Bridges RDF OPP Number 32-2 Amount: 30 cy
123 Twin Bridges Road
Danville, IN 46122

11-18-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

002

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bell
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES ANTIO [signature] 11/18/93
Name (print or type) Signature Date

ROBERT JAMES ANTIO, AGM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 93-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

[signature] 11 18 93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number Amount:
123 Twin Bridges Road
Danville, IN 46122

Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

U03

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bill
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO [signature] 11/18/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO, AGM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

[signature] 11-18-93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number 32-2 Amount: 1537 300y
123 Twin Bridges Road
Danville, IN 46122

[signature] 11-18-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

005

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Ball
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO 11/18/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11/19/93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number 32-2 Amount: 19.19
123 Twin Bridges Road
Danville, IN 46122

30cy

11-19-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

006

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp, Technical Contact: Roy Ball
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO 11/19/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO, REM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11/19/93
Driver's Signature Date

DISPOSAL SITE INFORMATION 3463 40

Site Name: Twin Bridges RDF OPP Number 32-2 Amount:
123 Twin Bridges Road
Danville, IN 46122

11-19-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

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007

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bull
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES ANTIO — 11/19/93
Name (print or type) Signature Date

ROBERT JAMES ANTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991, NUMBER 83-1919 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11 19 93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number 32-2 Amount: 30 cy 22.98
123 Twin Bridges Road
Danville, IN 46122

11-19-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

008

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp.
Mailing Address: 985 South U.S. 421
Zionsville, IN 46077

Technical Contact: Roy Bull 11/22/93
Generator Location: Same

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242408

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO [signature] 11/22/93

Name (print or type) Signature Date

ROBERT JAMES AUTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991, NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management

Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

[signature] 11-22-93

Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF
123 Twin Bridges Road
Danville, IN 46122

OPP Number 322

307
2/09 Amount:

[signature] 11.23.93

Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

651
6009

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

1/11/94 Aja

Company Name: Enviro. Conservation & Chemical Corp.
Mailing Address: 985 South U.S. 421
Zionsville, IN 46077

Tecnical Contact: ~~Robert Autio~~ ROY O. BALL
Generator Location: Same

Emergency Response Phone Number: ~~317-769-4774~~ (708).940-7200 Aja 1/11/94

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, Demolition of process waste Profile No. 242208 Aja 1/11/94

I Hereby certify that the above information is true and accurate to the best of my knowledge. - SEE STATEMENT BELOW

ROBERT JAMES AUTIO — 01/11/94

Name(print or type) Signature Date(MM/DD/YY)

TRANSPORTER INFORMATION

Company Name: Waste Management
Mailing Address: 3200 West Bertha Street Indianapolis, IN 46222

1-11-94

Driver's Signature Date(MM/DD/YY)

DISPOSAL SITE INFORMATION

10.91

Site Name: Twin Bridges RDF
123 Twin Bridge Rd
Danville, IN 46122

OPP Number: 32-2 Amount: 28 cy

1-11-94

Authorized Signature Date(MM/DD/YY)

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided. The solid waste disposal facility shall also maintain the disposal notifications until such time as certification of post-closure is deemed acceptable for the site.

Pursuant to Solid Waste Rule 329 IAC 2-14-8 (Records and reports), all solid waste disposal facilies shall submit to the commissioner a quarterly report which includes the origin of the solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

ROBERT JAMES AUTIO, OEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 93-1419C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

7.92

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SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

a Aya 11/17/93

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bell
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, of "A" frame building Waste Profile No. 242407

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO [signature] 11/17/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO, GEN, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 18, 1991 NUMBER 93-1419 C, U.S.DC., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

[signature] 11/17/93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number 32-2 Amount: 2052
123 Twin Bridges Road
Danville, IN 46122 30 cy

[signature] 11-17-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

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026

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

a Dy 9 11/17/93

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Ball
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, of "A" frame building Waste Profile No. 242407

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO [signature] 11/17/93

Name (print or type) Signature Date

ROBERT JAMES AUTIO, REM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

[signature] 11-18-93

Driver's Signature Date

DISPOSAL SITE INFORMATION

10.74 Ton

Site Name: Twin Bridges RDF OPP Number 322 Amount:
123 Twin Bridges Road
Danville, IN 46122

209

[signature] 11-18-93

Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

027

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bull 11/17/93
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, of "A" frame building Waste Profile No. 242407

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO — 11/17/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO QEM, ON BEHALF OF THE ENVIRE-HEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

William McCla — 11-18-93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF
123 Twin Bridges Road
Danville, IN 46122

OPP Number 32-2 Amount: 30 cy 25.02

11-18-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

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028

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Ball 11/17/93
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, of "A" frame building Waste Profile No. 242407

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO 11/17/93
Name (print or type) Signature Date

ROBERT JAMES AUTIO, QEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11/18/93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF OPP Number 322 Amount: 30cy 17.42
123 Twin Bridges Road
Danville, IN 46122

11-18-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

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029

SPECIAL WASTE DISPOSAL NOTIFICATION

GENERATOR INFORMATION

Company Name: Environmental Conservation & Chemical Corp. Technical Contact: Roy Bell
Mailing Address: 985 South U.S. 421 Generator Location: Same
Zionsville, IN 46077

Emergency Response Phone Number: 317 769-4774

WASTE CERTIFICATION INFORMATION

Waste Name: Building Demolition Certification Number: 31016 Expiration Date: 9/30/94

Description of Waste: Super Fund Cleanup, of "A" frame building Waste Profile No. 242407

I Hereby certify that the above information is true and accurate to the best of my knowledge.

ROBERT JAMES AUTIO 11/19/93
Name (print or type) Signature Date
ROBERT JAMES AUTIO, OEM, ON BEHALF OF THE ENVIRO-CHEM SETTLING DEFENDANTS UNDER THE CONSENT DECREE ENTERED SEPTEMBER 10, 1991 NUMBER 83-1419 C, U.S.D.C., SOUTHERN DISTRICT OF INDIANA.

TRANSPORTER INFORMATION

Company Name: Waste Management Mailing Address: 3200 West Bertha Street
Indianapolis, IN 46222

11 18 93
Driver's Signature Date

DISPOSAL SITE INFORMATION

Site Name: Twin Bridges RDF
123 Twin Bridges Road
Danville, IN 46122

OPP Number 32-2 Amount: 30 cy 18.66

11-18-93
Authorized Signature Date

Pursuant to Solid Waste Rule 329 IAC 2-21-15 (Facility responsibility for special waste disposal) and 329 IAC 2-21-16 (Generator responsibility for special waste disposal), all special waste delivered for disposal shall be accompanied by a disposal notification. As stated in each of these respective cites, the generator must provide the disposal facility with a written disposal notification for each load of special waste to be disposed of and the solid waste disposal facility operator shall check each load of special waste with the information provided.. The solid waste compiled by county, or by state if the waste originated outside of Indiana. The origin of the waste must be provided to the facility by the hauler and the hauler must estimate, by percent, the composition of a mixed load. Therefore, the county and/or the state of origin is now required information on the special waste disposal notification (see above).

The quarterly report, however, does not replace the monthly report which is required from all solid waste facilities that receive special waste. If you have any questions regarding this matter, please contact this office at 317/232-4473.

Hazardous (Solid) Disposal Facility

Chemical Waste Management, Inc.
Adams Center Facility
Fort Wayne, Indiana
Contact: Customer Service
219-447-5585
Letter of Agreement pending
U.S. EPA I.D. No. IND078911146

PROJECT RECORD

Chemical Waste Management of Indiana, Inc.

4636 Adams Center Road
Fort Wayne, Indiana 46806
219/447-5585

Fax Numbers: Administration (219)447-0474
Site services (219)447-0474
Financial Services (219)447-7872

PLEASE DELIVER THE FOLLOWING PAGES TO: **PROJECT RECORD**

NAME: JIM FIFE

LOCATION:

DATE: 12-3-93

FROM: KURT UHEN (SITE SERVICES REPRESENTATIVE

TOTAL NUMBER OF PAGES 3 (not including cover page)

If you do not receive the complete facsimile, please call (219) 447-5585 ext. 220 or ext. 229 as soon as possible.

COMMENTS: This fax is in response to your request of Grant Hartmann:

C: CURRENT OPERATING/ACTIVE DISPOSAL UNIT IS PHASE II/III. REMAINING CAPACITY ~ 200,000 CUBIC YARDS. WE [redacted] ARE UNABLE TO RESERVE AIR SPACE FOR SPECIFIC WASTESTREAMS. THE PHASE III PORTION OF THE ACTIVE UNIT WAS CONSTRUCTED IN 1987 AND WASTE WAS DISPOSED IN THIS [redacted] UNIT BEGINNING IN 1988.

D: OUR LAST INSPECTION BY IDEM (INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT) WAS NOVEMBER 4,5 + 18 AND WE DO NOT YET HAVE THE FINAL REPORT.

E: SEE FOLLOWING SUMMARY

F: WE AT THE SITE LEVEL ARE NOT PERMITTED TO GIVE OUT ANY FINANCIAL INFORMATION; HOWEVER, IF WE AS A [redacted] FACILITY DID NOT MEET THE REQUIREMENTS MENTIONED, WE WOULD NOT BE ABLE TO OPERATE.

IF YOU NEED FURTHER INFORMATION, PLEASE CALL ME OR FAX YOUR REQUEST TO 219-447-0474. Thank you!

PROJECT RECORD

SUMMARY OF CWMI'S FORMAL ENFORCEMENT ACTIONS

Since Chemical Waste Management of Indiana, Inc. ("CWM") has owned the Adams Center Landfill six formal enforcement actions have been filed against the facility. None of the actions allege that the facility posed a threat to the environment. Four of the actions have been finally resolved. There was not a finding for any violations in any of the final resolutions. The resolutions were entered into in an effort to be cooperative and to resolve valid differences of regulatory interpretations.

The first action was issued by the Environmental Protection Agency, Region V ("EPA") on November 7, 1985. That action was resolved by a consent agreement entered into on September 29, 1986. EPA determined that CWM had fully complied with the consent agreement on October 30, 1988. The issues in that action resulted from filings of the prior owner of the facility. As a result of the consent order CWM performed a groundwater assessment program and installed additional groundwater monitoring wells in the Atherton 2b aquifer. In addition CWM amended its certificate of insurance to list as the insured "Adams Center Landfill" as opposed to "Chemical Waste Management" and paid in settlement $30,000. There was no admission that CWM committed a violation. There was no allegation of environmental harm. A copy of the consent order is attached. It is important to understand that in August of 1984 EPA announced publicly a stepped-up enforcement program. It stated that EPA would first single out commercial hazardous waste disposal companies and that it would start that process with the largest company in the commercial disposal industry. CWM's parent is the largest such company and it became the first one to receive intense scrutiny and enforcement action by EPA. EPA set out to make an example of CWM for the entire commercial disposal industry and all other industries as well.

The second action was a Notice of Violation issued by the Indiana Department of Environmental Management ("IDEM") on September 30, 1988. That action was resolved by an agreed order approved by the Commissioner of IDEM on September 30, 1988 -- the same date the NOV was issued. IDEM believed that it was necessary to formally resolve any alleged violations by an agreed order prior to issuance of the Part B permit. All of the alleged violations had already been addressed by CWM prior to issuance of the NOV. CWM did not admit to any violations. IDEM did not allege any environmental harm. CWM paid in settlement $16,000. The allegations concerned technical groundwater sampling and documentation issues and concerns with the cover letter accompanying the letter of credit and the correct guidance document to be used for determining the amount of financial responsibility. A copy of that Agreed Order is attached.

The third action was a Notice of Violation issued by IDEM on June 19, 1991. Again, this NOV concerned only technical violations such as the proper way to manifest leachate and storage of roll-off boxes of stabilized waste. The NOV did not allege a threat to the environment. CWM did not admit to any violation. CWM entered into an agreed order

in accordance with its corporate policy to resolve differences of opinion in regulatory interpretations cooperatively with the regulatory agency. The agreed order was approved by the Commissioner of IDEM in November of 1991.

The fourth action is a Notice of Violation issued by IDEM on November 14, 1991. It is CWM's belief that this NOV was issued as a result of a Notice of Citizen Suit filed by the City of New Haven. The City of New Haven has taken a position opposing the Adams Center facility with the stated purpose of closing the facility. The City of New Haven has filed numerous actions all directed at closing the landfill. Those actions include at least the following: (1) an appeal of the NPDES permit issued to CWM; (2) the citizen suit notice; (3) a proposed ordinance to annex the facility into the corporate limits of New Haven; and (4) intervention into the lawsuit filed by CWM against IDEM concerning the applicability of and constitutionality of the "good character" law. The NOV contains 24 allegations. None of the allegations concern a threat to the environment. All of the concerns that were the basis for the allegations which had been expressed to CWM had already been addressed by CWM prior to issuance of the NOV. CWM's attorney has reviewed all of the allegations and believes that only one of the twenty-four allegations may constitute a violation. That allegation is that CWM failed to pass three cycles of bladder water through the filter prior to collection of a groundwater sample at one of its wells. The purpose of this permit requirement was to eliminate any false indication of contamination that might result from rinsing the filter with deionized water. In no way did this possible deviation from the permit requirement pose a threat to the environment. The effect of this deviation could have been a false positive, requiring further sampling. CWM is waiting for a response from IDEM to finally resolve the matter.

The fifth action resulted from CWM self notification of inadvertent disposal for a land disposal restricted waste. This exception waste was placed into the landfill prior to full treatment. It was discovered within 24 hours of placement, removed and re-treated to meet all requirements of the land disposal restrictions. In the consent agreement CWM paid a settlement of $4,160.00.

CWMI received the sixth formal enforcement action in April 1993. IDEM alleged that CWMI overfilled waste beyond the final permitted elevation grades by approximately 14,000 cubic yards in the Phase II and III active landfill. This alleged violation was to have occurred by April 1992. In June 1992, CWMI received a permit modification from the IDEM which changed the permitted final grades from 5:1 to 4:1. This alteration of the sideslopes returned the nominal 14,000 yards of waste within the permitted final waste elevations. CWMI has met with IDEM in an attempt to resolve this issue and made all necessary submittals. This issue remains unresolved.

In addition to these formal enforcement actions, CWM has over these 6 years received 11 violation letters of warning from IDEM all of which were resolved in the 30 day time frame established by IDEM.

PROJECT RECORD

It is important to understand that land disposal facilities are inspected much more frequently than hazardous waste generators. Adams Center has been inspected at least two times a year. In addition IDEM's enforcement policy for determining what is a "high priority violator" includes a consideration of whether the facility is a land disposal facility. For this reason it is expected that CWM will be inspected more frequently and will have alleged violations addressed by the issuance of formal enforcement actions more frequently. CWM has a corporate policy of compliance. CWM's parent company performs compliance audits of the facility annually. CWM's customers also inspect the facility regularly. It is the goal of CWM to ensure compliance at all times. CWM believes that its compliance record with the rapidly changing, highly technical and numerous regulatory requirements is excellent.

PROJECT RECORD

Hazardous (Liquid) Disposal Facility

Clean Harbors, Inc.
11800 South Stony Island Road
Chicago, Illinois 60617
Contact: Terri Crippen
312-646-6202
Letter of Agreement pending
U.S. EPA I.D. No. 000608471

PROJECT RECORD

Danville Recycling and Disposal Facility
P.O. Box 17
123 Twin Bridges Road
Danville, Indiana 46122
317/745-2878

A Waste Management Company

Post-it™ brand fax transmittal memo 7671	# of pages ▸ 6
To Jim	From April
Co.	Co.
Dept.	Phone #
Fax #	Fax #

November 4, 1993

Mr. Jim Fife
AWD Technologies
Penn Center West
Building III, Suite 300
Pittsburgh, PA 15276

PROJECT RECORD

Dear Mr. Fife:

Per the request of the ECC Trustees and AWD the following information is being provided in order to pre-qualify Twin Bridges RDF for disposal.

The current cell being utilized at Twin Bridges RDF is number 3C. Cell construction was initiated in May, 1993 and usage began in September, 1993. The estimated life expectancy of cell 3C is 12-18 months.

Presently there are no notices of violation at Twin Bridges RDF and no leakage or contamination. State inspection reports for 1993 are being enclosed.

If any additional information is needed please contact me at (317) 745-2878.

Sincerely,

Steve Wallace

Steve Wallace
Special Waste Consultant

SAW/csc

cc: Chuck Trimbur

Indiana Department of Environmental Management 281
Office of Solid and Hazardous Waste Management Registrant #
Solid Waste Facility Inspection Report

Date 2-26-93 Time 3:30 p.m.	County Hendricks
Facility Danville Landfill	Permit Yes 32-2 No
Location CR 75N. ½ mi. W CR 150E	Inspected By Tim Hotz

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container Other_____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11*

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: Last inspection 2-4-93 noted #18 as the only violation.
Several inches of snow on the ground today. The daily working face looks good with plenty of cover soil stockpiled nearby. Weather has been too wet to attempt the repair of an erosion problem on SW bank. Will recheck next time.

RECEIVED BY: [illegible]

State Form 34505 (R/3-91)

PROJECT RECORD

Indiana Department of Environmental Management

2B1

Office of Solid and Hazardous Waste Management — Registrant #

Solid Waste Facility Inspection Report

Date 4-8-93	Time 2:00 p.m.	County Hendricks
Facility Danville Landfill		Permit (Yes) 32-2 No
Location CR 75 N ½ mi. W CR 150E		Inspected By Tim Hotz

Type Of Operation: (Sanitary Landfill) Construction/Demolition Processing Facility Incinerator Restricted Waste Site Type____ Collection Container Other____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: No violations noted on 2-26-93.

Regrading work done on SW bank eliminating erosion problem. Reseeding of this area to be done this spring along with the northern portion of the site. Everything else looks good. No violations.

PROJECT RECORD

RECEIVED BY: [illegible]

DISTRIBUTION: White-Office; Pink-Facility; Canary-Inspector

State Form 34505 (R/3-91)

Indiana Department of Environmental Management

2B1

Office of Solid and Hazardous Waste Management

Registrant #

Solid Waste Facility Inspection Report

Date 5-12-93	Time 3:00 p.m.	County Hendricks
Facility Danville Landfill		Permit Yes # 32-2 No
Location CR 75 N. ½ mi. W. CR 150 E		Inspected By Tim Hotz

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator Restricted Waste Site Type____ Collection Container Other____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-21 *
23. LEACHATE COLLECTION, 2-14-22 *
24. LEACHATE DISPOSAL, 2-14-23 *
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11*

INCINERATORS

34. OPERATIONAL REQUIREMENTS, 2-20-3 *
35. ADDITIONAL OPERATIONAL REQUIREMENTS & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: Last inspection 4-8-93 did not note any violations.
New cell construction is underway and the gas well heads are being redone in order to eliminate water infiltration. Everything is in good shape. No violations.

PROJECT RECORD

RECEIVED BY: [signature]

DISTRIBUTION: White-Office; Pink-Facility; Canary-Inspector

State Form 34505 (R/3-91)

File

Indiana Department of Environmental Management 281
Office of Solid and Hazardous Waste Management
Solid Waste Facility Inspection Report

Date 7-14-93	Time 9:00 a.m.	County Hendricks
Facility Twin Bridges RDF (formerly Danville)		Permit No. 32-2 No
Location CR 75N, 1/2 mi. W CR 150E		Inspected By Tim Hotz, Dave Werson

Type Of Operation: (Sanitary Landfill) Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type_____ Collection Container Other_____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-[illegible]
23. LEACHATE COLLECTION [illegible]
24. LEACHATE DISPOSAL, 2-[illegible]
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATION [illegible]
35. ADDITIONAL OPERATIONAL [illegible] & INFECTIOUS WASTE, 2-20-[illegible]

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-[illegible]

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: No violations noted on [illegible]

Wet weather has suspended construction activity in the new cell. In the current fill area today, solid waste is being compacted and covered at two levels. The area of the lower level will become a turn around for trucks. Solid waste is also being worked at an upper level, which is an easier area for trucks to get in and out due to wet weather. Everything looks real good.

RECEIVED BY: [signature]

DISTRIBUTION: White-Office; Pink-Facility; Canary-Inspector

State Form 34503 (R/3-91)

PROJECT RECORD

Larry.

Indiana Department of Environmental Management 281
Office of Solid and Hazardous Waste Management Registrant #
Solid Waste Facility Inspection Report

Date 10-22-93	Time 11:30 a.m.	County Hendricks
Facility Twin Bridges RDF (Formerly Danville LF)		Permit Yes 32-2 No
Location [illegible]		Inspected By Tim Hotz

Type Of Operation: Sanitary Landfill Construction/Demolition Processing Facility Incinerator
Restricted Waste Site Type____ Collection Container Other____

OPERATIONAL REQUIREMENTS-LAND DISPOSAL

1. ACCESS CONTROL, 2-14-1
2. ON-SITE ROADS, 2-14-2
3. SIGNS, 2-14-3
4. SANITATION, 2-14-4
5. SCAVENGING, 2-14-5
6. SALVAGING, 2-14-6
7. SAFETY REQUIREMENTS, 2-14-7
8. RECORDS, 2-14-8
9. OPEN BURNING, 2-14-9 *
10. WASTE DEPOSIT AND COMPACTION, 2-14-10
11. DIVERSION OF SURFACE WATER, 2-14-11
12. COVER-GENERAL PROVISIONS, 2-14-12 *
13. COVER-SANITARY LANDFILLS & RWS TYPE I, 2-14-13 *
14. COVER-RWS TYPE II, 2-14-14 *
15. COVER-RWS TYPE III, 2-14-15 *
16. COVER-CONST/DEMO SITES, 2-14-16 *
17. DISPERSAL CONTROL, 2-14-17
18. GRADING & SOIL STABILIZATION, 2-14-18
19. FINAL COVER, 2-14-19
20. EXPLOSIVE GASES, 2-14-20
21. LEACHATE ON SITE, 2-14-21
22. LEACHATE OFF SITE, 2-14-22
23. LEACHATE COLLECTION, 2-14-22
24. LEACHATE [illegible] 2-14-23
25. GROUNDWATER MONITORING WELLS, 2-14-24
26. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

PROCESSING FACILITIES

27. FACILITY ACCESS & ROADS, 2-19-1
28. PUBLIC HEALTH & SAFETY, 2-19-2
29. FACILITY SANITATION, 2-19-3 *
30. USE OF CONTINGENCY PLAN, 2-19-4
31. SPECIAL WASTE, 2-19-5
32. RECORDS & REPORTS, 2-19-6
33. PERMIT DEVIATION/MODIFICATION, 2-8-11 *

INCINERATORS

34. OPERATIONAL REQUIREMENTS [illegible]
35. ADDITIONAL OPERATIONAL [illegible] & INFECTIOUS WASTE, 2-20-4

SPECIAL WASTE

36. SPECIAL WASTE DISPOSAL, 2-21-15 *

Circled asterisk items identify major violation(s) of 329 IAC 2 or IC 13-7 and shall be corrected immediately

Comments: No violations noted on 9-24-93. A leachate collection line is being installed along the bottom of the east bank to collect leachate from an older part of the site. Installation of additional gas collection wells are underway. Completed area on west side of access road, southeast corner is ready for clay cap. Everything looks good. No violations.

RECEIVED BY: [illegible]

DISTRIBUTION: White-Office; Pink-Facility; Canary-Inspector State Form 34505 (R/3-91)

PROJECT RECORD

Non-Hazardous (Solid) Disposal Facility

Waste Management Company
Danville Recycle and Disposal Facility
123 Twin Bridges Road
P.O. Box 17
Danville, Indiana 46122
Contact: Stephen Wallace
Special Waste Consultant
317-745-2878
IDEM Special Waste Approval issued
IDEM Operating No. 32-2
Permit No. 32-6-93

PROJECT RECORD

CleanHarbors
ENVIRONMENTAL SERVICES COMPANIES
8935 N. MERIDIAN STREET, SUITE 105
INDIANAPOLIS, IN 46260
(317) 581-0001

November 8, 1993

To Whom It May Concern:

In reference to specification e. under 1. Part B of 01385, Clean Harbors, Inc. is not currently nor has it ever been out of compliance at the Chicago facility.

In reference to specification f. under the same form, Clean Harbors is not a RCRA regulated facility.

Sincerely,

Clean Harbors, Inc.
Compliance Department

PROJECT RECORD

I. GENERAL INFORMATION

PROJECT RECORD

PROJECT RECORD

I. GENERAL INFORMATION

Introduction to the Company

Clean Harbors of Chicago, Inc., a subsidiary of Clean Harbors, Inc. headquartered in Quincy, Massachusetts, owns and operates a hazardous waste storage, treatment and disposal facility located in Chicago, Illinois. This facility is an interim status facility and has been permitted by the Illinois Environmental Protection Agency to receive, store, treat and transfer a variety of waste streams. The treatment methods utilized at this facility reduce the volume and or toxicity of waste materials to a level that meets specifications for discharge into a publically-owned treatment works (Metropolitan Water Reclamation District of Greater Chicago) or make it suitable for further treatment, reuse, or disposal.

Clean Harbors of Chicago, Inc. was established on January 25, 1989 as a result of an acquisition of ChemClear, Inc.--a nationally recognized company providing industrial aqueous waste treatment services.

Clean Harbors currently maintain and operate four hazardous waste treatment, storage and disposal facilities, three waste oil reclamation facilities, two EPA-qualified analytical laboratories and fifteen remedial & field service locations throughout the New England, Mid-Atlantic and Midwest states. As part of this network of companies, Clean Harbors of Chicago provides hazardous waste management, remedial, risk management, analytical and haz-mat handling training services to customers in Illinois, Wisconsin, Indiana and surrounding regions. Please refer to the Network of Services and Facility/Service Cener Directory which immediately follow.

The company's strategy is to provide comprehensive solutions on an integrated basis to a diversified group of customers on a recurring basis. These services are typically provided to chemical, petroleum, paper, transportation, utility and industrial firms, schools, hospitals, communities, other waste management comanies and government agencies. Clean Harbors' customers include over 200 of the Fortune 500 companies.

NETWORK OF SERVICES

PROJECT RECORD

CLEAN HARBORS ENVIRONMENTAL SERVICES COMPANIES

NETWORK OF SERVICES

Hazardous Waste Management

* Treatment and disposal of hazardous/industrial/aqueous waste(s)
* Transportation, storage and disposal of PCB wastes (transformers and capacitors)
* Recovery of waste halogenated solvents
* Treatment of waste oil(s)
* Collection, consolidation, storage, treatment and disposal of laboratory chemicals
* Incineration of medical and pathological wastes
* Transportation of drummed or bulked industrial wastes
* Collection, consolidation, storage and coordination for ultimate disposal of industrial wastes for secure landfill, stabilization, incineration or other available technologies

Environmental Remediation

PROJECT RECORD

* 24-hour emergency/spill response
* Waste site cleanup(s)
* Facility/equipment decontamination
* Groundwater restoration
* Aboveground tank maintenance
* Underground storage tank management
* Surface impoundment, maintenance/Closure(s)
* Project management
* Recovery/treatment system design and installation
* Equipment fabrication

Technical

* Certified laboratory analysis
* Mobile laboratory services
* Sample collection
* Air sampling/monitoring
* Site/risk assessments
* Remedial action planning
* Treatability studies
* Waste minimization studies
* Research and development of new and existing treatment technologies
* Training for haz-mat handling
* Facility compliance audits
* SPCC/closure plan development and implementation

FACILITY & SERVICE CENTER DIRECTORY

PROJECT RECORD

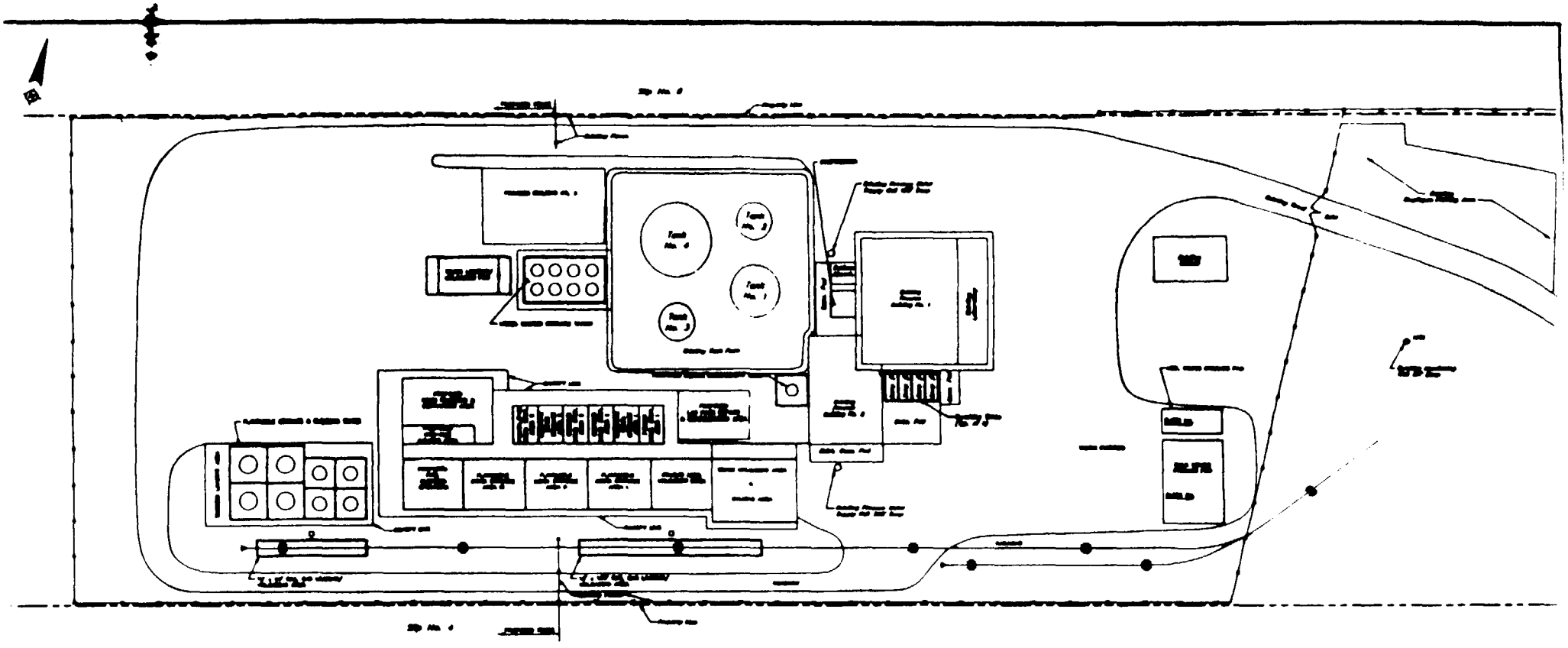
CLEAN HARBORS OF CHICAGO, INC. - OVERVIEW

Facility Name:	Clean Harbors of Chicago, Inc.
Location:	11800 S. Stony Island Avenue Chicago, IL 60617
County:	Cook
Facility Owner:	Clean Harbors of Chicago, Inc. 11800 S. Stony Island Avenue Chicago, IL 60617
Property Owner:	The Illinois International Port Authority 3600 E. 95th Street 95th & the Lakefront Chicago, IL 60617-5193
Facility I.D. No.:	ILD000608471
Permit Type:	Hazardous Waste Interim Status Waste Management Facility
Waste Description:	Most organic and inorganic waste
Services Provided:	Chemical precipitation Chemical oxidation/reduction Phase separation Sludge dewatering/fixation Oil recovery Container storage/transfer Lab chemicals packaging Categorization of unknown laboratory waste Household hazardous waste collections Emergency/Spill Response Transportation and disposal

PROJECT RECORD

FACILITY SITE PLAN

PROJECT RECORD



PROJECT RECORD

CHCI DWG. NO. 4232

A	FOR INFORMATION ONLY

CleanHarbors
ENVIRONMENTAL ENGINEERING, INC

CLEAN HARBORS OF CHICAGO, INC.
11800 S. STONY ISLAND AVENUE
CHICAGO, ILLINOIS 60617

SITE PLAN WITH
PROPOSED MODIFICATIONS

2918-C-11

DIRECTIONS TO CLEAN HARBORS OF CHICAGO, INC.

PROJECT RECORD

Clean Harbors

PROJECT RECORD

CLEAN HARBORS OF CHICAGO, INC.

Facility Address
11800 South Stony Island Avenue
Chicago, IL 60617
312-646-6202

Corporate Headquarters
1200 Crown Colony Drive
Quincy, MA 02269
617-849-1800
Central Service - ext. 4430

Clean Harbors of Chicago, Inc. is located on the east bank of Lake Calumet on the south side of Chicago near the Illinois/Indiana border.

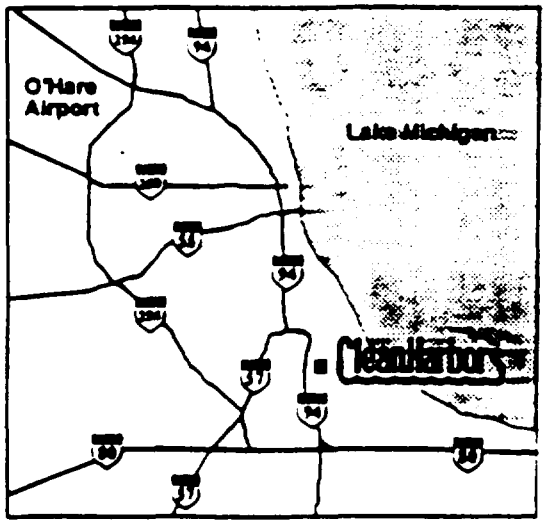
1. From Interstate 94, the Calumet Expressway (accessible from the Tri-State Tollway 294 or 80/94), take the 130th Street East exit. Proceed 1.5 miles to the third set of lights.

2. Turn left onto Torrence Avenue. Go North approximately 2 miles, over the steel bridge to 122nd Street (you will see a group of billboards at the intersection).

3. Turn left onto 122nd Street and continue across the railroad tracks 1.5 miles to the stop sign.

4. Turn right onto Stony Island Avenue. Clean Harbors is .75 mile down on the left.

5. Please check in at the first office trailer inside the second gate.



PROJECT RECORD

II. SITE DESCRIPTION

II. SITE DESCRIPTION

Plant History

The Clean Harbors of Chicago facility, approximately 26.5 acres, is located in the Southeast area of Cook County, South side of Chicago, Illinois. Until its acquisition by Clean Harbors in January, 1989, the facility had been built, owned and operated by ChemClear, Inc., a publically-held company providing hazardous waste treatment and management services throughout the Midwest and east coast of the United States.

Geology/Hydrogeology

The facility site is located on a pier between slip No. 4 and Slip No. 6 on the eastern side of Lake Calumet, which falls within the Chicago Lake Plain, a subdivision of the Great Lakes Section and the land is characterized as central low-land.

Typically, a mixed fill consisting of slag, silty clays, sand, gravel and miscellaneous materials exist from the surface to 15 feet depth. From 15 to 50 feet below grade, a tough to hard gray silty clay is found. The groundwater table is at the top of the sand stratum about 15 feet below grade which is approximately equivalent to the surface level of Lake Calumet.

The facility site is not located within the 100-year flood plain nor what has been designated a coastal high hazard zone. Additionally, the site has never received any past flood damage.

Most operations performed at the facility are conducted indoors or within a contained area; any resulting stormwaters collected from outdoor process areas are gravity drained in sumps, tested and treated through routine treatment processes.

The facility is located approximately 3 miles from the nearest drinking water supply and 2 miles from any sensitive receptors, i.e., schools, hospitals.

III. PRINCIPAL OPERATING LICENSES/PERMITS

Clean Harbors of Chicago, Inc. is currently permitted by the Illinois Environmental Protection Agency, the City of Chicago and the Metropolitan Water Reclamation District of Greater Chicago for the collection, storage, analysis, treatment, and container storage of hazardous waste with subsequent transfer off-site.

Existing permits include:

Permit Type/Governing Agency	Permit No.	Expir. Date
Hazardous Waste Operating (TSDF) Land Division - Illinois Environmental Protection Agency	1980-36-OP	None
Wastewater (POTW) Water Pollution Control Division - Illinois Environmental Protection Agency	1986-EP-1157-1	09/01/91
Air Quality Air Pollution Control Division - Illinois Environmental Protection Agency	83120017	6/30/93
RCRA Part A Permit Waste Management Activities Region V - U.S. Environmental Protection Agency	ILD000608471 (Revised Part B application submitted)	N/A

Copies of existing permits which entail types of disposal units, licensed capacities and waste types accepted are available for inspection upon request at the site.

PROJECT RECORD

CLEAN HARBORS OF CHICAGO, INC.

SUPPLEMENTAL PERMIT NO. 1983-80-SP

Attached is a list of some of the generic waste codes and names currently approved for acceptance at the Clean Harbors of Chicago facility.

PROJECT RECORD

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 0316000051 -- Cook County
Clean Harbors of Chicago, Inc.
Log No.: 1991-177
Permit File

July 8, 1991

Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, Illinois 60617

Gentlemen:

This letter is to inform you that the Agency has revised Supplemental Permit No. 1983-80-SP to include the following modifications:

1. To combine various generic permits which will:

   i. allow nonhazardous waste to be accepted for treatment or storage,

   ii. allow hazardous waste to be accepted for treatment or storage, and

   iii. allow infectious waste to be accepted for storage.

   The request to eliminate the specific generic for nonhazardous used oil was not granted because these wastes require specific testing for total chlorine and possibly a generator's rebuttal.

Should you have any questions regarding this permit, please contact Mark A. Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:MAS:ct,1890q,59

PROJECT RECORD

cc: Division File
Maywood Office

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 0316000051 -- Cook County
Clean Harbors of Chicago, Inc.
Permit No. 1980-36-OP
Supplemental Permit No. 1983-80-SP
Log No.: 1991-177 (1990-476, 1990-277, 1990-250, 1990-156, 1990-155, 1990-007, 1989-237, 1984-759, 1985-219, 1986-083, 1986-101, 1986-145, 1987-022, 1988-294, 1989-007, 1989-173)
Expiration Date: December 16, 1991
Permit File

Revised July 8, 1991

Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, Illinois 60617

Gentlemen:

Supplemental Permit is 1983-80-SP, is hereby issued to the above named waste management facility:

a. To allow acceptance for treatment only, the following waste streams from any IEPA registered generator on a generic basis:

   i. Nonhazardous waste (see attached waste stream permit #000053). This permit allows only waste streams received for treatment of inorganic parameters, oil separation or cyanide and phenolic oxidation. Wastes requiring treatment for organics (except cyanide, and phenolics) are not allowed under this generic.

   ii. Hazardous waste which are hazardous by characteristic (see attached waste permit #000281).

      D001 - (oxidizers only)
      D002 through D011
      D028 through D030
      D032 through D035
      D018, D039, D0040

      or by listing:

      K062

      This permit does not allow other organic type wastes to be accepted except oily wastewater. See Exhibit 3 of the application dated May 10, 1991 for a description of the boundary conditions for the parameters.

PROJECT RECORD

b. To allow acceptance for storage (bulking and transfer) only, the following waste streams from any IEPA registered generator on a generic basis:

   i. Hazardous waste as described in Exhibit #2 of the application dated May 10, 1991 (see attached Waste Stream Permit #000284).

   ii. Non-hazardous used, waste, off spec. or surplus oils received ultimately for fuel blending (see attached Waste Stream Permit #000275). To be a waste oil the oil content must be greater than 50%.

   iii. Hazardous (infectious) hospital waste (see attached Waste Stream Permit #000277).

   iv. Non-hazardous waste (see attached Waste Stream Permit #000285.

Final plans, specifications, application and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Illinois Environmental Protection Agency, Division of Land Pollution Control by the permit numbers and log numbers designated in the heading above.

This supplemental permit is subject to the standard conditions attached and is further subject to the following special conditions:

1. The facility shall conduct a laboratory analysis upon initial acceptance of a non-hazardous waste to determine that the waste does not exhibit the characteristic of a hazardous waste. This documentation shall be included in the facility's permanent operating record. The generator may certify that the pesticides and herbicides parameters are not present. All other characteristic analysis must be performed.

2. All wastes shall be transported from each generator to this treatment facility under a properly completed manifest.

3. All wastes accepted under this generic waste permit shall be appropriately treated (chemical oxidation/reduction, precipitation, neutralization, chlorination, flocculation, sedimentation, filtration) with wastewater effluents discharged (under necessary permits) to the sanitary sewer and residuals transported to a permitted disposal site utilizing the Agency supplemental waste stream permit and manifest system.

4. An analysis of each waste stream accepted from each generator shall be maintained on file at your premises for review by the Agency.

5. This facility shall record the total quantity from each generator of each of the generic wastes shown in the attachment to this permit that were received for treatment. This record shall become a part of the facilities permanent operating record.

PROJECT RECORD

PROJECT RECORD

6. If waste other than those identified above are to be accepted for treatment, then Clean Harbors shall apply for either a modification of this permit or a supplemental waste stream permit.

7. The applicant shall do routine monitoring (once per month) to demonstrate that the waste (treatment residue) being disposed of is non-hazardous by characteristic. These monitoring results should be maintained at the facility in an operating record and made available for Agency inspection upon request.

8. All wastes received for treatment which carry the hazardous waste code K062 shal be lime stabilized.

9. Extreme care shall be exercised when opening, handling, or repacking wastes due to inherent dangers that could be encountered.

10. This facility shall record, the total quantities from each generator of each of the generic wastes that were received for storage and/or repacking. In addition, Clean Harbor shall record the total quantities of waste materials transferred off-site for further treatment of disposal, and shall identify the receiving facility. This record shall become a part of the facilities permanent operating record.

11. Special wastes which are stored on-site for treatment of disposal elsewhere, shall be transported to the receiving facility utilizing the Agency's special waste stream permit and manifest system.

12. Prior to receiving a new waste stream under generic Permits 000284 and 000285, Clean Harbors shall provide the treatment, storage or disposal facility (TSDF) to which Clean Harbors intends to send the waste with a sample of the waste and any additional data required for the TSDF to determine if it can receive the waste. Clean Harbors shall not accept the waste until the TSDF has provided Clean Harbors with written documentation that it will accept the waste and that it has the proper permits and technical resources to treat or dispose of the waste. This documentation shall be included in the facility's permanent operating record.

13. In the event that Clean Harbors determines that the TSDF to which Clean Harbors has been shipping a waste stream can no longer accept the waste, the Permittee shall comply with the procedures described in Condition #14, prior to receiving an additional load of the waste. The Permittee shall notify the Agency in writing, within 15 days of discovery that they do not have a final disposition for the waste or have found an alternate facility to send the waste.

14. The hazardous (infectious) hospital waste must be shipped off-site within 10 days of receipt to a permitted facility.

15. All wastes shall be stored in an area where the ambient temperature is less than 45 degrees Fahrenheit except when conducting waste transfer operations to avoid putrescible conditions.

16. During waste transfer operations, at no time shall the surface temperature of the waste containers be permitted to rise above 60 degrees Fahrenheit.

17. All wastes received under Generic Permit 000275 shall be analyzed for total halogen. Any USEPA approved test method may be used (i.e., oxygen bomb followed by titrimetric halogen determination). Clean Harbors shall use the following rebuttal method for determining halogenated solvents in wastes received by blending into fuel to be marketed as used oil:

    Used oil or wastes containing more than 1,000 ppm of total halogens is presumed to be hazardous waste unless adequately rebutted by the generators. It is important to note that simply showing that the amount of chlorinated solvents in the oil is less than 1,000 ppm by GC/MS analysis (i.e., SW-846 Method 8240) is not an adequate rebuttal to the presumption. For example, if the oil has a total halogen concentration of 3,000 ppm (by ASTM Method 808), and the GC/MS analysis indicates 800 ppm of trichloroethylene, the presumption has not been adequately rebutted. The generator must still (1) identify the source(s) of all the 3,000 ppm chlorine and (2) provide that the 800 ppm of trichloroethylene is not the result of mixing the oil with a listed hazardous waste. At a minimum, the rebuttal shall include (1) the concentrations of halogenated solvents as determined by GC/MS Test Methods (i.e., SW-846 Method 8240), (2) if available, material safety data sheets for the waste. The MSDS' must include % chlorine in each waste and the source (i.e., chlorinated paraffins), (3) process descriptions of the operations (including those which use solvents) raw materials, and products which may intorduce chlorine into the process, and (4) the generator certification form. A copy of the rebuttals shall be submitted with the renewal application for generic permits.

18. If characteristic waste is blended into used oil, the used oil can only be shipped off-site as a hazardous waste/fuel if it continues to exhibit the characteristics of a hazardous waste. It should be noted that mixing a characteristic hazardous waste with another material which renders the waste non-hazardous constitutes treatment of hazardous waste subject to the applicable standards under 35 Ill. Adm. Code 724 and 725.

19. For each generic permit number, Clean Harbors shall provide a list of the generators which utilize the generic permits (from January to September) when this permit comes up for renewal. Under each generic permit number, provide the generator name, address and ID number (if applicable).

PROJECT RECORD

Except as modified, this site shall be operated in accordance with the terms and conditions of Permit No. 1980-36-OP and any subsequent supplemental permits.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:MAS:ct,1890q,60-64

Attachments

cc: State Permit File
Northern Region
Compliance Monitoring Section

PROJECT RECORD

Illinois Environmental Protection Agency • P.O. Box 19276, Springfield, IL 62794-9276

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051 GENERIC W/S PERMIT NUMBER: 0000:

SITE NAME: CLEAN HARBORS OF CHICAGO INC SUP/OP PERMIT NUMBER: 1983178SP

DATE RECEIVED: 09/19/88 APPROVAL DATE: 12/12/8
EXPIRATION DATE: 12/16/9

GENERIC WASTE CODE: 0090

GENERIC WASTE NAME: NON-HAZARDOUS WASTE

WASTE CLASSIFICATION: NON-HAZARDOUS NOT SUBJECT TO FEE

IEPA NON-HAZARD WASTE NUMBER(S): 0007,0009

HANDLING CODE(S): T23,T24,T25,T31,T40,T41,T44

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): 140F PH (MIN): 2.1 PH (MAX): 12.4

-------- CRITERIA FOR WASTE CONSTITUENTS --------

CODE	NAME	MAX LIMITS
0001	WATER	0099 % VOL
0002	OIL	0005 % VOL
0120	COOLANT	0005 % VOL
0003	DIRT	0010 % VOL
0235	ARSENIC - TCLP	0005 PPM
0236	BARIUM - TCLP	0100 PPM
0237	CADMIUM - TCLP	0001 PPM
0238	CHROMIUM - TCLP	0005 PPM
0239	LEAD - TCLP	0005 PPM
0240	MERCURY - TCLP	0200 PPB
0241	SELENIUM - TCLP	0001 PPM
0242	SILVER - TCLP	0005 PPM
0027	MERCURY	0003 PPB

DISPOSAL METHOD: WASTE TREATMENT

TREATMENT METHOD: DEWATERING

MAS

PROJECT RECORD

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051

GENERIC W/S PERMIT NUMBER: 000275

SITE NAME: CLEAN HARBORS OF CHICAGO INC

SUP/OP PERMIT NUMBER: 1983080SP

DATE RECEIVED: 05/09/90

APPROVAL DATE: 06/11/90
EXPIRATION DATE: 12/16/91

GENERIC WASTE CODE: 0119

GENERIC WASTE NAME: WASTE OIL

WASTE CLASSIFICATION: NON-HAZARDOUS NOT SUBJECT TO FEE

IEPA NON-HAZARD WASTE NUMBER(S): 0002

HANDLING CODE(S): D17,S01

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): N/A F PH (MIN): N/A PH (MAX): N/A

-------- CRITERIA FOR WASTE CONSTITUENTS ---------

CODE	NAME	MAX LIMITS
0193	TOTAL CHLORIDE	1000 PPM
0002	OIL	0100. % VOL

DISPOSAL METHOD: WASTE STORAGE

STORAGE METHOD: CONTAINER (BARREL, DRUM, ETC.)

MAS

PROJECT RECORD

Illinois Environmental Protection Agency • P.O. Box 19276, Springfield, IL 62794-9276

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051 GENERIC W/S PERMIT NUMBER: 000277

SITE NAME: CLEAN HARBORS OF CHICAGO INC SUP/OP PERMIT NUMBER: 1983080SP

DATE RECEIVED: 05/09/90 APPROVAL DATE: 07/03/90
EXPIRATION DATE: 12/16/91

GENERIC WASTE CODE: 0038

GENERIC WASTE NAME: HAZARDOUS (INFECTIOUS) HOSPITAL WASTE

WASTE CLASSIFICATION: HAZARDOUS NOT SUBJECT TO FEE

USEPA HAZARDOUS WASTE NUMBER(S): HIHW

HANDLING CODE(S): D17,S01

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): N/A F PH (MIN): N/A PH (MAX): N/A

-------- CRITERIA FOR WASTE CONSTITUENTS --------

CODE	NAME	MAX LIMITS
0248	HAZ WASTE WITH A FINAL DESTINA	0100 % VOL

DISPOSAL METHOD: WASTE STORAGE

STORAGE METHOD: CONTAINER (BARREL, DRUM, ETC.)

MAS

PROJECT RECORD

Illinois Environmental Protection Agency • P.O. Box 19276, Springfield, IL 62794-9276

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051

GENERIC W/S PERMIT NUMBER: 00028

SITE NAME: CLEAN HARBORS OF CHICAGO INC

SUP/OP PERMIT NUMBER: 1983080SP

DATE RECEIVED: 09/09/90

APPROVAL DATE: 10/08/9

EXPIRATION DATE: 12/16/9

GENERIC WASTE CODE: 0082

GENERIC WASTE NAME: WASTE THAT IS HAZ DUE TO CHARACTERISTICS

WASTE CLASSIFICATION: HAZARDOUS SUBJECT TO FEE

USEPA HAZARDOUS WASTE NUMBER(S): D001,D002

HANDLING CODE(S): T23,T24,T25,T31,T40,T41,T44

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): > 140F PH (MIN): N/A PH (MAX): N/A

-------- CRITERIA FOR WASTE CONSTITUENTS ---------

CODE	NAME	MAX LIMITS
0248	HAZ WASTE WITH A FINAL DESTINA	0100 % VOL

DISPOSAL METHOD: WASTE TREATMENT

TREATMENT METHOD: DEWATERING

MAS

PROJECT RECORD

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051

GENERIC W/S PERMIT NUMBER: 0002

SITE NAME: CLEAN HARBORS OF CHICAGO INC

SUP/OP PERMIT NUMBER: 19830805

DATE RECEIVED: 08/09/90

APPROVAL DATE: 11/09/

EXPIRATION DATE: 12/16/

GENERIC WASTE CODE: 0121

GENERIC WASTE NAME: HAZARDOUS WASTE FOR STORAGE ONLY

WASTE CLASSIFICATION: HAZARDOUS NOT SUBJECT TO FEE

USEPA HAZARDOUS WASTE NUMBER(S): D002,D004,D005,D006,D007,D008,D009

HANDLING CODE(S): S01

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): >N/A F PH (MIN): N/A PH (MAX): N/A

-------- CRITERIA FOR WASTE CONSTITUENTS ---------

CODE	NAME	MAX LIMITS
0248	HAZ WASTE WITH A FINAL DESTINA	0100 % VOL

DISPOSAL METHOD: WASTE STORAGE

STORAGE METHOD: CONTAINER (BARREL, DRUM, ETC.)

MAS

PROJECT RECORD

GENERIC WASTE STREAM PERMIT ATTACHMENT

SITE CODE: 0316000051 GENERIC W/S PERMIT NUMBER: 00028

SITE NAME: CLEAN HARBORS OF CHICAGO INC SUP/OP PERMIT NUMBER: 1983080SP

DATE RECEIVED: 08/09/90 APPROVAL DATE: 11/09/9

EXPIRATION DATE: 12/16/9

GENERIC WASTE CODE: 0090

GENERIC WASTE NAME: NON-HAZARDOUS WASTE

WASTE CLASSIFICATION: NON-HAZARDOUS NOT SUBJECT TO FEE

IEPA NON-HAZARD WASTE NUMBER(S): C024

HANDLING CODE(S): S01

---------- CRITERIA FOR WASTE PROPERTIES ----------

FLASH POINT (MIN): > 140F PH (MIN): > 2.5 PH (MAX): <12.5

-------- CRITERIA FOR WASTE CONSTITUENTS ---------

CODE	NAME	MAX LIMITS
0249	NH WASTE WITH A FINAL DESTINAT	0100 % VOL

DISPOSAL METHOD: WASTE STORAGE

STORAGE METHOD: CONTAINER (BARREL, DRUM, ETC.)

MAS

PROJECT RECORD

CLEAN HARBORS OF CHICAGO, INC.

OPERATING PERMIT NO. 1980-36-OP

PROJECT RECORD

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 0316000051 -- Cook County
Clean Harbors of Chicago, Inc.
ILD 000608471
Log No.: 1991-177
Permit File

July 8, 1991

Clean Harbors of Chicago, Inc.
Attn: James R. Laubsted
11800 South Stony Island Avenue
Chicago, Illinois 60617

Gentlemen:

This letter is to inform you that the Agency has revised your Operating Permit, 1980-36-OP, to include the following modifications:

1. To define clearly the activities for which the facility is permitted.

Should you have any questions regarding this permit, please contact Mark Schollenberger at 217/782-9799.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:MAS:ct,1890q,51

cc: State Permit File
Northern Region
Compliance Monitoring Section

PROJECT RECORD

Illinois Environmental Protection Agency · P. O. Box 19276, Springfield, IL 62794-9276

217/782-6762

Refer to: 0316000051 -- Cook County
Clean Harbors of Chicago, Inc.
ILD 000608471
Permit No.: 1980-36-OP
Log No.: 1991-177 (1990-476, 1990-277, 1990-250, 1990-156, 1990-155, 1990-007, 1989-237, 1984-759, 1985-219, 1986-083, 1986-101, 1986-145, 1987-022, 1988-294, 1989-007, 1989-173)
Permit File

October 22, 1981
Revised July 8, 1991

PROJECT RECORD

Clean Harbors of Chicago, Inc.
Attn: James R. Laubsted
11800 South Stony Island Avenue
Chicago, Illinois 60617

Gentlemen:

Permit is hereby granted to Clean Harbors, to operate a solid waste management site located on 26.5 acres in that part of the East 1/4 of fractional Section 23 and of the West 1/2 of Section 24, all in Township 37N, Range 14E of the 3rd P.M., south of the Indian Boundary Line and that part of Lake Calumet in said Township and Range, as more specifically described in the original application for a development permit.

Final plans, specifications, application(s) and supporting documents as submitted and approved shall constitute part of this permit and are identified on the records of the Illinois Environmental Protection Agency, Division of Land Pollution Control by the permit number(s) and log number(s) designated in the heading above. The permit is issued subject to the standard conditions attached hereto and incorporated herein by reference, and further subject to the following special conditions:

1. This permit allows Clean Harbors to operate the following units:

   A. Four (4) 7,000 gallon in-ground, lines concrete receiving tanks.

   B. A 200,000 gallon steel, primary settling tank.

   C. A 400,000 gallon steel, mix tank.

   D. A chemical treatment unit (IPSI Model #SAL2-100).

   E. Three (3) gravitators/clarifiers (IPSI Model #ESS-075).

   F. A 4,000 gallon steel, effluent collection tank.

G. A 175,000 gallon steel, effluent discharge tank.

H. A 200,000 gallon steel, sludge concentrator tank.

J. A 10,000 gallon steel, sludge conditioning tank.

K. A plate and frame filter press (Netzch Model 1200/88).

L. A chemical reduction/oxidation pretreatment system (for hexavalent chrome, cyanide, phenolic and ammonia contaminated waste streams) consisting of (3) reactor vessels, each equipped with an air scrubber emission control system.

M. An oily wastewater pretreatment system consisting of two (2) 6,000 gallon steel, oil/water separators, a heat exchanger, a 6,000 gallon steel (oil storage) tank and a 6,000 gallon steel (cuff storage) tank.

N. A carbon adsorption system (Baron-Blakesless Dual Bed Model No. CAV40-EX), including a water/solvent condensate separation unit designed to control organic emissions for the aerated storage/mix tanks and oil/water separators.

O. A sludge dewatering system consisting of a 10,000 gallon sludge feed tank and a trailer-mounted recessed plate and frame filter press (Netzch Model 1200/88).

P. Two (2) 300 gallon mixing chambers.

Q. One (1) 850 gallon flocculation tank.

PROJECT RECORD

R. One (1) 1400 gallon surge tank.

S. One (1) cooling tank and cooling tower.

T. All piping, sumps, pumps, containment systems and other appurtenances as described in the aforementioned application(s).

U.

Unit Designation	Size	No. of Drums
Container Storage Area		
a. (within Processing Building #2)		
i) Staging area	20 x 26	72
ii) Acidic drums area	29 x 26	192
iii) Alkaline drums area	12 x 26	96
iv) Organic drums area	24 x 26	192
b. outside Storage Area #1 (for development only)		
i) Medical waste	20 x 50	400

c. outside Storage Area #2 (for development only)

i)	Staging area	41 x 51	80
ii)	Oxidizers	20 x 30	96
iii)	Reactives	20 x 30	96
iv)	Poisons	20 x 30	96
v)	Flammable #1	50 x 42	160
vi)	Flammable #2	50 x 42	160

No waste may be received for the outside storages area until such time as an operating permit is issued by this Division for each area.

2. The treated effluent shall meet the requirements specified by the Metropolitan Sanitary District of Greater Chicago and this Agency's Division of Water Pollution Control, including Permit No. 1986-EP-1157.

3. The facility is permitted to accept for treatment wastes with these parameters within the following limitations:

pH	Range 0 to 14
Suspended Solids	up to 10%
Arsenic	10,000 ppm
Barium	10,000 ppm
Cadmium	10,000 ppm
Chromium	250,000 ppm
Copper	150,000 ppm
Iron	200,000 ppm
Lead	150,000 ppm
Nickel	150,000 ppm
Phenol	50,000 ppm
Selenium	10,000 ppm
Silver	10,000 ppm
Zinc	180,000 ppm
Cyanide	150,000 ppm
Mercury	1.0 ppm
Sulfide (reactive)	50,000 ppm

and TCLP (organic) wastes if a treatibility study is provided.

The facility is also permitted to accept for treatment for the purposes of dewatering non-hazardous semi-solids and sludges.

The facility is permitted to store infectious hospital waste.

The facility is also permitted to store any waste for which the permittee has an ultimate disposal site (i.e., incineration, landfill, recycler).

4. The concentrations of Mercury in the wastes accepted for treatment shall not exceed 3 ppb unless Clean Harbors demonstrates that their treatment is effective for that particular waste stream in reducing the concentration

PROJECT RECORD

of Mercury below this criteria. Documentation of the demonstration shall be maintained at the facility and shall be made available for inspection upon request.

5. Wastes containing any amount of the following items shall not be permitted for acceptance at the facility: PCB, PBB, Insecticides and Pesticides.

6. Wastes containing solvents of a quantity sufficient to render the waste ignitable or explosive shall not be permitted for treatment at the facility. Aqueous wastes containing treatment levels of organics may not be accepted at this facility unless a treatment demonstration is made to the Agency in the form of an attachment to the special waste stream permit application(s) submitted to the Agency for review and approval.

7. Special wastes received at the site for storage and treatment shall be transported to the facility utilizing the Agency's supplemental waste stream permit and manifest systems.

8. Special wastes generated at the facility for disposal, storage, incineration, recovery or further treatment elsewhere shall be transported to the receiving facility utilizing the Agency's supplemental waste stream permit and manifest systems.

9. This facility shall be operated in accordance with this Agency's Division of Air Pollution Control Permit Number 83120017.

10. All loading/unloading of special wastes shall be accomplished over spill containment devices.

11. Any modification to the facility shall be subject of an application for supplemental permit for site modification submitted to this Agency.

12. Permittee shall notify the Agency of any changes from the information submitted to the Agency in its application for a developmental and operating permit for this site. Permittee shall notify the Agency of any changes in the names and addresses of both beneficial and legal titleholders, to the herein permitted site. Such notification shall be made in writing within fifteen (15) days of such change and shall include the name or names of any parties in interest and the address of their place of abode; or if a corporation, the names and addresses of its registered agent.

13. This permit is issued subject to review and modification by the Agency as deemed necessary to fulfill the intent and purpose of the Illinois Environmental Protection Act and all applicable environmental rules and regulations.

14. The new reactors shall be constructed in accordance with ASTM 3299 or its equivalency.

PROJECT RECORD

15. The Permittee shall inspect the tank systems yearly to assess their condition. This inspection shall consist of the visual inspections subject to the following modifications:

    a. Tanks shall be entered in accordance with 20 CFR 1910.41(d)(11).

    b. A detailed visual inspection of the tank's interior shall be conducted on an annual basis to ensure the tank's integrity. During this internal inspection, the interior surface shall be inspected for softening, indentations, cracks, exposed fibers, aging, checking, lack of surface resin, delamination, translucency/discoloration, air bubbles and thin areas. Corrective action as specified by the manufacturer of these tanks shall be taken if the internal inspection indicates that the interior surface of a tank system has been detrimentally affected by the hazardous wastes which have been stored, or treated in it.

    c. A leak test or other integrity assessment as approved by the Agency shall be conducted annually on the ancillary equipment.

    d. The annual inspection of each tank shall be certified by a qualified, independent, registered professional engineer.

    e. All waste and washwater generated during evacuation of the tanks shall be managed as a hazardous waste.

    f. Results of these inspections indicate a tank system is leaking, the permittee must cease using the tank until it is repaired or replaced.

    g. If the results of these inspections indicate a tank system is leaking, the permittee must cease using the tank until it is repaired or replaced.

16. A container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste.

17. A container holding hazardous waste must not be opened, handled, or stored in a manner which may rupture the container or cause it to leak.

18. The container in the storage areas must be arranged so that a 2 foot aisle space exists for inspection. Furthermore, containers may only be stored in rows two abreast.

19. The container storage areas must be inspected daily for signs of cracks or gaps in the base. Containers must be removed from areas which are showing structural deficiency until such time that the area has been repaired.

20. The approval of the design of these container storage areas does not imply that these areas are designed in compliance with 35 IAC 724.

PROJECT RECORD

21. All wastes received at the facility shall be reviewed for compatibility using the methods and procedures described in "A Method for Determining the Compatibility of Hazardous Waste" USEPA document EPA-600/2-80-076 dated April 1980, in addition to the facilities approved waste analysis plan. The Permittee shall not store containers holding waste that is incompatible with any waste or other materials stored nearby unless it is separated from the other material and protected from them by means of a dike, berm or other device.

22. All lab packs shall be opened within the confines of an operating fume hood.

23. A packing list identifying all hazardous waste classes inside of a lab pack must be attached to its outside container prior to it being placed into storage.

24. Only lab packs packaged in accordance with 49 CFR 173.12 may be received at this site for temporary storage, repackaging/consolidation of compatible materials for on-site treatment, or treatment/disposal off-site at permitted facilities.

25. Fume hoods shall be constructed in accordance with the practices recommended by ACGIH Committee on Industrial Ventilation.

26. Ventilation of the lab pack area must be in accordance with 29 CFR 1910.1000.

27. The new line storage silo and ferric chloride storage tank shall not be constructed and operated until all necessary permits from the Division of Water Pollution Control and Air Pollution Control have also been obtained.

28. The collection of precipitation and run-on within the concrete containment area around the medical waste storage area shall be removed as soon as possible and processed through the treatment plant.

29. The facility may only accept wastes in outside storage area #1 which meet the definition of hazardous (infectious) hospital waste as defined in 35 IAC 809.901 or medical waste as defined in 40 CFR 359.30. All wastes received at this facility must be managed as hazardous (infectious) hospital waste. This facility is not permitted to receive any RCRA hazardous waste as defined by 35 IAC 721.103, radioactive waste, mixed waste, or asbestos waste. The facility may only accept the following chemotherapy wastes: gloves, gowns, absorbent pads, empty vials, empty syringes, and empty tubing.

30. All waste in outside storage area #1 shall be stored in an area where the ambient temperature is less than 45° degrees Fahrenheit except when conducting waste transfer operations to avoid putrescible conditions. During waste transfer operations at no time shall the surface temperature of the waste containers be permitted to rise above 60° degrees Fahrenheit.

PROJECT RECORD

31. Any area in the concrete containment area contaminated by a spill or leak from a medical waste container shall be disinfected in accordance with th truck decontamination procedure.

32. The coating in the outside storage area #2 shall be inspected for signs of deterioration after each spill and shall be touched up (i.e., the coating reapplied in the area) if such signs are present.

33. All medical wastes shall be packaged in accordance with the requirement set forth in 77 Illinois Administrative Code 250.1720(g)(4).

34. A vector control specialist shall inspect the outside storage area #1 at least quarterly. If necessary, vector control measures shall be taken. The results of these inspections shall be maintained as part of the facility's operating record and be made available to the Agency upon written or verbal request.

35. The facility shall maintain a daily operating record. The operating record must be able to track waste streams as they pass through the facility. It must have the following entries for each shipment of waste received:

- A unique identification number for each container received.
- The generator's name and location.
- The date and time of arrival.
- The amount received.
- The date treated or shipped off-site.

Very truly yours,

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control

LWE:MS:ct,1890q,51-58

cc: Northern Region
Compliance Monitoring Section
Division File

PROJECT RECORD

Storage and Transfer of Waste Oils - Waste industrial lubricating and fuel oils are stored on-site. Once a sufficient quantity is accumulated, the waste oil is shipped off-site for reclamation.

Sludge Dewatering/Fixation - Sludges produced upon treatment of the aqueous wastes and batch treatment of slurry wastes, are first thickened by gravity. Settled sludge from the bottom of the thickener is pumped to a batch conditioning tank where chemical reagents are added to aid the dewatering and to stabilize the constituents of concern. The conditioned sludge is pumped into a recessed chamber filter press to achieve a stable landfillable filter cake. Filtrate produced is sent back to the head of the system for reprocessing while the filter cake is collected into a dump trailer for its disposal into an approved landfill.

PROJECT RECORD

Other On-Site Services

Container Storage/Transfer - A wide variety of wastes not acceptable for on-site treatment can be received for consolidation and transfer to other Clean Harbors' sites or select audited and approved non company-owned sites.

Inorganic Lab Chemical Treatment/Consolidation - Drummed lab packed chemicals are segregated in groups based on their chemical compatability. Contents from each group of chemical containers is consolidated into a reactor through a pour-off area where the batch is treated using laboratory directive tailored for the specific batch.

Transportation - Transportation for all types of wastes treated at Chicago or processed at other Clean Harbors' facilities can be coordinated through the company's fleet of over 200 vehicles. This fleet of vehicles includes the following:

* Tractor trailers
* Vacuum trailers
* Stainless steel vacuum trucks
* Stainless steel transport trailers
* Lined transport trailers
* Roll off and dump trailers
* Drop deck, flatbed and low boy trailers
* Box vans dry and refrigerated trailers
* Box truck and racks straight jobs
* Dump trucks straight jobs
* Frac Tanks
* Utility and pickup trucks
* Construction equipment including excavators, backhoes and loaders
* Roll off containers

Waste Analysis

The Waste Analysis Plan for Clean Harbors of Chicago outlines prequalification and on-site acceptance analysis requirements.

PreQualification

Prior to acceptance and treatment of a specific waste, a representative sample is submitted by the generator along with a completed Waste Material Profile Sheet to the Chicago laboratory at the address below:

Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, IL 60617
Attention: Waste Approval Coordinator

(A copy of a Waste Material Profile Sheet follows. Comprehensive instructions for completing this sheet are available upon request.)

The sample is analyzed by either the Chicago laboratory or a central profile approval laboratory in Bedford, Massachusetts and a treatment code and price are established. All analyses performed are in accordance with EPA-approved methodologies and approved QA/QC procedures. If the material is accepted for treatment/disposal, this information becomes part of the permanent record in the generator's file.

On-Site Analysis/Acceptance

With each delivery of approved waste, a sample is taken from the load and tested to determine whether the waste is the same as the previously submitted sample. If this analysis differs significantly from the advance sample, the waste will be deemed non-conforming. All non-conforming wastes are further analyzed to determine the best treatment alternatives, whether on-site handling at an adjusted price or trans-shipment to an alternative treatment facility. The customer is contacted regarding any non-conforming waste and given the option for alternate handling or return of their waste. On specification shipments are processed with one or more of the tratments previously identified.

NOTE: The IEPA requires Clean Harbors of Chicago, Inc. to analyze the initial shipment of any waste classified as "RCRA non-hazardous" for the characteristics of hazardous waste (D001-D043).

PROJECT RECORD

V. CLOSURE PLAN

A comprehensive facility closure plan has been developed in accordance with RCRA requirements and is available at the site for inspection upon request. The cost estimate for complete closure, as of June 1, 1990, is $405,254. Financial assurance for closure is guaranteed by a trust fund, which currently contains over $90,000.00.

PROJECT RECORD

VI. OFF-SITE DISPOSAL FACILITIES

Clean Harbors of Chicago has developed an extensive compliance effort and follows a rigorous risk management program designed to reduce its potential liabilities as well as those of its customers. Additionally, we impose standards which exceed those required by various governmental agencies to further minimize liability exposures.

Our full-time compliance staff conducts audits of waste management facilities utilized by Clean Harbors. Reports on these facilities are centrally maintained and updated regularly by our Corporate Compliance Department in Quincy, Massachusetts. A list of these facilities is available for review upon request.

PROJECT RECORD

VII. FINANCIAL

The following table indicates revenues from the primary services performed by CHI. Some services performed by different divisions are similar in nature; in the table, revenues from such services are allocated in accordance with the general character of the division's principal services.

	Fiscal Year Ended February 28 or 29 ($ in thousands)					
	1991		1990		1989	
	Amount	% of Total Revenues	Amount	% of Total Revenues	Amount	% of Total Revenues
Hazardous Waste Management	$75,667	53%	$61,142	46%	$38,968	41%
Environmental Remediation Svcs.	58,661	41	58,636	45	46,278	48
Technical Services	8,578	6	11,663	9	10,433	11
Total	$142,906	100%	$131,441	100%	$95,679	100%

Revenues during fiscal 1991 increased 8.8% to $142.9 million from $131.4 million during fiscal 1990. Demand for the Company's hazardous waste management services increased 23.8% to $75.7 million from $61.1 million in fiscal 1990, primarily due to continued expansion in the Mid-Atlantic and Midwest regions. Revenues from the Company's technical services sector decreased 26.4% to $8.6 million in fiscal 1991, as compared to $11.7 million in fiscal 1990.

PROJECT RECORD

VIII. INSURANCE

Clean Harbors presently carries general liability insurance providing coverage in the aggregate amount of $11 million per year, subject to a deductible of $250,000 per occurrence. The Company has excess pollution liability insurance coverage in the amount of $29 million which insures the Company against liability for sudden and accidental occurrences from the time waste is picked up from a customer, while being handled at the Company's treatment and transfer facilities, through its delivery to a disposal site. The following sample attachments depict insurance coverages afforded under such policies.

PROJECT RECORD

Clean Harbors' Casualty Program Summary

Policy	Limits of Liability
* Workers' Compensations & Employeers' Liability	$1,000,000 Each Occurrence
* Business Automobile Liability	$1,000,000 Each Person $1,000,000 Each Accident
* Comprehensive General Liability	$1,000,000 Each Occurrence $3,000,000 Aggregate
* Umbrella Liability	$10,000,000 Each Occurrence $10,000,000 Each Aggregate
* Wharfingers Liability	$10,000,000 Any one Vessel/ Any one Accident
* Contractor's Pollution Coverage	$1,000,000 Each Occurrence $5,000,000 Aggregate
* Pollution Legal Liability	$3,000,000 Each Occurrence $6,000,000 Aggregate
* Protection and Indemnity	$1,000,000 Each Occurrence
* Excess Pollution Liability	$29,000,000 Each Occurrence

PROJECT RECORD

SAMPLE INSURANCE CERTIFICATES

PROJECT RECORD

ACORD. CERTIFICATE OF INSURANCE

ISSUE DATE (MM/DD/YY) 07/22/91 hwl

PRODUCER

Johnson & Higgins of Mass., Inc.
Three Center Plaza
Boston, MA 02108

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	National Union Fire Insurance Company
COMPANY LETTER B	Birmingham Fire
COMPANY LETTER C	United Coastal
COMPANY LETTER D	
COMPANY LETTER E	

INSURED

Clean Harbors Inc.
Clean Harbors of Kingston, Inc.
Clean Harbors of Natick, Inc.
Clean Harbors of Briantree, Inc. and
all subisdiary and affiliated companies
1200 Crown Colony Drive
Quincy, MA 02269-9137

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)	LIMITS		
	GENERAL LIABILITY				GENERAL AGGREGATE	$	3,000,000
	X COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OP AGG.	$	1,000,000
A	CLAIMS MADE X OCCUR.	GL 2498840	11-1-90	11-1-91	PERSONAL & ADV. INJURY	$	1,000,000
	X OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE	$	1,000,000
	X Contractual				FIRE DAMAGE (Any one fire)	$	500,000
	X Underground Explosion & Collapse Hazard				MED. EXPENSE (Any one person)	$	10,000
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT	$	1,000,000
	X ANY AUTO						
	ALL OWNED AUTOS				BODILY INJURY (Per person)	$	
A	SCHEDULED AUTOS	CA 5629739	11-1-90	11-1-91			
	X HIRED AUTOS				BODILY INJURY (Per accident)	$	
	X NON-OWNED AUTOS						
	GARAGE LIABILITY				PROPERTY DAMAGE	$	
	EXCESS LIABILITY				EACH OCCURRENCE	$	5,000,000
A	X UMBRELLA FORM	BE 3082521	11-1-90	11-1-91	AGGREGATE	$	5,000,000
	OTHER THAN UMBRELLA FORM						
	WORKER'S COMPENSATION				STATUTORY LIMITS		
B	AND	WC 4196028 (MD)	11-1-90	11-1-91	EACH ACCIDENT	$	1,000,000
A	EMPLOYERS' LIABILITY	WC 4196029			DISEASE—POLICY LIMIT	$	1,000,000
					DISEASE—EACH EMPLOYEE	$	1,000,000
	OTHER						
C	CONTRACTOR'S POLLUTION LEGAL LIABILITY	UC00916	12-19-90	12-19-91	$1,000,000 Each Occurrence $5,000,000 Aggregate		

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS

PROJECT RECORD

CERTIFICATE HOLDER

COPY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 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

John R. Harrison

©ACORD CORPORATION 1990

ACORD. CERTIFICATE OF INSURANCE

07-22-91 hwl

PRODUCER

Johnson & Higgins of Mass., Inc.
Three Center Plaza
Boston, Massachusetts 02108

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COMPANIES AFFORDING COVERAGE

COMPANY LETTER A International Marine Underwriters

COMPANY LETTER B

COMPANY LETTER C

COMPANY LETTER D

COMPANY LETTER E

CODE SUB-CODE

INSURED
Clean Harbors, Inc.
Clean Harbors of Braintree, Inc. &
Clean Harbors of Kingston, Inc.
Clean Harbors of Natick, Inc. and
all subsidiary and affiliated co's.
1200 Crown Colony Drive
Quincy, Massachusetts 02269-9137

COPY

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
	GENERAL LIABILITY				GENERAL AGGREGATE $
	COMMERCIAL GENERAL LIABILITY				PRODUCTS-COMP/OPS AGGREGATE $
	CLAIMS MADE OCCUR.				PERSONAL & ADVERTISING INJURY $
	OWNER'S & CONTRACTOR'S PROT				EACH OCCURRENCE $
					FIRE DAMAGE (Any one fire) $
					MEDICAL EXPENSE (Any one person) $
	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT $
	ANY AUTO				
	ALL OWNED AUTOS				BODILY INJURY (Per person) $
	SCHEDULED AUTOS				
	HIRED AUTOS				BODILY INJURY (Per accident) $
	NON-OWNED AUTOS				
	GARAGE LIABILITY				PROPERTY DAMAGE $
	EXCESS LIABILITY				EACH OCCURRENCE $ / AGGREGATE $
	OTHER THAN UMBRELLA FORM				
	WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				STATUTORY / $ (EACH ACCIDENT) / $ (DISEASE—POLICY LIMIT) / $ (DISEASE—EACH EMPLOY
	OTHER				
A	P & I	349-502025-6	01/16/91	01/16/91	$1M per occurrence

COPY

PROJECT RECORD

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/RESTRICTIONS/SPECIAL ITEMS

CERTIFICATE HOLDER

COPY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL ____ 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.

JOHNSON & HIGGINS OF MASSACHUSETTS, INC.

BY AUTHORIZED REPRESENTATIVE

ATTORNEY

ACORD CERTIFICATE OF INSURANCE

07/22/91 hwl

PRODUCER

Johnson & Higgins of Mass., Inc.
Three Center Plaza
Boston, MA 02108

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COMPANIES AFFORDING COVERAGE

COMPANY LETTER A	Lloyds of London
COMPANY LETTER B	
COMPANY LETTER C	
COMPANY LETTER D	
COMPANY LETTER E	

INSURED

Clean Harbors, Inc. and its
Subsidiaries
1200 Crown Colony Drive
Quincy, MA 02269-9137

COVERAGES

THIS IS TO CERTIFY THAT 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.

CO LTR	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS IN THOUSANDS		
						EACH OCCURRENCE	AGGREGATE
	GENERAL LIABILITY COMPREHENSIVE FORM PREMISES/OPERATIONS UNDERGROUND EXPLOSION & COLLAPSE HAZARD PRODUCTS/COMPLETED OPERATIONS CONTRACTUAL INDEPENDENT CONTRACTORS BROAD FORM PROPERTY DAMAGE PERSONAL INJURY	N/A			BODILY INJURY	$	$
					PROPERTY DAMAGE	$	$
					BI & PD COMBINED	$	$
					PERSONAL INJURY		$
	AUTOMOBILE LIABILITY ANY AUTO ALL OWNED AUTOS (PRIV PASS) ALL OWNED AUTOS (OTHER THAN PRIV PASS) HIRED AUTOS NON-OWNED AUTOS GARAGE LIABILITY	N/A			BODILY INJURY (PER PERSON)	$	
					BODILY INJURY (PER ACCIDENT)	$	
					PROPERTY DAMAGE	$	
					BI & PD COMBINED	$	
	EXCESS LIABILITY UMBRELLA FORM OTHER THAN UMBRELLA FORM	N/A			BI & PD COMBINED	$	$
	WORKERS' COMPENSATION AND EMPLOYERS' LIABILITY	N/A			STATUTORY		
						$ (EACH ACCIDENT)	
						$ (DISEASE-POLICY LIMIT)	
						$ (DISEASE-EACH EMPLOYEE)	
	OTHER Excess Pollution Liability Transportation	H29532	5/1/89	5/1/92	$29 million any one accident / $29 million each 12 mont		

PROJECT RECORD

COPY

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/SPECIAL ITEMS Excess Pollution Liability of the assured arising out their business of environmental services which occurs during transportation or at tranfer and treatment facilities during the course of such transportation as defined in the policy wording.

CERTIFICATE HOLDER

COPY

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, THE ISSUING COMPANY WILL ENDEAVOR TO MAIL 30 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 John R. Harrington

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

217/782-6761

September 22, 1993

Clean Harbors
Attn: James Laubsted
118 Stony Island Ave.
Chicago, Illinois 60617

Re: 0316000051 -- Cook County
Clean Harbors
ILD000608471
Compliance File

Dear Mr. Laubsted:

On September 8, 1993 your facility was inspected by Michael Cimaglio of the Illinois Environmental Protection Agency. The purpose of this inspection was to determine your facility's compliance with 35 Illinois Administrative Code, Part 722, Subparts A, B, C, and D; Part 725, Subparts A, C, D, E, I, and J; and Part 728, Subparts A, C, D, and E. At the time of the inspection, no apparent violations of the requirements addressed as part of the inspection were observed.

For your information, a copy of the inspection report is enclosed. If you have any questions regarding the above matter, please contact Michael Cimaglio at 708/531-5900.

Sincerely,

Brian S. White, Manager
Compliance Unit
Planning and Reporting Section
Bureau of Land

BSW:MC:ls:dv

PROJECT RECORD

Printed on Recycled Paper

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director

2200 Churchill Road, Springfield, IL 62794-9276

RCRA Log No. 16

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

HAZARDOUS WASTE MANAGEMENT RCRA PART B PERMIT

IEPA #0316000051 -- Cook County
USEPA ILD #000608471
Chicago/Clean Harbors of Chicago, Inc.
Permit Log #16
RCRA -- Part B - Administrative Record

Issue Date: September 30, 1993
Effective Date: November 4, 1993
Expiration Date: November 4, 2003

Illinois International Port District
3600 East 95th Street
95th & the Lakefront
Chicago, Illinois 60617-5193

Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, Illinois 60617

A Part B Permit is hereby granted pursuant to the Resource Conservation and Recovery Act, Illinois Environmental Protection Act, and Title 35 Ill. Adm. Code Parts 702, 703, 705, and 720 through 729 to Clean Harbors of Chicago, Inc. and the Illinois International Port District (herein known as the Permittee(s)) to construct, maintain and operate a waste management facility involved in the treatment and storage of hazardous waste. The site is located at 11800 South Stony Island Avenue in Chicago, Illinois.

This permit consists of the conditions contained herein (including those in any attachments and appendices) and applicable regulations contained in the Illinois Environmental Protection Act and Title 35 Ill. Adm. Code Parts 702, 703, 705 and 720 through 729 in effect on the effective date of this permit. The Environmental Protection Act ("Act") Ill. Rev. Stat., Ch. 111-1/2, par. 1039 grants the Illinois Environmental Protection Agency the authority to impose conditions on permits which are issued.

If you have any questions regarding this draft permit, please contact Mark A. Schollenberger at 217/524-3307.

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

LWE:MAS:lat/sp/218Y,11

PROJECT RECORD

State of Illinois
ENVIRONMENTAL PROTECTION AGENCY

Mary A. Gade, Director
2200 Churchill Road, Springfield, IL 62794-9276
217/524-3300

September 30, 1993

Illinois International Port District
3600 East 95th Street
95th & the Lakefront
Chicago, Illinois 60617-5193

Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, Illinois 60617

Re: 0316000051 -- Cook County
Clean Harbors of Chicago, Inc.
ILD000608471
RCRA Log 16
RCRA Part B -- Administrative Record

PROJECT RECORD

Gentlemen:

Enclosed is a RCRA Hazardous Waste Management Part B permit. The final permit decision is based on the administrative record contained in the Agency's files. The contents of the administrative record are described in 35 Illinois Administrative Code (IAC) Section 705.211.

This permit is divided into two permits: A RCRA permit issued by IEPA and a Hazardous Waste Management Permit issued by USEPA. The USEPA permit generally contains only those provisions and conditions raised pursuant to the Hazardous and Solid Waste Amendments of 1984 to RCRA (HSWA). The IEPA permit also enforces portions of HSWA where IEPA has authority to do so. Read both documents carefully. Failure to meet any portion of either permit could result in civil and/or criminal penalties.

Within 35 days after the notification of a final permit decision, the permittee may petition the Illinois Pollution Control Board to contest the issuance of the permit. The petition shall include a statement of the reasons supporting a review, including demonstration that any issues raised in the petition, were previously raised during the public comment period. In all other respects the petition shall be in accordance with the requirements for permit appeals as set forth in 35 I.A.C. Part 105. Nothing in this paragraph is intended to restrict appeal rights under Section 40(b) of the Environmental Protection Act (35 I.A.C. 705.212(a)). If you intend to appeal the USEPA issued permit, contact USEPA -- Region V concerning the appeal procedures.

This permit does not restrict the Agency's authority to impose additional corrective action at the facility. The term "facility" is not limited to those portions of the owner's property at which units for the management of solid or hazardous are located, but rather extends to all contiguous property under the owner or operator's control (see 50 FR 28712). If the Agency determines that additional corrective action is warranted, a permit modification would be required. Any final action taken on a permit modification by the Agency will be subject to the appeal provisions set fourth in Sections 39 and 40 of the Illinois Environmental Protection Act.

Petitions for review of the USEPA decision must be submitted within 30 days after service of notice of the final USEPA permit decision. Any person who filed comments on the draft permit or participated in the public hearing may petition the Environmental Appeals Board to review any condition of the permit decision. Any person who failed to file comments or failed to participate in the public hearing on the draft permit may petition the Environmental Appeals Board to review only to the extent of the changes from the draft to the final permit decision. The procedures for permit appeals on the USEPA portion of the permit are found in 40 CFR 124.19.

A copy of the Agency's response to significant comments on the draft permit will be mailed today under separate cover.

If you have any questions concerning this permit, please contact Mark A. Schollenberger at 217/524-3307. If you intend to seek review of the USEPA issued permit, please contact USEPA -- Region V Juana Rojo at 312/886-0990 concerning the applicable review procedures.

Very truly yours,

Lawrence W. Eastep by DWR

Lawrence W. Eastep, P.E., Manager
Permit Section
Division of Land Pollution Control
Bureau of Land

LWE:DWR:MAS/mls/725Y/97-98

cc: USEPA Region V

PROJECT RECORD

CLEAN HARBORS OF CHICAGO, INC.

ENVIRONMENTAL INFORMATION PACKAGE

PROJECT RECORD

Facility Address:
Clean Harbors of Chicago, Inc.
11800 South Stony Island Avenue
Chicago, IL 60617
312-646-6202

Corporate Headquarters:
Clean Harbors Environmental
Services Companies
1200 Crown Colony Drive
617-849-1800p

Clean Harbors
Environmental Services Companies
11800 S. Stony Island Ave.
Chicago, IL 60617
(312) 646-6202

Dear Customer:

We appreciate your interest in Clean Harbors and in our hazardous waste storage, treatment and transfer facility located in Chicago, Illinois. The enclosed compliance information has been compiled to address the most commonly asked questions about our Chicago facility's operational and technical capabilities.

Additionally, a facility tour can provide you with a better understanding of our operations and will allow you access to the following documents and plans:

* Operationas Manual
* Waste Analysis Plan & Records
* Contingency Plan
* Closure Plan/Financial Assurance
* Inspection Plan and Records
* Manifest and Landban Records
* Scheduling Logs
* Training Plan and Records
* Preparedness and Prevention Plans
* Operating Licenses/Permits

We hope you will find this package helpful in your selection of a waste management facility. Clean Harbors is confident our commitment to quality and safety standards will meet with your approval. Please feel free to contact our Customer Service Department at (312) 646-6202 to coordinate a tour or discuss disposal options.

Very truly,

James R. Laubsted
Facility Compliance Manager

JRL/
Enclosure

PROJECT RECORD

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PROJECT RECORD

TRUCK SCALE TEST AND CERTIFICATION REPORT

CUSTOMER Waste management DATE OF INSPECTION 4-6-93

ADDRESS 4636 adams Center RD. TECHNICIAN S. Patton

CITY Fort wayne ST IN STATE REG. NO. Inbound

MFG. Masstron MODEL MS800 SERIAL NO. _____

CAPACITY 120,000 GRAD. SIZE 20 TYPE _____

SECTION TEST

CONDITIONS	SECT 1	SECT 2	SECT 3	SECT 4	SECT 5
AS FOUND	49760	49740	49400	49640	49760
AFTER ADJUST	49660	49660	49660	49660	49660

PLATFORM TEST

AS FOUND		AFTER ADJUST	
LOAD	READING	LOAD	READING
0	ok	0	ok
3000		3000	
6000		6000	
9000		9000	
12000		12000	
15000		15000	
18000		18000	
20000	+20	20000	OK

STRAIN LOAD TEST

TEST TRUCK
29520
TEST WEIGHT LOAD
20 000
TOTAL TEST LOAD
49 520

PROJECT RECORD

COMMENTS: _____

EQUIPMENT MEETS HANDBOOK 44 TOLERANCES X PASSED

EQUIPMENT DOES NOT MEET HANDBOOK 44 TOLERANCES ____ FAILED

DATE COMPLETED 4-6-93 TECHNICIAN SIGNATURE Scott Patton

FORM STDTRK CUSTOMER SIGNATURE

1 of 2 Scales

Inside Scale

INDIANA STATE DEPARTMENT OF HEALTH
WEIGHTS AND MEASURES
1330 W. MICHIGAN ST., INDIANAPOLIS 46206
Telephone No. 317/633-0350

LARGE-CAPACITY SCALE TEST REPORT

Approved ✓
Rejected ____

Date 9-17-93 County Hendricks

NAME AND LOCATION OF SCALE

Name Danville Sanitary Landfill Phone No. 745-2375
Street 123 Twin Bridges Rd City Danville

DESCRIPTION OF SCALE

Make Fairbanks Type Vehicle Capacity 100T Minimum Graduation 20 lb.
Platform Good Size 10X70 Enclosed No Approaches Good

INDICATING ELEMENT

Full Capacity Weighbeam — Weighbeam with Counterpoise Weights —
Automatic Digital Weighbeam with Auxiliary Weighing Attachment Printer

SENSITIVITY

Under Zero Load — Under Maximum Applied Load —

SECTION-TEST ERRORS

	Weights Applied	Registration Over	Registration Under	Auxiliary Indicating Attachment Registration Over	Auxiliary Indicating Attachment Registration Under
Section #1	21020				
Section #2					
Section #3					
Section #4		OK		OK	
Section #5					
Section #6					
Section #7					
Section #8					

SECTION-STRAIN LOAD TEST

	Test Weights	Maximum Load	Registration Over	Registration Under
Section #1		43100		
Section #2				
Section #3				
Section #4			OK	
Section #5				
Section #6				
Section #7				
Section #8				

NOTE: Standing at the weighbeam or other indicating element and facing the platform, the far left hand section is number one with the remaining sections numbered consecutively.

GENERAL REMARKS

Owner's Representative [signature] Inspector [signature]

State Form 22121 SDH 56-003 1/93

PROJECT RECORD

Outside Scale
2 of 2 Scales

INDIANA STATE DEPARTMENT OF HEALTH
WEIGHTS AND MEASURES
1330 W. MICHIGAN ST., INDIANAPOLIS 46206
Telephone No. 317/633-0350

LARGE-CAPACITY SCALE TEST REPORT

Approved ✓
Rejected ____

Date 9-17-93 County Hendricks

NAME AND LOCATION OF SCALE

Name Danville Sanitary Landfill Phone No. 745-2873
Street 123 Twin Bridges Rd City Danville

DESCRIPTION OF SCALE

Make ____ Type Vehicle Capacity 60 Minimum Graduation 20 lb
Platform Steel Size 10x60 Enclosed Not Approaches Good

INDICATING ELEMENT

Full Capacity Weighbeam — Weighbeam with Counterpoise Weights —
Automatic Digital Weighbeam with Auxiliary Weighing Attachment Printer

SENSITIVITY

Under Zero Load — Under Maximum Applied Load —

SECTION-TEST ERRORS

	Weights Applied	Registration Over	Registration Under	Auxiliary Indicating Attachment Registration Over	Auxiliary Indicating Attachment Registration Under
Section #1	2000				
Section #2	/				
Section #3	/	OK		OK	
Section #4	/				
Section #5					
Section #6					
Section #7					
Section #8					

SECTION-STRAIN LOAD TEST

			Registration Over	Registration Under
Section #1	Test Weights	Maximum Load 43162		
Section #2	Test Weights	Maximum Load /		
Section #3	Test Weights	Maximum Load /	OK	
Section #4	Test Weights	Maximum Load /		
Section #5	Test Weights	Maximum Load		
Section #6	Test Weights	Maximum Load		
Section #7	Test Weights	Maximum Load		
Section #8	Test Weights	Maximum Load		

NOTE: Standing at the weighbeam or other indicating element and facing the platform, the far left hand section is number one with the remaining sections numbered consecutively.

GENERAL REMARKS

Owner's Representative [signature] Inspector [signature]

State Form 22121 SDH 58-003 1/99

PROJECT RECORD

Farmick Scale Co., Inc.
6225 Scatterfield Road
Anderson, Indiana 46013
(317) 644-8350

S & S Scale Engineering
6225 Scatterfield Road
Anderson, Indiana 46013
(317) 644-8350

SCALE INSPECTION REPORT

Owner Lusco Corporation Date: Feb 1 1993

Location of Scale Noblesville Owner Scale No.

Type MTS Maker Fairbanks Model No. 161

Capacity 50 ton Platform 10 X 60 Serial No.

Indication Fairbanks Digital Graduated 20/6

SECTION CHECK

First Test	Last Test	Test Load	Error	Remarks
1 20,000		20000	0	
2 20,000		5000	/	
3 20,000		10000	/	
4 20,000		20000		
5		10000	0	

PROJECT RECORD

Normal Adjustments Made

Condition of: Pivits and Bearing in Levers ---

Condition of: Dial (Bearings, Tapes, Charts) N/A

Condition of: Weighbeam (Rusty, Worn, Defaced) N/A

Condition of: Weighbridge Steel Rust free

Condition of: Pit Weeds Cleared Platform Good Foundation Good

Repair required

SCALE #	WEIGHT #	TYPE	WEIGHTS APPLIED	SCALE READING	REMARKS

CUSTOMER SCALE MECHANIC

INDIANA STATE BOARD OF HEALTH

DIVISION OF WEIGHTS AND MEASURES

1330 W. MICHIGAN ST., INDIANAPOLIS 46206

(ADDRESS CORRESPONDENCE TO DIVISION DIRECTOR)

Telephone No. — 317/633-0350

LARGE-CAPACITY SCALE TEST REPORT

Test No. ..... Date [illegible] Approved or Rejected Approved

OWNERSHIP OF SCALE

Owner Oscar Winski Owner's Representative [illegible]

LOCATION OF SCALE

County [illegible] City Lafayette Street [illegible]

DESCRIPTION OF SCALE

Make Hush Truck Type Vehicle Capacity [illegible] Minimum Graduation [illegible]

Platform Steel Size [illegible] Enclosed [illegible] Approaches [illegible]

INDICATING ELEMENT

Full Capacity Weighbeam ..... Weighbeam with Counterpoise Weights .....

Automatic Digital ..... Weighbeam with Auxiliary Weighing Attachment .....

SENSITIVITY

Under Zero Load ..... Under Maximum Applied Load .....

CORNER-TEST ERRORS

Weights Applied	Registration Over	Registration Under	Auxiliary Indicating Attachment Registration Over	Auxiliary Indicating Attachment Registration Under
Corner # 1 [redacted]				
Corner # 2 [redacted]				
Corner # 3 [redacted]				
Corner # 4				

SECTION-TEST ERRORS

Weights Applied	Registration Over	Registration Under	Auxiliary Indicating Attachment Registration Over	Auxiliary Indicating Attachment Registration Under
Section # 1 [illegible]				
Section # 2 [illegible]				
Section # 3 [illegible]				
Section # 4 [illegible]				

SECTION-STRAIN LOAD TEST

			Registration Over	Registration Under
Section # 1 [illegible]	Test Weights [illegible]	Maximum Load [illegible]		
Section # 2	Test Weights	Maximum Load		
Section # 3	Test Weights	Maximum Load		
Section # 4	Test Weights	Maximum Load		

NOTE—Standing at the weighbeam or other indicating element and facing the platform, the far left hand corner is number one; the far right hand corner is number two; the near right hand corner is number three; and the near left hand corner is number four. Standing in the above position, the far left hand section is number one with the remaining sections numbered consecutively.

GENERAL REMARKS .....

[illegible]

Inspector

State Form 22121
S B.H 56-003
7/82

PROJECT RECORD

FIELD WORK ORDER REGISTER
ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

ORDER NUMBER	ORDER TITLE	ORDER DATE	ROFC CROSS REVEREN	COST	DISPOSITION
FO #1	Delete Permanent 480 Volt Electrical Installation	26-Aug-93	None	None	NA
FO #2	Site Grading	16-Sep-93	ROFC 004	SEE ROFC 004	COMPLETED
FO #3	Plug and Locate Septic Pipe	22-Sep-93	ROFC 007	SEE ROFC 007	COMPLETED
FO #4	Continue Site Drainage	22-Sep-93	None	None	NA
FO #5	Tank Cutting	22-Oct-93	None	None	NA
FO #6	VOID				
FO #7	Drum Purchases	22-Oct-93	None	$55.44	Completed
FO #8	Remove Aggregate from Soil Sampling Location	21-Oct-93	ROFC 020	SEE ROFC 020	Completed
FO #9	VOID				
FO #10	Exclusion Zone Fence Relocation	03-Nov-93	None	None	NA
FO #11	Monitoring Well Protective Barrier	09-Nov-93	None	None	NA
FO #12	Security Fence Installation	10-Nov-93	None	$1,691.58	Completed
FO #13	Boiler Cutting and Covering	11-Nov-93	ROFC 015	$2,340.36	Completed
FO #14	Transformer Removal	15-Nov-93	None	None	Completed

TOTAL VALUE OF FIELD ORDERS: $4,087.38

Memorandum

ERM-North Central, Inc.

To: James R. Fife, AWD Technologies, Inc.
Mark J. Dowiak, AWD Technologies, Inc.
Robert Autio, Quality Environmental Management, Inc.
John Kyle, III, Esq., Barnes & Thornburg
Norman W. Bernstein, Esq., Arent Fox Klinter Plotkin & Kahn

From: Roy O. Ball, PhD., P.E., ERM-North Central

Date: August 26, 1993

Subject: Field Order #1

ERM

This Field Order is provided pursuant to Article 9.7 of the contract between the Trustees and AWD Technologies, Inc. (Contractor) dated July 27, 1993 (the Contract). The terms used in this Field Order are as defined in the Contract. The content of this notice was discussed during the August 12, 1993 preconstruction conference held at the Contrator's office in Indianaplois, IN.

1. With respect to page 01510-2 of the technical specifications, Section 302.A, all references to 3-wire 480V are hereby deleted.

2. It is understood by Contractor and Resident Project Representative (RPR) that RPR will provide power at the site boundary, if Public Service Inc. (PSI) does not. It is further understood by the parties that power will include either single phase 120V with meter and cabinet for installation by Contractor, portable generators for use by Contractor or approval for Contractor to utilize electrical service from Boone County Resource Recovery Systems, Inc. (BCRSS).

RSB

Roy O. Ball, PhD., P.E.

Site Preparation and Material Removal
Field Order No. 2
Site Grading

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

September 16, 1993

Quality Environmental Management, Inc. is issuing Field Order Number 2 because a significant volume of soil would be generated from grading the support zone to the design grades. The required cuts ranged from one half (0.5) to three (3) feet across the support zone with up to five (5) feet in the decontamination and wastewater storage pad area. The grades will be changed to reduce the volume of excess cut soils to a minimum.

AWD Technologies, Inc. is ordered to:

1. Spread the cut soil from the pad area and other areas, as necessary, to maintain the planned drainage pattern and fill low spots but not cut the soil to grades as designed. Two (2) exceptions are noted below.

2. The first grading exception is to maintain the design elevations surrounding the decontamination and wastewater pads.

3. The second grading exception is to maintain the design elevations in the diversion channels.

4. Maintain the design drainage gradients that are northeast in the northern support zone and southeast in the southern support zone from the central support zone crown.

5. Use line-of-sight methods to grade the support zone and maintain proper drainage.

6. Verify the proper slopes with an Indiana licensed surveyor.

7. Submit final grade drawing based on surveyor data.

[illegible], QEM — 9/16/93

Resident Project Representative — Date

Site Preparation and Material Removal
Field Order No. 3
Plug and Locate Septic Pipe

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

September 22, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 3 because an apparent septic discharge is emanating from soils and rubble at the western boundary of the support zone. The discharge is located about one hundred and twenty (120) feet from the southwestern corner of the construction fence. The discharge and black-stained soil extend about twenty (20) feet northeast into the support zone.

AWD Technologies, Inc. (AWD) is ordered to:

1. Locate the septic pipe.

2. Plug the septic pipe.

3. Bury the pipe as needed for site grading but mark the location with a metal post for future location.

AWD checked with the Boone County officials and there is no record of any septic system in this area. No work will be done outside the Environmental Conservation and Chemical footprint without prior written approval.

[signature] QEM — 9/22/93

Resident Project Representative — Date

Site Preparation and Material Removal
Field Order No. 4
Continue Site Drainage

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

September 22, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 4 because liquid is discharging onto the Environmental Conservation and Chemical footprint from western adjacent property. The liquid is discharging through black-stained construction rubble. AWD Technologies Inc. attempted to locate point source of discharge by excavating with a back hoe up to the construction fence. The construction fence marks the western edge of the footprint and edge of ECC legal access.

AWD Technologies, Inc. (AWD) is ordered to allow the discharge to continue into the existing temporary drainage diversion channel. The drainage allows the soil to drain properly and let site grading continue.

QEM will contact the Indiana Department of Environmental Management:.

QEM 9/22/93

Resident Project Representative Date

Site Preparation and Material Removal
Field Order No. 5
Tank Cutting

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

October 12, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 5 in order to expedite the process of tank removal and recycling. Fifty-three (53) tanks will be cut into pieces, decontaminated, and shipped off site for metal reclamation as part of the Site Preparation and Material Removal project. The Technical Specifications, Section 02081, state that the tanks will be brought to the decontamination pad to be cut and decontaminated. The project is progressing in such a way that AWD Technologies, Inc. (AWD) will be ready to start tank preparation before the decontamination pad is completed.

One method for expediting the tank removal process is to cut the tanks into pieces prior to the decontamination pad completion. The tanks could be cut on an existing concrete pad located immediately south of the process building. The tank pieces could be stockpiled in preparation for pad completion and tank cleaning.

AWD is ordered to cut and stockpile as many tanks as possible in advance of the decontamination pad completion. AWD will adhere to the following conditions:

- AWD will sweep any debris off the existing concrete pad prior to moving any tanks onto the pad.
- AWD will move the tanks onto the existing concrete pad located immediately south of the process building.
- AWD will perform the air monitoring required by the Technical Specifications and other project documents.
- AWD will follow the health and safety procedures required by the Technical Specifications and other project documents.
- AWD will sweep off the concrete pad at the end of each day's cutting activities. The material will be stored until it can be recycled with the other scrap metal.
- AWD will <u>not</u> cut any tank containing free liquids because the existing concrete pad lacks any method for collecting liquids. AWD may pump off the free liquids and allow the tank to dry prior to cutting.
- AWD will <u>not</u> cut any tanks during precipitation events for the same reason stated above.

QEM

Resident Project Representative

10/12/93

Date

Site Preparation and Material Removal
Field Order No. 7
Drum Purchase

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

October 22, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 7 to purchase two (2) 55 gallons drums to contain soil cuttings and decontamination water from contaminated soil sampling project northwest of the existing concrete pad.

The soil sampling generates soil cuttings and decontamination water. The waste materials need to be stored in an approved container until the material can be properly disposed of during the next remediation phase.

AWD had empty drums available

AWD is ordered to provide two (2) DOT-approved 55 gallon drums.

AWD will be reimbursed for the drums. The cost of the drums is $55.44 which includes taxes and a 10% mark-up.

Robert James Auto QEM

Resident Project Representative

10/22/93

Date

Site Preparation and Material Removal
Field Order No. 8
Removing Aggregate from Soil Sampling Locations

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

October 21, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 8 to pay for an operator and equipment to remove aggregate covering soil sample locations.

Contaminated soil was encountered during excavation of the diversion channel northwest of the existing concrete pad. QEM has been directed to investigate the extent of contaminated soils into the support zone. The compacted aggregate in the support zone has to be removed in order to allow QEM to hand auger into the underlying soils.

AWD is ordered to provide an operator and equipment to remove the aggregate cover from selected locations within the support zone, as directed by QEM. AWD will remove the aggregate down to the geotextile fabric layer and not below.

AWD will be reimbursed for the cost of an operator, excavation equipment, site safety officer, and PID on a time and materials basis using the AWD labor and equipment rates dated August 23, 1993. The operator rate is $36.00 per hour, the back hoe loader rate is $33.51 per hour, the site safety officer rate is $55.50 per hour, and the PID rate is $12.50 per hour.

QEM

Resident Project Representative

10/21/93

Date

Site Preparation and Material Removal
Field Order No. 10
Exclusion Zone Fence Realignment

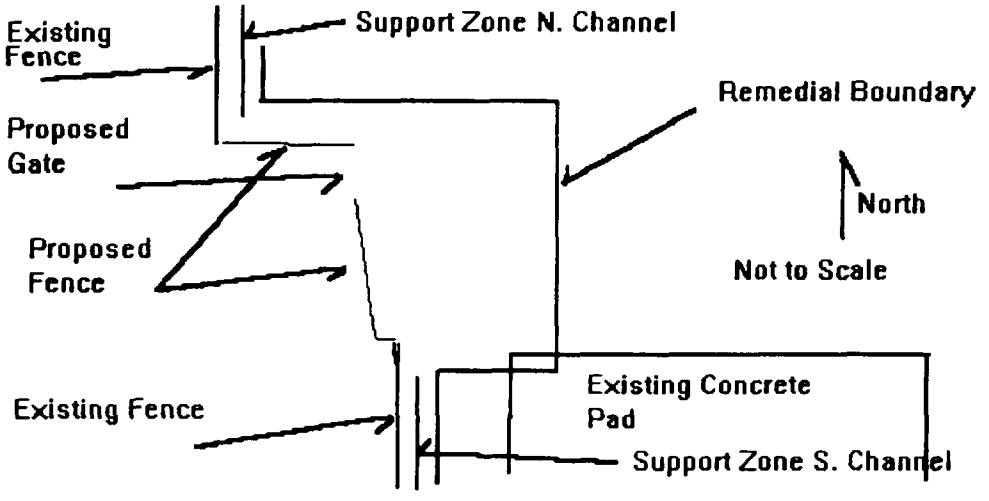
Environmental Conservation and Chemical Corp.
Zionsville, Indiana

November 03, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 10 to realign the exclusion zone fence northwest of the existing concrete pad.

AWD will install the exclusion zone fence between the existing termini of the fence near the support zone north and south diversion channels. Refer to the schematic below for the fence realignment location.

The fence realignment will be started from the southern terminus of the existing fence, about forty-seven (47) feet west of the northwest corner of the concrete pad, then extend about ten (10) west, and extend about ninety (90) feet north-northwest. A cable gate will be installed from that point north. The remainder of the fence will continue from the north end of the cable gate about fifty two (52) feet west to the north terminus of the existing fence



[illegible], QEM
Resident Project Representative

11/03/93
Date

Site Preparation and Material Removal
Field Order No. 11
Monitoring Well Protective Barriers

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

November 09, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 11 to modify the installation of protective barriers around the existing monitoring wells in the support zone.

Monitoring Well (MW-) 5A is outside the support zone footprint, therefore outside the legal access for AWD Technologies, Inc. and no protective barriers can be installed around MW-5A

MW-12 no longer exists; therefore no protective barriers can be installed around MW-12.

MW-16 and MW-13 have three (3) existing protective barriers. One (1) of the MW-13 barriers has been pushed over.

MW-10A has three (3) existing protective barriers but the tops of the barriers are near grade.

AWD will:

1. Leave the existing protective barriers in place.
2. Install a fourth protective barrier around MW-13 and -16.
3. Repair the damaged protective barrier at MW-13.
4. Install four (4) new protective barriers at MW-10A.
5. Install the top of new barriers to about three (3) feet above grade.

Resident Project Representative

11/09/93
Date

Site Preparation and Material Removal
Field Order No. 12
Security Fence Installation

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

November 10, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 12, on behalf of the Enviro-Chem Trustees, to install the security fence outside the diversion channel.

The original design called for the security fence to be installed ten (10) feet inside the support zone footprint. The fence will be moved to reduce safety concerns with the diversion channels and allows future access to the diversion channels from inside the support zone.

AWD Technologies, Inc. will install the security fence at the edge of the support zone footprint where the construction fence is currently located. The security fence will connect to the originally designed fence at the north end of the support zone near coordinates of N922315.7396/E725630.9927 (Drawing C-2 dated 06/03/93). The security fence east of this point will be installed per plans. The security fence will connect to the originally designed fence at the south end of the support zone near coordinates N921492.1800/E725907.1543. The security fence north of this point will be installed per plans (Drawing C-2 dated 06/03/93).

AWD will be reimbursed for the cost of any additional length of fencing to cover the expanded area. The cost of the fence is estimated to be $13.98 PER LINEAR FOOT INSTALLED.

[signature], QEM
Resident Project Representative

11/15/93
Date

Site Preparation and Material Removal
Field Order No. 13
Boiler Cutting and Covering

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

November 11, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 13, on behalf of the Enviro-Chem Trustees, to cut and wrap the boiler in preparation for off-site disposal.

The hazardous waste landfills contacted for boiler disposal have required the boiler to be cut up into smaller pieces to eliminate the void space within the boiler.

AWD Technologies, Inc. (AWD) shall cut up the boiler where it is currently located, in the boiler room of the former process building. After cutting the boiler, the pieces will be covered with polyethylene sheets to reduce the potential for precipitation to leach any constituents from the boiler into the underlying soil.

AWD will be reimbursed on a time and material basis based for the boiler cutting and covering based on the AWD Labor and Equipment Rates sheet dated August 23, 1993 up to a cost of two thousand five hundred dollars ($2,500).

Robert Jan Auto, QEM
Resident Project Representative

11/11/93
Date

Site Preparation and Material Removal
Field Order No. 14
Transformer Removal

Environmental Conservation and Chemical Corp.
Zionsville, Indiana

November 15, 1993

Quality Environmental Management, Inc. (QEM) is issuing Field Order Number 14, on behalf of the Enviro-Chem Trustees, to remove two (2) transformers from the pole in the remedial boundary.

The transformer and pole are to be removed as part of the Site Preparation and Material Removal but the Technical Specifications state that the transformers would be removed by others.

AWD Technologies, Inc. (AWD) shall remove the two (2) transformers from the pole and bring them to the decontamination pad. Public Service Indiana (PSI) will take possession of the transformers at the decontamination pad and dispose of the transformers off site. AWD shall coordinate transformer pick-up with PSI.

AWD will be reimbursed for transformer removal for a lump sum of two thousand five hundred dollars ($2,500).

Robert James Autio, QEM — 11/15/93

Resident Project Representative — Date

J

PROJECT RECORD

REPORT OF FIELD CHANGE REGISTER
ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

REPORT NUMBER	REPORT TITLE	REPORT DATE	DATE SUBMITTED	COST	DISPOSITION
001	DOCUMENT DISCREPANCIES	9-4-93	10-7-93	$33,829.88	REJECTED
002	POTENTIALLY LEAKING DRUM	9-4-93	10-7-93	$5,842.57	REJECTED
003	STEEL FENCE POSTS	9-9-93	10-7-93	$1,742.00	REJECTED
004	SITE GRADING	9-16-93 12-16-93	10-7-93 12-16-93	$40,509.00	PENDING
005	ABRASION RESISTANCE	9-17-93	10-7-93	NA	APPROVED
006	HIGH EARLY STRENGTH CEMENT	9-20-93	10-8-93	$843.36	APPROVED SPMR-39
007	WATER SEEPAGE INVESTIGATION	9-21-93	10-8-93	$492.02	APPROVED
008	DIVERSION CHANNEL RUBBLE DELAY 1 WEEK	9-27-93	10-8-93	$17,637.59	REJECTED
009	DECONTAMINATION PAD MINOR MODIFICATIONS	10-1-93	10-8-93	NA	APPROVED
010	SHIFT ACCESS ROAD APPROX 14' UPGRADE AREA	10-4-93	10-8-93	NA	APPROVED
011	PARCEL 45 SOUTH DIVERSION CHANNEL OUTFALL RELOCATION	10-5-93	10-8-93	NA	APPROVED Design only
012	TANK CUTTING	10-6-93	10-8-93	NA	APPROVED
013	SHIFT REMEDIAL BOUNDARY GATE OPENING	10-7-93	10-8-93	NA	REJECTED PENDING INVEST.
014	CONCRETE CURING	10-8-93	10-8-93	NA	APPROVED
015	CONTAMINATED SOIL OUTSIDE REMEDIAL BOUNDARY	10-8-93	10-8-93	$2,180.64	APPROVED
016	SPECIFIC GRAVITY OF 60 MIL HDPE LINER	10-14-93	10-14-93	NA	APPROVED
017	WASTEWATER PAD RELOCATION 2' SOUTH	10-14-93	10-14-93	NA	APPROVED
018	VOID				
019	DIVERSION CHANNEL PROPOSED SOLUTION	10-14-93	10-14-93	???	ON HOLD
020	SAMPLING SUPPORT	10-20-93	10-20-93	$1,025.36	APPROVED
021	WATER IN WW COLLECTION PIPE TRENCH	10-22-93	10-22-93	NA	APPROVED
022	FRAC TANK FOR WASTEWATER STORAGE	10-27-93	10-27-93	NA	APPROVED
023	ASBESTOS SAMPLING - A - FRAME	11-2-93	11-2-93	$687.00	APPROVED
023-JH	CITY WATER	10-27-93	10-27-93	NA	APPROVED
023A-JH	DRINKING WATER CERTIFICATION	10-27-93	10-27-93	NA	APPROVED
024	PCB SAMPLING OF 3 TANKS	11-2-93	11-2-93	$1,428.00	APPROVED
025	BOILER CUTTING FOR DISPOSAL Refer to FWO #13	11-9-93	11-9-93	$2,340.36	APPROVED Refer to FWO #13
026	EXCLUSION ZONE FENCE TO ECC	11-16-93	11-16-93	NA	REJECTED NOT USED
027	VOID				
028	ENGINEERING CO SECURITY FENCE	11-24-93	11-24-93	NA	SEE FO # 12
029	DELAYS FOR DRUM HANDLING IN A-FRAME	12-16-93	12-16-93	$8,051.96	PENDING
030	SUBMITTAL REVIEW DELAYS	12-16-93	12-16-93	$20,379.90	PENDING
031	ADDITIONAL BOILER DISPOSAL CHARGES	12-16-93	12-16-93	$13,278.52	PENDING
032	DEBRIS CLEANUP AFTER PROJECT COMPLETION	1-17-94	1-17-94	$3,507.31	PENDING

TOTAL APPROVED	$8,996.74
TOTAL REJECTED	$59,052.04
TOTAL PENDING	$85,726.69
	==========
TOTAL ABOVE BASE CONTRACT VALUE	$153,775.47

ECCCO.WK3

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 001
REPORT TITLE: Document Discrepancies

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-4-93

REFERENCE DATA

Spec. Section No.: all Page No.: all Paragraph No.: all

Drawing No.: all Entitled: all

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

An undetermined amount of discrepancies currently exist between the U.S. EPA approved design documents (dated December, 1992) and the AWD Remedial Services construction contract documents (dated May, 1993). AWD Remedial Services is under contract with the ECC Trust to perform Site Preparation and Material Removal in accordance with documents dated May, 1993. However, U.S. EPA has approved a different set of documents dated December, 1992. U.S. EPA oversight and the Independent CQA Officer (QEM) are enforcing the U.S. EPA approved documents which has continually resulted in delaying field construction operations.

2. Detailed Solution Proposed or Accomplished:

Through the week ending October 1, 1993, document discrepancies have been reconciled on a case by case basis with AWD Remedial Services incurring a schedule delay of 2 weeks with an associated cost of $33,829.88 (see attached cost breakdown).

3. Is the Problem an Isolated Case or General? GENERAL (case by case)

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REJECTED: [signature] SEE ATTACHED COMMENT

Cost Breakdown

Report No. 001 - Document Discrepancies

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	10	$82.50	$6,600.00
Site Safety Officer	1	8	10	$55.50	$4,440.00
Equipment Operator (s)	2	8	10	$36.00	$5,760.00
Laborer (s)	1	8	10	$27.00	$2,160.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.5	$100.00	$50.00
Service Truck	1	Day	10	$95.00	$950.00
PID	1	Day	10	$100.00	$1,000.00
LEL/O2	1	Day	10	$35.00	$350.00
Track Loader	1	Wks	2	$3,191.43	$6,382.86
Mini Ram (s)	4	Day	10	$50.00	$2,000.00
Dozer	1	Wks	2	$1,818.51	$3,637.02

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Days	10	$25.00	$250.00
Trips	Each	1	$250.00	$250.00
			TOTAL	**$33,829.88**

RESPONSE TO REPORT OF FIELD CHANGE
REPORT NUMBER: 001
TITLE: Plan Discrepancies
DATE: October 22, 1993

The ECC Trustees instructed AWD Technologies, Inc. to prepare a bid package for the implementation of the Site Preparation and Material Removal Final Design (SPMR). The December 1992 Drawings and Technical Specifications for the SPMR were approved by the USEPA based on the conditions and revisions detailed in several correspondences including those subsequently listed in Karen Vendl's July 30, 1993 letter to Brad Grow at AWD Technologies, Inc. However, AWD Technologies, Inc. revised set of drawings and specifications ("the May Plans") included additional unapproved revisions. The additional AWD revisions included in the May 1993 Plans are not only unapproved by the USEPA, they are also undocumented and, therefore, difficult to identify.

USEPA is requiring the implementation of the approved drawings and specifications (the December 1992 Plans and the associated USEPA modifications). However, USEPA is allowing AWD Technologies, Inc. to use the May 1993 Plans during the implementation of the SPMR on the condition that the Agency be apprised of the unapproved revisions and be given the opportunity to approve them.

Because the AWD additional revisions were not authorized by the ECC Trustees, AWD Technologies, Inc. responsible for any costs or delays incurred as a result of the unapproved modifications. Therefore, the ECC Trustees reject the AWD Technologies, Inc. Report of Field Change No. 001.

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 002
REPORT TITLE: Potentially Leaking Drum

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-4-93

REFERENCE DATA

Spec. Section No.: 01040 Page No.: 01040-3 Paragraph No.: 3.02.B

Drawing No.: n/a Entitled: n/a

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

During removal of the contents of the A-Frame House, AWD Remedial Services noticed that the 55-gallon drum of unknown contents (as shown on Table 3 - Structure Inventory Summary Table in Appendix A of the Technical Specifications) appeared to be leaking.

2. Detailed Solution Proposed or Accomplished:

AWD Remedial Services immediately halted the removal process and notified the Engineer's On-Site Representative (QEM) of the changed condition regarding the potentially leaking drum. Health and Safety protocols then dictated that since the drum of unknown contents appeared to be leaking, "Level B" Personal Protective Equipment including self-contained breathing apparatus (SCBA) and polytyvek clothing needed to be used for handling this drum. Procurement of the necessary equipment was expedited to handle this drum in a safe manner. The drum contents were then transferred to an 85-gallon overpack drum including the deteriorated drum carcus. A schedule delay of 2 days with an associated cost of $5,842.57 was incurred by AWD Remedial Services due to this potentially leaking drum of unknown contents.

3. Is the problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: REJECTED BY: [signature] SEE ATTACHED RESPONSE

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 002 - Potentially Leaking Drum

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	2	$82.50	$1,320.00
Site Safety Officer	1	8	2	$55.50	$888.00
Equipment Operator (s)	1	8	2	$36.00	$576.00
Laborer (s)	1	8	2	$27.00	$432.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Service Truck	1	Day	2	$95.00	$190.00
PID	1	Day	2	$100.00	$200.00
LEL/O2	1	Day	2	$35.00	$70.00
Track Loader	1	Day	2	$638.29	$1,276.57
Mini Ram (s)	4	Day	2	$50.00	$400.00
SCBA	2	Day	2	$35.00	$140.00
Polytyvek PPE	2	Day	2	$35.00	$140.00
SCBA Extra Bottles	2	Day	2	$10.00	$40.00

Miscellaneous		Unit	Duration	Unit Rate	Total
Per Diem		Day	2	$25.00	$50.00
Shipping/Handling		Each	4	$30.00	$120.00
					==========
				TOTAL	$5,842.57

RESPONSE TO REPORT OF FIELD CHANGE
REPORT NUMBER: 002
TITLE: Potentially Leaking Drum
DATE: October 15, 1993

This work is NOT viewed to be out of the Scope of Work for the Project. Drum handling procedures were clearly defined in the Technical Specifications for the Site Preparation and Materials Removal and the Health and Safety Plan.

Article 7.4 of the contract between AWD Technologies, Inc. and the ECC Trustees dated July 27, 1993 states, "Except for the inaccuracy of technical data on which the Contractor is entitled to rely, if any physical condition uncovered or revealed at the site differs from that anticipated by the Contractor , the Contractor shall deal with the condition as appropriate, consistent with the requirements of EPA and the Trustees, without any adjustment in the Contract Price or the Contract Time."

Moreover, the Site Preparation and Material Removal Final Design was prepared by AWD Technologies, Inc.; therefore, any costs or delays during implementation of the Site Preparation and Material Removal Final Design resulting from errors and omissions in the Site Preparation and Material Removal Final Design are the responsibility of AWD Technologies, Inc.

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 003
REPORT TITLE: Steel Fence Posts

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-9-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-2, Rev.1 Entitled: Site Preparation and Grading Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

During installation of the steel fence posts associated with the temporary construction fence (orange high-visibility fence), AWD Remedial Services encountered unexpected subsurface conditions that made it very difficult to install the steel fence posts using conventional manual means. These changed subsurface conditions consisted of extremely dense, compacted material to the full depth of the post penetration.

2. Detailed Solution Proposed or Accomplished:

AWD Remedial Services procured special equipment to install the steel fence posts in the changed subsurface conditions. This special equipment is non-conventional equipment that was not intended to be used on this project. AWD has installed numerous steel fence posts on many projects; however, never has such non-conventional equipment been required. Typical construction methods employ one man with a hammer to install steel fence posts. Instead, this project required the use of multiple men utilizing special subsurface boring equipment including rock drills to accomplish the steel fence post installation. In accordance with Article 9.3 of the Contract, AWD is requesting that the Engineer's On-Site Representative issue a Work Directive Change Order in the amount of $1,742.00 to cover the additional costs incurred by AWD during the installation of the steel fence posts.

3. Is the Problem an Isolated Case or General? GENERAL

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: REJECTED BY: [signature] SEE ATTACHED RESPONSE

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

[signature] SEE ATTACHED

Cost Breakdown

Report No. 003 - Steel Fence Posts

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Site Safety Officer	1	8	1	$55.50	$444.00
Equipment Operator (s)	1	8	2	$36.00	$576.00
Laborer (s)	1	8	2	$27.00	$432.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Service Truck	1	Day	1	$95.00	$95.00
Compressor with Rock Drill	1	Day	3	$65.00	$195.00
					==========
				TOTAL	**$1,742.00**

RESPONSE TO REPORT OF FIELD CHANGE
REPORT NUMBER: 003
TITLE: Steel Fence Posts
DATE: October 19, 1993

Installation of the fencing is within the Scope of Work and is not a field change. Section 02800 of the Technical Specification for the Site Preparation and Material Removal Final Design does not specify the method of installation of fencing; therefore, any method of installation consistent with industry practice is within the Scope of Work. This is plainly stated in the contract between AWD Technologies, Inc. (Contractor) and the ECC Trustees dated July 27, 1993 (the Contract):

> Article 1.3 of the Contract states, "any Work, materials or equipment that may reasonably be inferred from the Contract Documents as being required to produce the intended results will be supplied by Contractor whether or no specifically asked for."

The ECC Trustees are not responsible for costs incurred during the implementation of the Site Preparation and Material Removal Final Design that are the result of physical conditions uncovered or revealed at the site differing from that anticipated by the Contractor. This is plainly stated in the the Contract:

> Article 7.2 states, "Reference is made to Article 7.7 for identification of those reports of explorations and tests of subsurface conditions and existing structures at the site that have been utilized by Engineer in preparation of the contract Documents. The data is for general information and the Trustees and Engineer do not guarantee the reports except Contractor may rely upon the accuracy but not the completeness of the technical data contained in drawings. Except as indicated in the immediately preceding sentence and in Article 7.3, Contractor shall have full responsibility with respect to physical conditions in or relating to such subsurface conditions and existing structures."
>
> Article 7.4 states, "Except for the inaccuracy of technical data on which the Contractor is entitled to rely, if any physical condition uncovered or revealed at the site differs from that anticipated by the Contractor, the Contractor shall deal with the condition as appropriate, consistent with the requirements of EPA and the Trustees, without any adjustment in the Contract Price or the Contract Time."

Moreover, the Site Preparation and Material Removal Final Design was prepared by AWD Technologies, Inc.; therefore, any costs or delays during implementation of the Site Preparation and Material Removal Final Design resulting from errors and omissions in the Site Preparation and Material Removal Final Design are the responsibility of AWD Technologies, Inc.

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report # 004
Site grading schedule Delays

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 12-16-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Varying field elevations for the support zone as compared to the elevations on the old drawings required additional time and equipment to perform the regrading of the site

2. Detailed Solution Proposed or Accomplished: Reestablish new grade elevations and place the material as necessary to maintain drainage and maintain diversion channel invert elevations

Additional time required 10 days cost 40509.50

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 004 – SITE GRADING SCHEDULE DELAYS

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	10	$82.50	$6,600.00
Site Safety Officer	1	8	10	$55.50	$4,440.00
Equipment Operator (s)	2	8	10	$36.00	$5,760.00
Laborer (s)	1	8	10	$27.00	$2,160.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.5	$100.00	$50.00
Service Truck	1	Day	10	$95.00	$950.00
PID	1	Day	10	$100.00	$1,000.00
LEL/O2	1	Day	10	$35.00	$350.00
Track Loader	1	Day	10	$1,063.81	$10,638.10
Mini Ram (s)	4	Day	10	$50.00	$2,000.00
Dozer	1	Day	10	$606.17	$6,061.70

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Days	10	$25.00	$250.00
Trips	Each	1	$250.00	$250.00
				==========
			TOTAL	**$40,509.80**

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 005
REPORT TITLE: Abrasion Resistance

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-17-93

REFERENCE DATA

Spec. Section No.: 02280 Page No.: 02280-2 Paragraph No.: 2.01.C

Drawing No.: n/a Entitled: n/a

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

The test methods listed in the Technical Specifications, the Construction Quality Assurance Plan (CQAP), and the AWD Contractor Quality Control Plan (CQCP) for abrasion resistance of geotextile material (ASTM D4157 and ASTM D4158) are no longer used.

2. Detailed Solution Proposed or Accomplished:

The test method for abrasion resistance of geotextile material currently being used by testing laboratories is ASTM D3884 - Standard Test Method for Abrasion Resistance of Textile Fabrics (Rotary Platform, Double-Head Method). ASTM D3884 will be used and the minimum acceptable value will remain at 40 pounds. This change has no affect on project schedule or cost.

3. Is the problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Engineer

Approved By: [signature] 10/14/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED BY: [signature]

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 006
REPORT TITLE: High Early Strength Cement

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-20-93

REFERENCE DATA

Spec. Section No.: 03300 Page No.: 03300-5 Paragraph No.: 2.01.B

Drawing No.: n/a Entitled: n/a

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

As previously discussed during a conference call on September 20, 1993, between AWD, the Engineer's On-Site Representative (QEM), and the ECC Trust, slow submittal review on decontamination pad submittals delayed the start of work on the decontamination pad. AWD's concrete subcontractor was unable to start work on the pad until approval of the submittals was given

2. Detailed Solution Proposed or Accomplished:

Verbal approval was given on the decontamination pad submittals during the above mentioned conference call. This allowed AWD's concrete subcontractor to mobilize to the jobsite to begin work on the pad; however, AWD Remedial Services had been delayed 1 week on this critical item. In order to make up this lost time, AWD Remedial Services was forced to use high early strength cement (Type III) which allows use of the pad sooner than with standard cement (Type II). In accordance with Article 9.3 of the Contract, AWD is requesting that the Engineer's On-Site Representative issue a Work Directive Change Order in the amount of $843.36 (see attached cost breakdown) to cover the additional cost incurred by AWD in upgrading the cement from standard (Type II) to high early strength (Type III).

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: J R [illegible] Title: Resident Superintendent

IS THIS NECESSARY? USE WAS ALREADY APPROVED BY APPROVAL OF CMR-0[illegible] [illegible] 10/1/93

~~Approved By~~:

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 006 - High Early Strength Cement

Materials	Unit	Qty	Unit Rate	Total
High Early Strength Cement	C.Y.	84	$10.04	$843.36
				==========
			TOTAL	$843.36

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 007
REPORT TITLE: Water Seepage Investigation

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-21-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-2, Rev.1 Entitled: Site Preparation and Grading Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

During excavation of the Parcel 45 South Diversion Channel, AWD Remedial Services encountered discolored water seeping into the excavation from the west. AWD notified the Engineer's On-Site Representative (QEM) of this condition.

2. Detailed Solution Proposed or Accomplished:

Subsequently, QEM issued Field Order No. 3 - Plug and Locate Septic Pipe dated September 22, 1993 (see attached). Field Order No. 3 directed AWD Remedial Services to locate, plug, bury, and mark a septic pipe which appeared to be causing the discharge from the west. AWD attempted to locate a pipe, but we were unable to find one. AWD continued to excavate with a backhoe up to the outer limit of the approved ECC legal access. QEM then issued Field Order No. 4 - Continue Site Drainage also dated September 22, 1993 (see attached). Field Order No. 4 directed AWD to allow the discharge to continue into the existing diversion channel. It is AWD's view that this work was outside our present scope of work, and as such has an additional cost associated with it. Therefore, this extra work should not have been handled as a Field Order under the terms of Article 9.7 of the Contract. Instead, this water seepage investigation should be handled as a Work Directive Change Order issued by QEM (less than $2500) in accordance with Article 9.3 of the Contract. The additional cost incurred by AWD for this water seepage investigation was $494.02 (see attached cost breakdown). However, there was no associated schedule implication for this work because it only took a few hours to perform.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: President Subcontractor

Approved By: [signature] 10/14/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED BY: [signature]

Cost Breakdown

Report No. 007 - Water Seepage Investigation

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	0.25	$82.50	$165.00
Site Safety Officer	1	8	0.25	$55.50	$111.00
Equipment Operator (s)	1	8	0.25	$36.00	$72.00
Laborer (s)	1	8	0.25	$27.00	$54.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
PID	1	Day	0.25	$100.00	$25.00
Backhoe Loader	1	Day	0.25	$268.07	$67.02
				TOTAL	**$494.02**

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 008
REPORT TITLE: Diversion Channel Rubble

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 9-27-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-2, Rev.1 Entitled: Site Preparation and Grading Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

During excavation of the diversion channels, AWD Remedial Services encountered unexpected subsurface conditions which included concrete rubble (concrete pieces as large as 6'x6'x10"), wood, block, brick, reinforcing steel, and general building/construction debris. These subsurface conditions along with revised site grading elevations (as directed by QEM Field Order No. 2) have made it very difficult, if not impossible, to construct the diversion channels with the side slopes as shown on the Site Preparation and Grading Plan (Drawing No. C-2, Rev. 1) and to maintain the diversion channel invert elevations.

2. Detailed Solution Proposed or Accomplished:

AWD Remedial Services is requesting a review of this matter by the ECC Trust's Engineer to determine the feasibility of altering the diversion channel side slopes and/or the diversion channel invert elevations. Other options include overexcavating the building/construction debris and replacing it with suitable backfill material or placing rip rap inside the diversion channels. Through the week ending October 1, 1993, the changed subsurface conditions have caused AWD Remedial Services to incur a schedule delay of 1 week with an associated cost of $17,637.59 (see attached cost breakdown). Additional project schedule and cost delays may develop based on the solution chosen by the ECC Trust's Engineer to resolve this matter.

3. Is the Problem an Isolated Case or General? GENERAL

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 008 - Diversion Channel Rubble

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	5	$82.50	$3,300.00
Site Safety Officer	1	8	5	$55.50	$2,220.00
Equipment Operator (s)	2	8	5	$36.00	$2,880.00
Laborer (s)	1	8	5	$27.00	$1,080.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.25	$100.00	$25.00
Service Truck	1	Day	5	$95.00	$475.00
PID	1	Day	5	$100.00	$500.00
LEL/O2	1	Day	5	$35.00	$175.00
Track Loader	1	Wks	1	$3,191.43	$3,191.43
Mini Ram (s)	4	Day	5	$50.00	$1,000.00
Track Excavator	1	Wks	1	$2,666.16	$2,666.16

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Day	5	$25.00	$125.00
			TOTAL	$17,637.59

RESPONSE TO REPORT OF FIELD CHANGE
REPORT NUMBER: 008
TITLE: Diversion Channel Rubble
DATE: October 19, 1993

The ECC Trustees are not responsible for costs incurred during the implementation of the Site Preparation and Material Removal Final Design. This is plainly stated in the contract between AWD Technologies, Inc. (Contractor) and the ECC Trustees dated July 27, 1993 (the Contract):

> Article 7.2 states, "Reference is made to Article 7.7 for identification of those reports of explorations and tests of subsurface conditions and existing structures at the site that have been utilized by Engineer in preparation of the contract Documents. The data is for general information and the Trustees and Engineer do not guarantee the reports except Contractor may rely upon the accuracy but not the completeness of the technical data contained in drawings. Except as indicated in the immediately preceding sentence and in Article 7.3, Contractor shall have full responsibility with respect to physical conditions in or relating to such subsurface conditions and existing structures."
>
> Article 7.4 states, "Except for the inaccuracy of technical data on which the Contractor is entitled to rely, if any physical condition uncovered or revealed at the site differs from that anticipated by the Contractor, the Contractor shall deal with the condition as appropriate, consistent with the requirements of EPA and the Trustees, without any adjustment in the Contract Price or the Contract Time."

Moreover, the Site Preparation and Material Removal Final Design was prepared by AWD Technologies, Inc.; therefore, any costs or delays during implementation of the Site Preparation and Material Removal Final Design resulting from errors and omissions in the Site Preparation and Material Removal Final Design are the responsibility of AWD Technologies, Inc.

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 009
REPORT TITLE: Decontamination Pad

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 10-1-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-5, Rev.0 Entitled: Decon. Pad Plan, Sections, and Details

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

Due to constructability issues encountered in the field during decontamination pad installation, the following modifications were made:

1.0 Keyway switched from slabside to curbside on the north and south sides of the pad. There is no structural impact on the pad as a result of this change.

2.0 The 6-inch PVC gate valve was moved to inside the manhole, rather than in a valve pit box. By putting the valve inside the manhole, it is more accessible.

3.0 Joint filler and joint sealant material was added along expansion joints in the decontamination pad. This is standard concrete construction practice which allows the slab to expand and contract without cracking.

4.0 Durabond, an epoxy material, was used to patch minor imperfections in the concrete curb. There is no structural impact on the pad as a result of this change.

2. Detailed Solution Proposed or Accomplished:

The above-mentioned modifications were made with no project schedule or cost implications.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Board at Superintendent

Approved By: [signature] 10/14/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED BY: [signature]

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 010
REPORT TITLE: Shift Access Road Upgrade Area

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 10-4-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-2, Rev.1 Entitled: Site Preparation and Grading Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

ıring layout of tne access road upgrade area, AWD Remedial Services ɔticed that the limits shown on the above-mentioned drawing do not coincide with the existing Northside Sanitary Landfill access road. Also, the limits shown on the drawing for the upgrade would result in unnecessary damage to adjacent property.

2. Detailed Solution Proposed or Accomplished:

To resolve this problem, the access road upgrade area limits were shifted to the northeast approximately 14 feet. This resulted in an upgraded access road that matches the existing access road to the Northside Sanitary Landfill. This shift also prevented unnecessary damage to adjacent property. There are no project schedule or cost implications associated with this shifting of the access road upgrade area.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: J.R. Taylor Title: Resident Superintendent

Approved By: [illegible] 10/15/93 please submit sketches as attachment to this Rep[illegible]

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED BY: _____

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 011
REPORT TITLE: Parcel 45 South Diversion Channel Outfall Relocation

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 10-5-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-2, Rev.1 Entitled: Site Preparation and Grading Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

ue to the possibility of the designed outfall for the Parcel 45 South version Channel being upstream of a future surface water monitoring point, the Engineer's On-Site Representative (QEM) has requested AWD Remedial Services to supply a cost and schedule estimate to alter the present alignment of the Parcel 45 South Diversion Channel outfall.

2. Detailed Solution Proposed or Accomplished:

QEM has instructed AWD to base the cost and schedule estimate for performance of this additional work on an earlier version of the design drawings (Drawing No. C-2, Rev. 0, titled "Site Preparation and Grading Plan"). AWD has complied with QEM's request, and the estimated cost and schedule to perform this additional work of relocating the Parcel 45 South Diversion Channel outfall is $15,381.47 and 3 days, respectively.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: [signature] as estimate only — RS and SSC time is questionable. 10/15/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED AS ABOVE: [signature]

Cost Breakdown

Report No. 011 - Parcel 45 South Diversion Channel Outfall Relocation

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	3	$82.50	$1,980.00
Site Safety Officer	1	8	3	$55.50	$1,332.00
Equipment Operator (s)	2	8	3	$36.00	$1,728.00
Laborer (s)	2	8	3	$27.00	$1,296.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.15	$100.00	$15.00
Service Truck	1	Day	3	$95.00	$285.00
PID	1	Day	3	$100.00	$300.00
LEL/O2	1	Day	3	$35.00	$105.00
Track Loader	1	Day	3	$1,063.81	$3,191.43
Mini Ram (s)	4	Day	3	$50.00	$600.00
Track Excavator	1	Day	3	$888.72	$2,666.16
Roller Compactor	1	Day	1	$639.98	$639.98

Material	Qty	Unit	Unit Rate	Total
Reinforced Concrete Pipe 18"	70	L.F.	$11.59	$811.30
Rip Rap	10	Tons	$13.16	$131.60

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Day	3	$25.00	$75.00
Transport Roller	L.S.	1	$225.00	$225.00
			TOTAL	**$15,381.47**

AWD
TECHNOLOGIES

A Subsidiary of
The Dow Chemical Company

PGH-93-MJD-1237

November 10, 1993

Ms. Karen A. Vendl
Senior Remedial Project Manager
Office of Superfund
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Enviro-Chem Superfund Site
Site Preparation and Material Removal
Reports of Field Change Nos. 11B, 19A (Diversion Channels)
AWD Project Number 2396.100

Dear Karen:

Enclosed are the subject reports of field change (RFC) for U.S. EPA review and approval as "major" design changes in accordance with the Construction Quality Assurance Plan.

These RFC's were submitted previously on October 15, 1993, and are now being resubmitted to present a modified approach to the diversion channel construction.

The RFC's are self-explanatory and each includes attached figures and sketches. Please call me or Jim Ambrose if you have any comments or questions.

Sincerely,

Mark J. Dowiak
Project Coordinator

MJD/slk

Enclosures

cc: R. Ball/ERM
S. DeBartolo/AWD
J. Ambrose/AWD
J. Fife/AWD

AWD Technologies, Inc.
Penn Center West Building III Suite 300 Pittsburgh Pennsylvania 15276 Telephone 412 788 2717 Fax 412 788 1316

RFC No. 11B (Voids RFC 11, 11A)
Parcel 45 South Diversion
Channel Outfall Revision

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/10/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-2, Rev. 1	**Entitled:** Site Preparation and Grading Plan	
Sketch No.: 3	**Dated:** 11/10/93	**Entitled:** Parcel 45 South Diversion Channel Outfall Revision

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   The channel outfall location will maintain the alignment and discharge point in the unnamed ditch as shown on Drawing C-2, Revision 1. RFC No. 11A is voided. The 18 inch diameter Class V RCP culvert outlet will not be necessary.

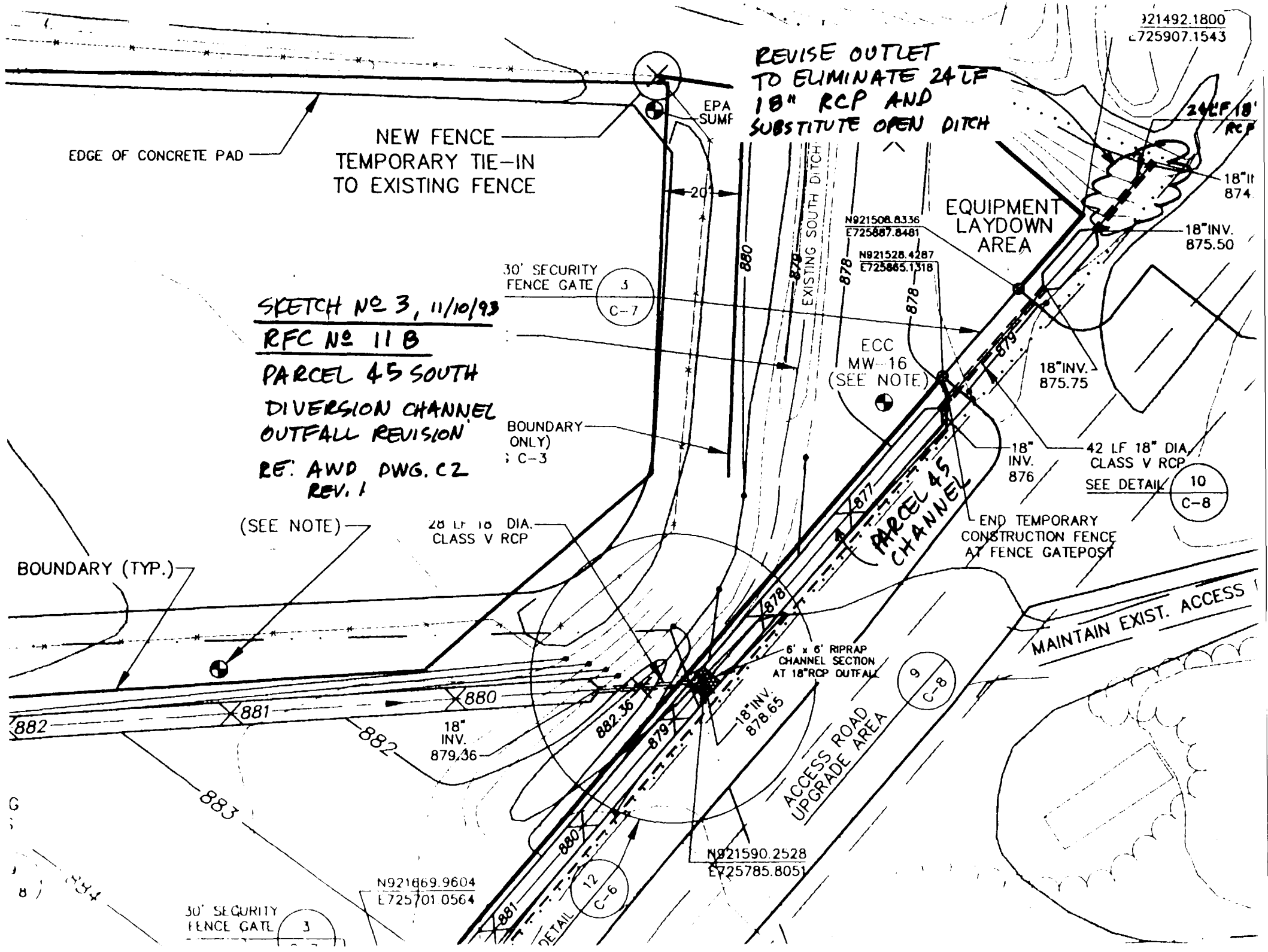
2. Detailed Solution Proposed or Accomplished:

   Construct the diversion channel outlet at the unnamed ditch as an open channel. The channel cross section shall be as constructed per Report of Field Change No. 19A, 11/10/93.

3. Is the Problem an Isolated Case or General? Isolated

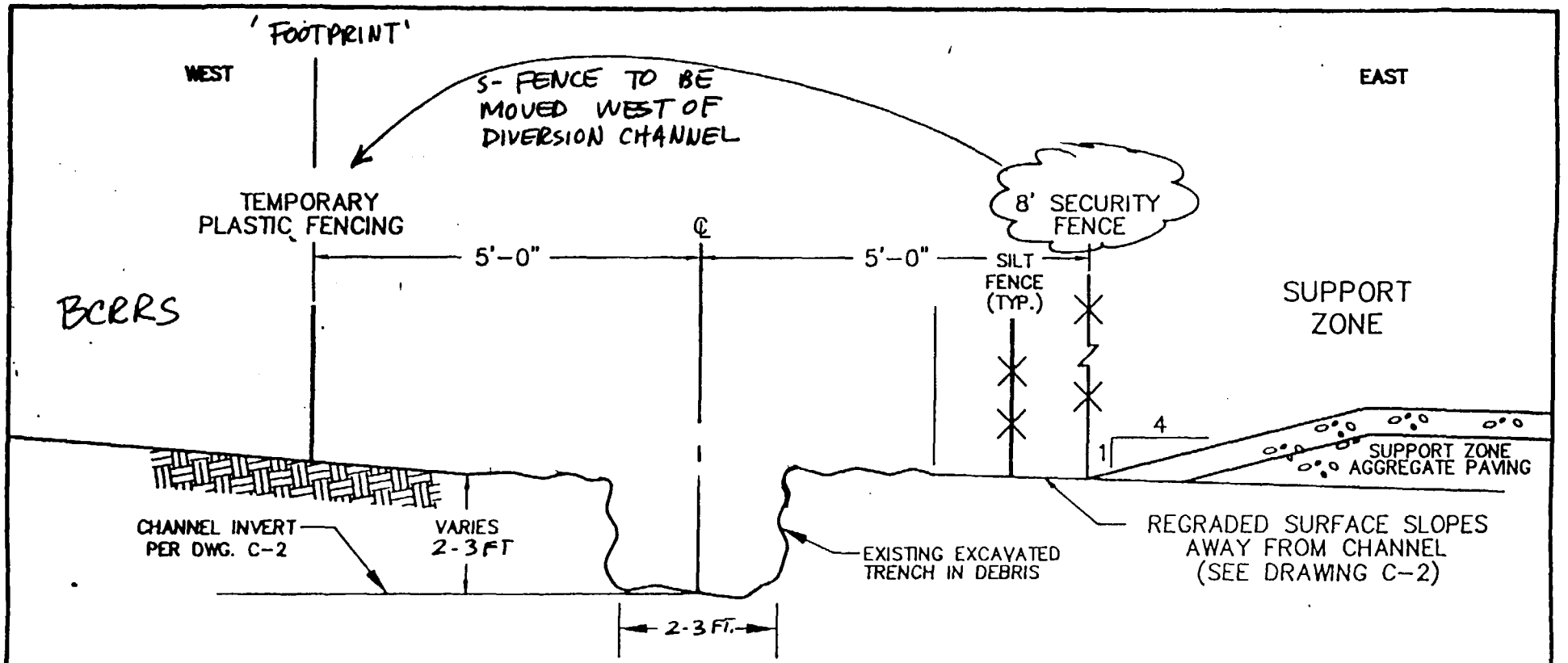
4. Submit Sketches as Necessary. (See attached revised detail 8, Drawing C-8)

By: Mark Daniels	**Title:** AWD DESIGN MGR.
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	



REVISE OUTLET TO ELIMINATE 24 LF 18" RCP AND SUBSTITUTE OPEN DITCH
SKETCH No 3, 11/10/93
RFC No 11 B
PARCEL 45 SOUTH
DIVERSION CHANNEL OUTFALL REVISION
RE: AWD DWG. C2 REV. 1
EDGE OF CONCRETE PAD
NEW FENCE TEMPORARY TIE-IN TO EXISTING FENCE
EPA SUMP
20'
EXISTING SOUTH DITCH
EQUIPMENT LAYDOWN AREA
N921508.8336
E725887.8481
N921528.4287
E725865.1318
30' SECURITY FENCE GATE
3
C-7
BOUNDARY ONLY)
C-3
ECC MW-16 (SEE NOTE)
18" INV. 875.75
18" INV. 876
42 LF 18" DIA. CLASS V RCP
SEE DETAIL
10
C-8
END TEMPORARY CONSTRUCTION FENCE AT FENCE GATEPOST
PARCEL 45 CHANNEL
(SEE NOTE)
28 LF 18" DIA. CLASS V RCP
BOUNDARY (TYP.)
MAINTAIN EXIST. ACCESS
6' x 6' RIPRAP CHANNEL SECTION AT 18"RCP OUTFALL
18" INV. 878.65
18" INV. 879.36
882.36
ACCESS ROAD UPGRADE AREA
9
C-8
N921590.2528
E725785.8051
N921669.9604
E725701.0564
30' SECURITY FENCE GATE
3
DETAIL
12
C-6
880
881
882
883
878
879
877

FILE: \ECC\CHANNEL1.DWG



8 / C-2 PARCEL 45 DIVERSION CHANNEL (TYP.)

ISSUED 11/10/93 ~~OCT 15 1993~~ FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

0 1 0 0 1 5 9 3 0 0 0 0 R T H	AWD TECHNOLOGIES, INC AWD TECHNOLOGIES	REVISED DIVERSION CHANNEL IN DEBRIS NORTH AND SOUTH DIVERSION CHANNELS ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN CLIENT: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST JOB NO. 0000-000 SCALE: 1/2" = 1'-0" FIGURE NUMBER REV 0

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/10/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-8, Rev. 1	**Entitled:** Sections and Details, Details 7 and 8	
Sketch No.: 1, Rev. 1	**Dated:** 11/10/93	**Entitled:** Revised Diversion Channels

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   Subsurface conditions along approximately 70 percent of the length of the Parcel 45 and support zone diversion channels vary from the till soil conditions which were used as the basis for design. Debris fill was encountered consisting of building demolition materials, trees, boulders, and miscellaneous bulky wastes. The diversion channels cannot be constructed as designed (V-ditch) because the debris cannot be excavated to a uniform slope.

2. Detailed Solution Proposed or Accomplished:

   Revise the Parcel 45 and Support Zone diversion channel details (7 and 8) to eliminate the V-ditch section and substitute an open trench section. This trench section has been constructed in the field. The trench bottom has been set at design grade (± 6 inches) and the depth below ground surface varies from 2 to 3 feet. The open trench section is 2 to 3 feet wide and has an irregular rectangular cross-section, with near-vertical side slopes The irregular section is a result of numerous debris and bulky materials being excavated and protruding from the trench.

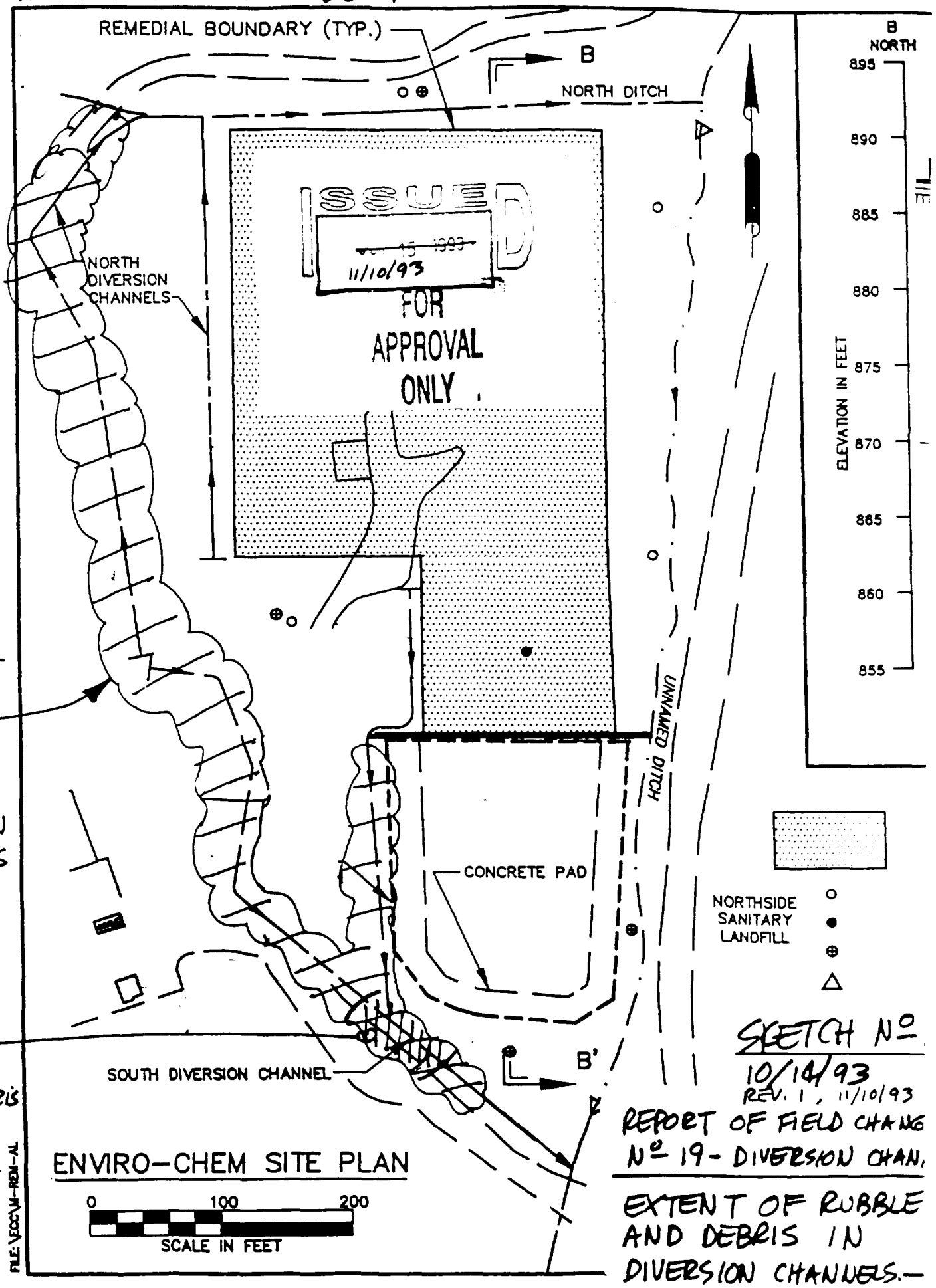
   The stability of the present trench is marginal. The majority of the trench has remained open, however, minor cave-ins have occurred along the length of the Parcel 45 channel A section of the Parcel 45 channel south of the main gate has experienced sloughing because of wet conditions. This area was backfilled with coarse aggregate, as an interim measure, to stabilize the trench. The concrete culverts have been set in the channels at the locations and inverts as designed.

3. Is the Problem an Isolated Case or General? General

4. Submit Sketches as Necessary. (See attached revised detail 7 and 8, Drawing C-8)

By: Mark Dawah	**Title:** AWO DESIGN MGR.
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	

RE. AWD TECHNOLOGIES 2259.880

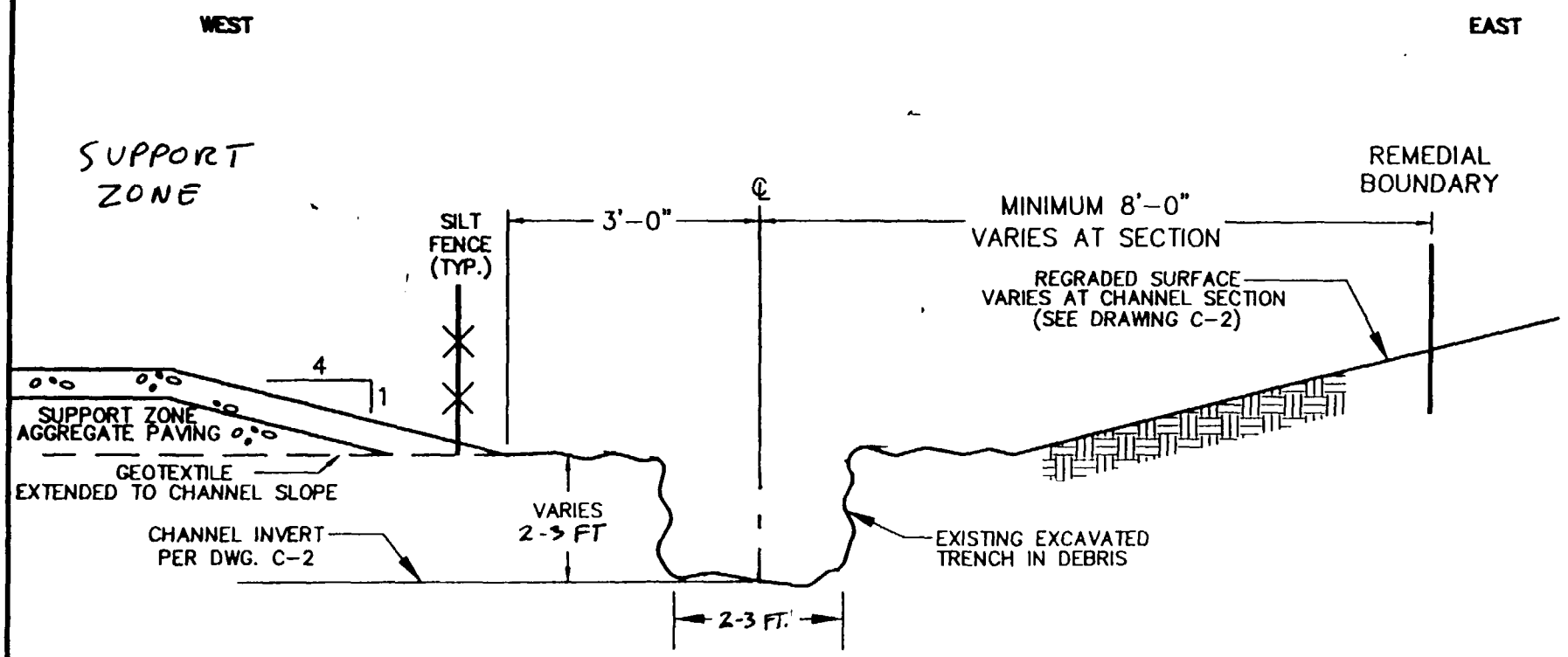


SKETCH Nº
10/14/93
REV. 1, 11/10/93

REPORT OF FIELD CHANG
Nº 19 - DIVERSION CHAN.

EXTENT OF RUBBLE AND DEBRIS IN DIVERSION CHANNELS.—

FILE: \ECC\CHANNEL2.DWG



7 / C-2 SUPPORT ZONE DIVERSION CHANNEL (TYP.)

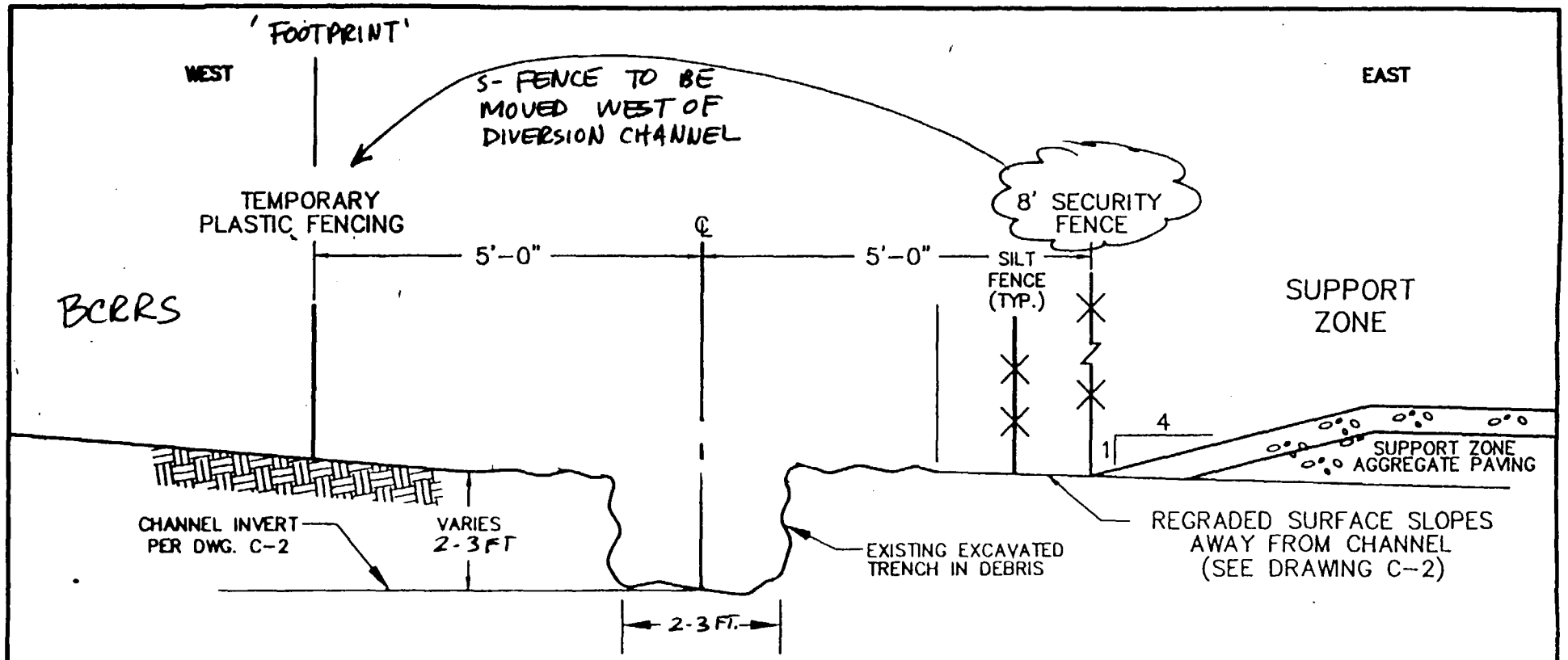
ISSUED
~~OCT 15 1993~~
11/10/93

FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

0 1 0 0 0 1 0 5 9 3 0 0 0 R 1 H	AWD TECHNOLOGIES, INC AWD TECHNOLOGIES	REVISED DIVERSION CHANNEL IN DEBRIS SOUTH DIVERSION CHANNEL ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN CLIENT ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST JOB NO. 0000-000 SCALE 1/2" = 1'-0" FIGURE NUMBER REV 0

FILE: \ECC\CHANNEL1.DWG



8 / C-2 PARCEL 45 DIVERSION CHANNEL (TYP.)

ISSUED
11/10/93
~~OCT 15 1993~~
FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

0000000 1015 93 RTH	AWD TECHNOLOGIES, INC AWD TECHNOLOGIES	REVISED DIVERSION CHANNEL IN DEBRIS NORTH AND SOUTH DIVERSION CHANNELS ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN CLIENT: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST JOB NO. 0000-000 SCALE: 1/2" = 1'-0" FIGURE NUMBER REV 0

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 012
REPORT TITLE: Tank Cutting

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 10-6-93

REFERENCE DATA

Spec. Section No.: 02081 Page No.: all Paragraph No.: all

Drawing No.: n/a Entitled: n/a

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

In order to expedite completion of this project on schedule, AWD Remedial Services is proposing to begin cutting tanks inside the Remedial Boundary rather than on the decontamination pad. This will allow tank cutting to begin prior to the completion of the decontamination pad. AWD would still place all tank material on the decontamination pad for rinsing prior to scrap shipment offsite.

2. Detailed Solution Proposed or Accomplished:

AWD would begin cutting tanks after approval of this Report of Field Change. This action will enhance the schedule while requiring no additional costs to the project.

3. Is the Problem an Isolated Case or General? GENERAL

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: [signature] 10/15/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

APPROVED BY: [signature]

REPORT OF FIELD CHANGE
PAGE 1 OF 1
REPORT NUMBER: 013
REPORT TITLE: Shift Remedial Boundary Gate Opening

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER: 2396

Date: 10-7-93

REFERENCE DATA

Spec. Section No.: n/a Page No.: n/a Paragraph No.: n/a

Drawing No.: C-3, Rev.1 Entitled: Support Zone Plan

Sketch No.: n/a Dated: n/a Entitled: n/a

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

WD Remedial Services proposes shifting the Remedial Boundary cable gate opening directly to the east 60 feet while keeping the same 30-foot gate opening. The reason for this change is to utilize an existing concrete pad that lies inside the Remedial Boundary at the proposed location. This concrete pad will provide a stable base for heavy equipment which must enter the Remedial Boundary during the remainder of this phase and during subsequent phases of remediation. Using this existing concrete pad for an entrance to the Remedial Boundary minimizes the potential for damage to the existing clay cap in the Remedial Boundary.

2. Detailed Solution Proposed or Accomplished:

This proposed shift of the cable gate opening would also require the same shift of the Diversion Channels in the affected area to accommodate the new cable gate opening. This shift of the Diversion Channels would not change the intent of the design. There will be no project schedule or cost associated with this proposed cable gate opening change.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REJECTED: [signature] Remedial Boundary currently subject to revision in this area.

REPORT OF FIELD CHANGE
PAGE 1 OF 1

REPORT NO. 014 - CONCRETE CURING

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/8/93

REFERENCE DATA

Specification Section No.: 03300 Page No.: 03300-12 Paragraph No.: 3.08.C

Drawing No.: N/A Entitled: N/A

Sketch No.: N/A Dated: N/A Entitled: N/A

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

DUE TO UNAVAILABILITY OF WATER AT THE SITE, AWD REMEDIAL SERVICES IS PROPOSING TO SUBSTITUTE UNIKOTE CURE AND SEAL IN LIEU OF PONDING WATER OR SPRINKLING.

2. Detailed Solution Proposed or Accomplished:

THIS MATERIAL WILL PROVIDE THE SAME CURING CHARACTERISTICS AS PONDING WATER OR SPRINKLING. THERE IS NO PROJECT SCHEDULE OR COST IMPLICATIONS ASSOCIATED WITH THIS SUBSTITUTION.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: [signature] pending certification that "Cure & Seal" will not cross contaminate decon water (I.E. WATER SOLUBLE)

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE
PAGE 1 OF 1

REPORT NO. 015
REPORT TITLE – CONTAMINATED SOILS OUTSIDE REMEDIAL BOUNDARY

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: October 8, 1993

REFERENCE DATA

Specification Section No.: N/A **Page No.:** N/A **Paragraph No.:** N/A

Drawing No.: C-2, REV. 1 **Entitled:** SITE PREPARATION AND GRADING PLAN

Sketch No.: N/A **Dated:** N/A **Entitled:** N/A

DESCRIPTION

1. **Detailed Identification of Problem or Reason for Change Request:** DURING EXCAVATION OF THE SUPPORT ZONE SOUTH DIVERSION CHANNEL VISIBLE CONTAMINATED SOIL WAS ENCOUNTERED (OVM readings of >500 PPM). THIS CONTAMINATED SOIL WAS OUTSIDE THE REMEDIAL BOUNDARY LINE AND EAST OF THE FORMER A-Frame HOUSE LOCATION.

2. **Detailed Solution Proposed or Accomplished:** Proposed solution – Backfill exposed waste materials. Decontaminate equipment in accordance with HASP. B. AUTIO, QEM to INITIATE A 2-phase soil contamination investigation to determine extent of soil contamination. A phase-2 workplan will be prepared by QEM for submittal to U.S. EPA. Lastly, construct a temporary diversion berm east of the channel based on a "clean line" to be determined during Phase 1 sampling. COST + schedule are yet to be determined based on 2-phase investigation result

3. **Is the Problem an Isolated Case or General?** ISOLATED

4. **Submit Sketches as Necessary**

By: James M Ambrose For James FIFE **Title:** Resident Superintendent

Approved By: ~~[illegible] QEM 10/15/93~~ 10/15/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 016
Report Title - Specific Gravity
60 mil HDPE Liner

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10-14-93

REFERENCE DATA

Specification Section No.: 02091 **Page No.:** 02091-2 **Paragraph No.:** 2.01.B

Drawing No.: N/A **Entitled:** N/A

Sketch No.: N/A **Dated:** N/A **Entitled:** N/A

DESCRIPTION

1. **Detailed Identification of Problem or Reason for Change Request:** The Specific Gravity value listed in the Technical Specifications (≥ .9835) is incorrect. This value is too high, above industry standards, and is very hard to attain, if not impossible.

2. **Detailed Solution Proposed or Accomplished:** the Specific Gravity has a direct relationship to Density. Therefore, the specific gravity should be ≥.94 as with the Density value. There are no cost or schedule implications associated with this minor change.

3. **Is the Problem an Isolated Case or General?** Isolated

4. **Submit Sketches as Necessary.**

By: James M. Ambrose For James Fife **Title:** Resident Superintendent

Approved By: [illegible] 10/15/93

Distribution:
1. Independent CQA Officer
2. BCC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 017

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Waste water storage Pad Location Adjustment and Anchor Trench width Adjustment

Date: 10-14-93

REFERENCE DATA

Specification Section No.: 02091 Page No.: ALL Paragraph No.: ALL

Drawing No.: C-6 Rev 1 Entitled: Plans and Sections

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: The North Edge of the waste water storage Pad liner anchor trench is too close to the Decontamination Pad manhole and material flexibility requires a 2' wide trench vs a 1' wide trench to facilitate a quality installation.

2. Detailed Solution Proposed or Accomplished: Adjust the waste water storage Pad location 2' south of it's planned location and increase the anchor trench width to 2'.

This Proposed Change has no impact on cost or schedule

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: J R Fife Title: Resident Superintendent

Approved By: [illegible] QRM 10/14/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

RoFC 18

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Void

Date: _____

REFERENCE DATA

Specification Section No.: _____ Page No.: _____ Paragraph No.: _____

Drawing No.: _____ Entitled: _____

Sketch No.: _____ Dated: _____ Entitled: _____

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: _____

2. Detailed Solution Proposed or Accomplished: _____

3. Is the Problem an Isolated Case or General? _____

4. Submit Sketches as Necessary.

By: _____ Title: _____

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

RFC No. 19, Diversion Channels

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10/14/93

REFERENCE DATA

Specification Section No.: N/A Page No.: _____ Paragraph No.: _____

Drawing No.: C-8, Rev. 1 Entitled: Sections and Details, Details 7,8 (Attached).

Sketch No.: 1 Dated: 10/14/93 Entitled: Extent of rubble and debris in diversion channels

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Subsurface conditions along approximately 70 percent of the length of the parcel 45 and support zone diversion channels varies from assumed till soil conditions. Debris fill was encountered consisting of building demolition materials, trees, boulders, and miscellaneous bulky wastes.

2. Detailed Solution Proposed or Accomplished: Revise parcel 45 and support zone diversion channel details (numbers 7 and 8) to eliminate the open channel concept by backfilling the existing excavated trench with a perforated culvert pipe and coarse aggregate, covered with a geotextile filter and rock. The perforated culvert would collect runoff by seepage through the rock backfill and would have adequate hydraulic capacity to convey stormwater runoff.

3. Is the Problem an Isolated Case or General? General

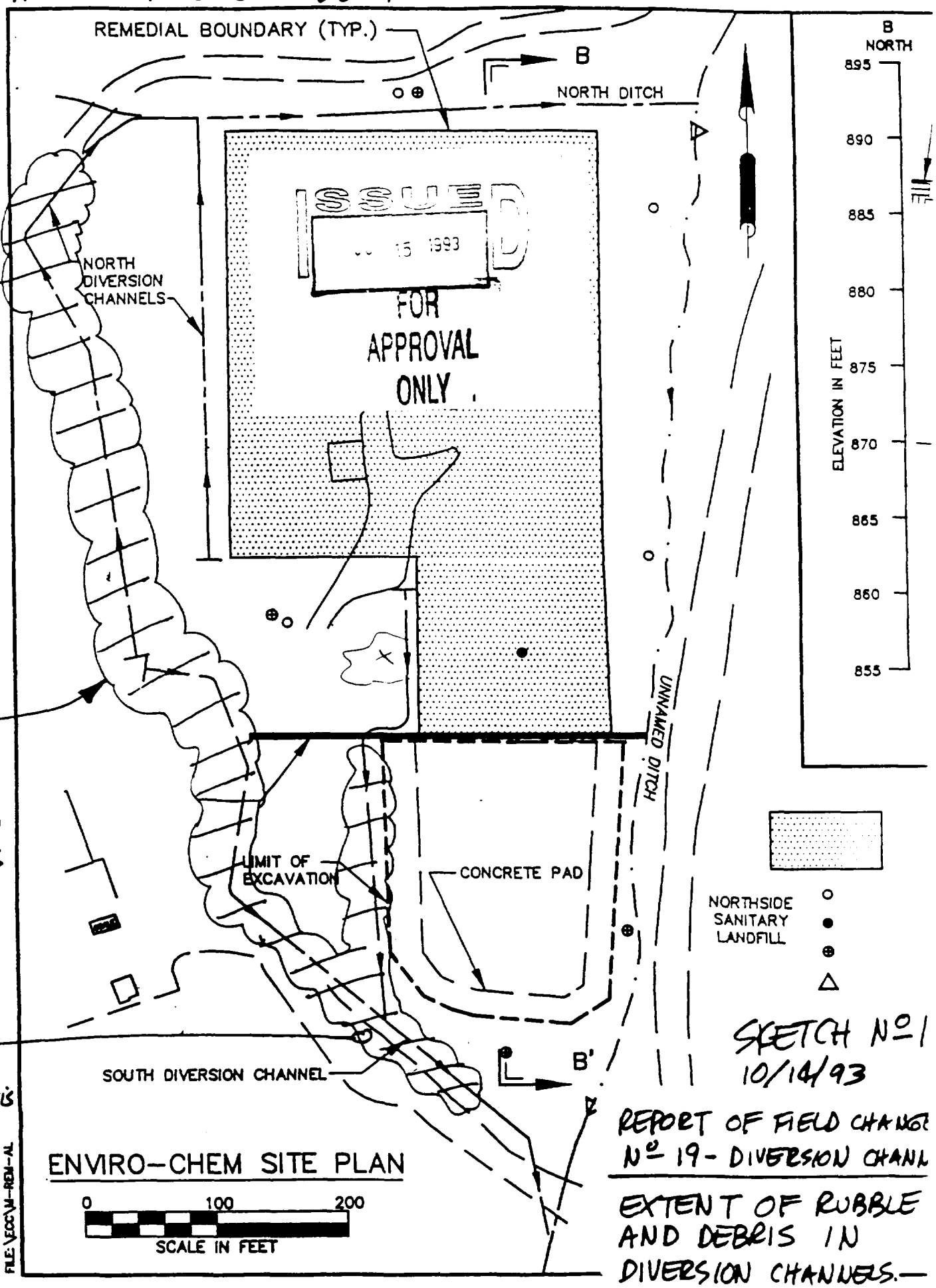
4. Submit Sketches as Necessary. (See attached revised details 7 & 8, drawing c-8)

By: M. Daniels Title: AWD DESIGN MGR

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

RE. AWD TECHNOLOGIES 2259.882

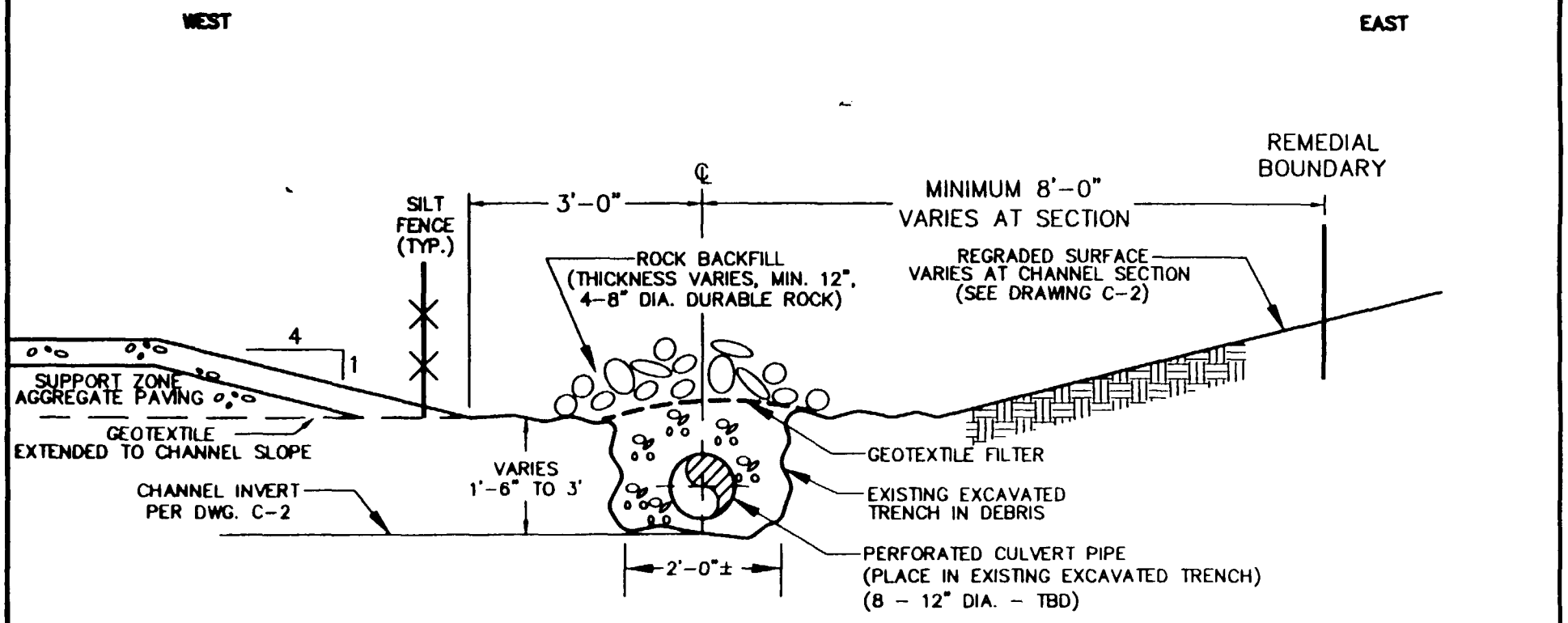


SKETCH Nº 1
10/14/93

REPORT OF FIELD CHANGE
Nº 19 - DIVERSION CHANNEL

EXTENT OF RUBBLE AND DEBRIS IN DIVERSION CHANNELS.

FILE: \ECC\CHANNEL2.DWG



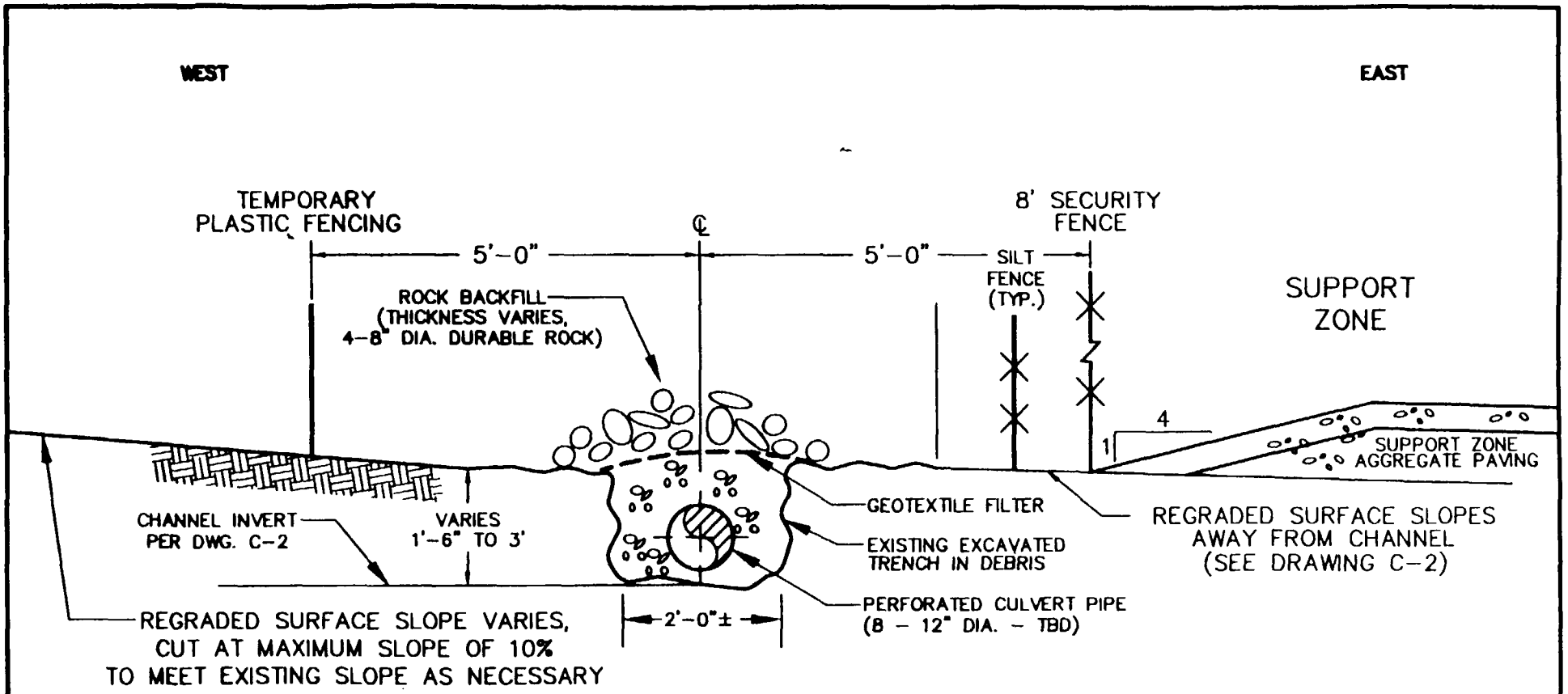
7 / C-2 SUPPORT ZONE DIVERSION CHANNEL (TYP.)

ISSUED
OCT 15 1993
FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

0 1 0 0 1 5 9 3 0 R T H	AWD TECHNOLOGIES, INC AWD TECHNOLOGIES	REVISED DIVERSION CHANNEL IN DEBRIS SOUTH DIVERSION CHANNEL ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN CLIENT ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST JOB NO 0000-000 SCALE 1/2" = 1'-0" FIGURE NUMBER ?? REV 0

FILE: \ECC\CHANNEL1.DWG



8 / C-2 PARCEL 45 DIVERSION CHANNEL (TYP.)

ISSUED
OCT 15 1993
FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

AWD TECHNOLOGIES, INC

AWD TECHNOLOGIES

REVISED DIVERSION CHANNEL IN DEBRIS
NORTH AND SOUTH DIVERSION CHANNELS

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN

CLIENT ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST | JOB NO 0000-000

SCALE 1/2" = 1'-0" | FIGURE NUMBER ?? | REV 0

AWD
TECHNOLOGIES

A Subsidiary of
The Dow Chemical Company

PGH-93-MJD-1282

November 30, 1993

Ms. Karen A. Vendl
Senior Remedial Project Manager
Office of Superfund
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Subject: Enviro-Chem Superfund Site
Site Preparation and Material Removal
Response to November 1 and November 29, 1993, U.S. EPA Comments and Report of Field Change 19B (Diversion Channels)
AWD Project Number 2396.001

Dear Karen:

Enclosed is the subject Report of Field Change (RFC) 19B for U.S. EPA review and approval as a "major" design change in accordance with the Construction Quality Assurance Plan. This RFC was submitted previously on October 15, 1993, (RFC 19), and November 10, 1993, (RFC 19A) and is now being resubmitted to present a modified approach to the diversion channel construction in response to your letter of November 18, 1993. The RFC is self-explanatory and includes attached figures and sketches.

The approach to leave the diversion channel as an open trench in the rubble is considered an interim measure to complete the SPMR construction phase at this time. Future modifications to the diversion channels, if necessary, will be evaluated after completion of additional site investigations being undertaken by the Enviro-Chem Trustees.

Quarterly inspections of the diversion channels will be initiated by the Enviro-Chem Trustees upon completion of SPMR construction. These inspections will continue until final measures are undertaken for the channels. Maintenance will be performed, as necessary, to prevent sediment transport and minimize erosion of the channels.

Also enclosed are itemized responses to comments outlined in your November 1 and November 29, 1993 correspondence.

AWD Technologies, Inc.
Penn Center West Building III Suite 300 Pittsburgh Pa [illegible] Telephone 412 788 2717 Fax 412 788 1316

Please call me or Jim Ambrose if you have any comments or questions.

Sincerely,

Mark J. Dowiak, P.E.
Project Coordinator

MJD/drp
Enclosures

cc: R. Ball/ERM
J. Smith/IDEM
T. Harrison/CH2M Hill
J. Ambrose/AWD
S. DeBartolo/AWD
J. Fife/AWD

RESPONSES TO NOVEMBER 1, 1993
U.S. EPA COMMENTS

RFC 11A

Comment No. 1 Response

RFC 11A has been voided and replaced with RFC 11B. RFC 11B proposes that the channel outfall location maintains the alignment and discharge point in the Unnamed Ditch as approved by the U.S. EPA on September 7, 1993, and shown on Drawing C-2, Revision 1. Therefore, the channel outfall will not be relocated and the access road to the NSL site will not be closed as previously requested under RFC 11A.

Comment No. 2 Response

As stated above, RFC 11A has been voided and replaced with RFC 11B. Therefore, we propose that the channel outfall location maintains the alignment and discharge point in the Unnamed Ditch as approved by U.S. EPA on September 7, 1993, shown on Drawing C-2, Revision 1. We are also in agreement that any change to monitoring point locations from that shown in Exhibit A will require future modifications to the Consent Decree/Exhibit A, if necessary.

RFC 19

Comment No. 3 Response

Since RFC 19 has been withdrawn, the diversion channels are not proposed to be enclosed. RFC 19A was submitted on November 10, 1993, to request a field change to temporarily leave the diversion channels as an open trench cross-section, as constructed. RFC 19B is attached which explains the reason for the field change request and includes further modifications to the open trenches to prevent erosion and control sedimentation.

Comment No. 4 Response

The debris fill encountered along the Parcel 45 diversion channels and the south support zone diversion channel prevent the construction of the V-ditch channel as designed because the debris cannot be excavated to a uniform slope. The channel was designed based on field data which indicated that subsurface conditions in the support zone were glacial till soils. The debris materials encountered during construction were not anticipated.

A V-ditch channel could be constructed if the debris materials are over-excavated along the channel length and select fill is replaced into the excavation. This option presents two problems. First, overexcavation would result in significant quantities of debris materials that would have to be managed, and secondly, overexcavation would require a wide excavation that would cut into the support zone and, in the case of the Parcel 45 channels, into adjoining BCRRS property. The most suitable alternative at this time is to leave the channels as an open trench, since they

do function as upslope diversions, and provide further safety and environmental precautions (See RFC 19B).

This measure would be temporary and will provide suitable performance as a diversion channel on an interim basis. This interim period will encompass the additional sampling proposed by the Enviro-Chem Trustees to assess contamination extent, in addition to the time required to evaluate this data and implement further construction activities, if necessary.

Comment No. 5 Response

Same response as Comment 3.

Comment No. 6 Response

Same response as Comment 3.

Comment No. 7 Response

Since RFC 19 has been withdrawn and replaced with RFC 19B, the diversion channels are now proposed to be left open. Potential seeps will be accessible and monitorable, if necessary.

Comment No. 8 Response

Contaminated soils were encountered during excavation of the South Support Zone diversion channel based on AWD field monitoring. This segment of the diversion channel was backfilled with the excavated soils to prevent accumulation of runoff. The extent of the soil contamination in the channel area and the Support Zone is being assessed by the Enviro-Chem Trustees, and this area is presently fenced off to prevent access. This backfilled channel section is considered complete for the SPMR construction phase. Future modifications to the channel will be made, if necessary, after evaluation of the additional site investigations proposed by the Enviro-Chem Trustees.

Comment No. 9 Response

The results of air monitoring performed by AWD during field construction of the diversion channels (with the exception of the South Support Zone channel as described in Comment No. 8 Response), in accordance with the approved design documents, indicated no readings above background. Additionally, Monthly Progress Report No. 3, as submitted by the Enviro-Chem Trustees, includes analytical results of samples taken by the Independent CQA Officer (Quality Environmental Management (QEM)) of the seepage coming from the corrugated pipe encountered within the South Parcel 45 diversion channel at the southwest corner of the site.

There is no concern that the existing diversion channels are contaminated based on sampling and analyses work performed by QEM for the Enviro-Chem Trustees as follows:

- Hot Spot - Although headspace readings were elevated in some locations and did not exhibit any pattern of distribution (reported in Monthly Progress Report Number 3), the analytical results of the three samples submitted to Heritage Laboratories, Inc. (Support Zone diversion channel, HA-3 0.5-1.0, and HA-16 1.5-2.0) demonstrated that only limited organic contamination was found. In fact, the only sample with an exceedance of an allowable soil concentration (Table 3-1 of Exhibit A of the Consent Decree) was in the Support Zone diversion channel sample; methylene chloride and tetrachloroethene were slightly over their allowable concentrations. The analytical results of the three samples are included on Table 1. The results also indicated that the concentration of the detected compounds detected in soil decreased as the sample locations moved west away from the "hot spot" and the remedial boundary. These locations are shown on the figure which was included in Monthly Progress Report Number 3 (Figure 1).

- Decontamination and Wastewater Storage Pad Samples - Although the decontamination pad samples showed limited organic contamination, with only one exception, no compounds were detected above the acceptable concentration. The one exception was a detection of 1,1-dichloroethane of 15 μg/kg in a sample taken from the location of the wastewater storage pad's sump which is greater than the 5.7 μg/kg acceptable concentration. These results are included on Table 1. The sample locations are shown on the attached Figures A and B.

- Corrugated Pipe Orange-red Discharge - The analytical results of sample of the orange-red discharge from the perforated, corrugated pipe in the South Parcel 45 diversion channel were reported in Monthly Progress Report Number 3. No organic compounds were detected and no elevated concentrations of metals were detected.

- Black Oily Discharge - This is a discharge from the BCRRS property, and is, therefore, not viewed to be the responsibility of the Enviro-Chem Trustees.

Comment No. 10 Response

Same response to Comment No. 8.

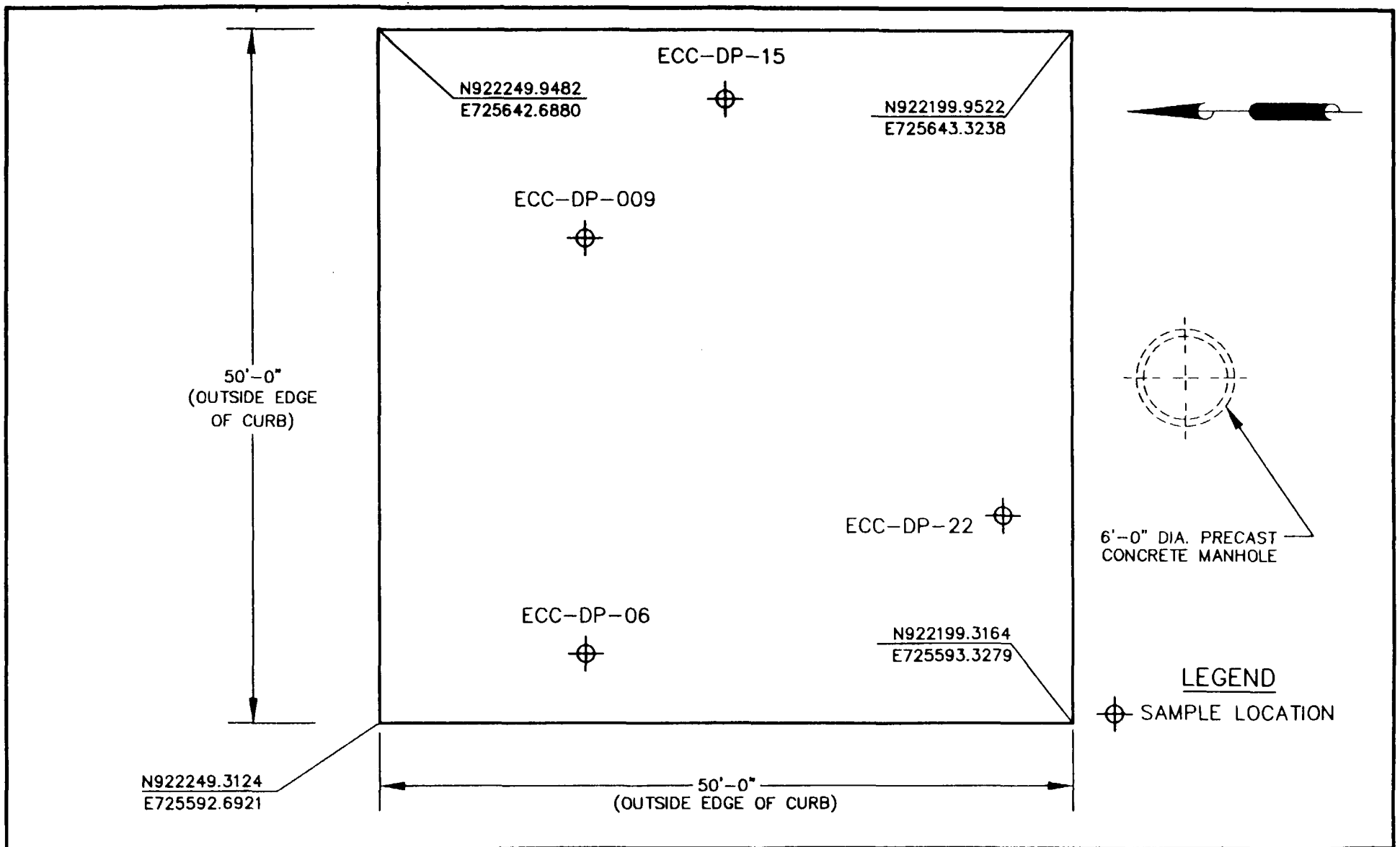
TABLE 1
SOIL SAMPLING ANALYTICAL RESULTS
ORGANIC COMPOUNDS
ENVIROCHEM SITE
ZIONSVILLE, INDIANA

PARAMETER	Concentration in Soil (ug/kg)													
	Acceptable Concentration (1)	Support Zone Sample	HA-3 0.5-1.0'	HA-16 1.5-2.0'	WWP-sump	WWP-3	WWP-18	WWP-19	WWP-22	ECC-DP-06	ECC-DP-009	ECC-DP-15	ECC-DP-15DUP	ECC-DP-22
Volatile Organic Compounds (SW846-8240A)														
Acetone	490	ND	ND	ND	75	ND	ND	65	ND	ND	ND	ND	ND	ND
Benzene	-	ND	ND	ND	6	ND	ND	ND	ND		10	7	9	ND
Chloroethane	-	ND	ND	ND	32	ND	ND	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5.7	ND	ND	ND	15	ND	ND	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	234000	ND	ND	ND	330	ND	ND	ND	ND	ND	ND	ND	ND	ND
Methylene chloride	20	42	8	5	7	11	7	8	ND	10	14	10	13	8
Toluene	238000	75	20	6	25	16	ND	10	6	ND	ND	ND	ND	7
1,1,1-Trichloroethane	7200	710	74	11	34	73	27	28	28	ND	35	32	60	10
Trichloroethene	240	73	21	7	6	32	7	10	8	ND	79	93	130	49
Xylene	195000	ND	ND	ND	100	ND	ND	ND	ND	ND	16	9	ND	10
Tetrachloroethene	130	320	ND	ND	ND	ND	ND	ND	ND	ND	10	10	11	ND
Semivolatile Organic Compounds (SW846-8270A)														
SVOCs		NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Polychlorinated Biphenyls/Pesticides (SW846-8080)														
PCBs	-	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
Pesticides	-	NA	NA	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Key:
ND = Not detected.
NA = Not analyzed.
- = No value.
HA = Hand auger sample.
WWP = Wastewater storage pad sample.
DP = Decontamination Pad sample.

Notes:
(1) Reference: Table 3-1 Exhibit A Consent Decree.

FILE: \ECC\FIGUREA.DWG



0 10 20
SCALE IN FEET

0 1 0 0 0 0 0 0 3 0 9 3 R 1 H

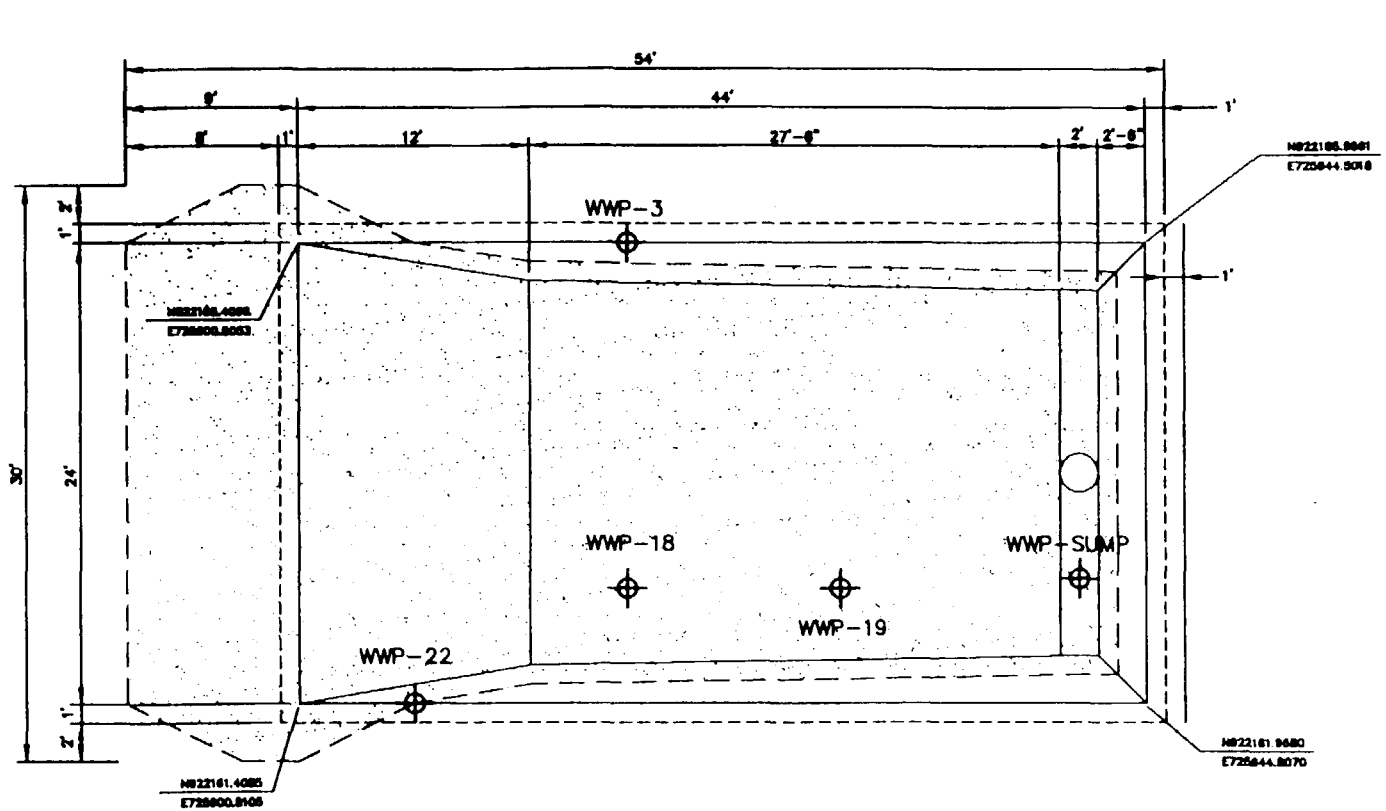
AWD TECHNOLOGIES, INC

AWD TECHNOLOGIES

DECONTAMINATION PAD
SAMPLING LOCATIONS

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN

CLIENT:	ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST	JOB NUMBER	2259-310
SCALE:	AS SHOWN	FIGURE A	REV 0



LEGEND

SAMPLE LOCATION

0 10 20

SCALE IN FEET

AWD TECHNOLOGIES, INC

AWD TECHNOLOGIES

WASTEWATER STORAGE PAD SAMPLING LOCATIONS

ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN

CLIENT:	ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST	JOB NUMBER.	2259-310
SCALE.	AS SHOWN	FIGURE B	REV 0

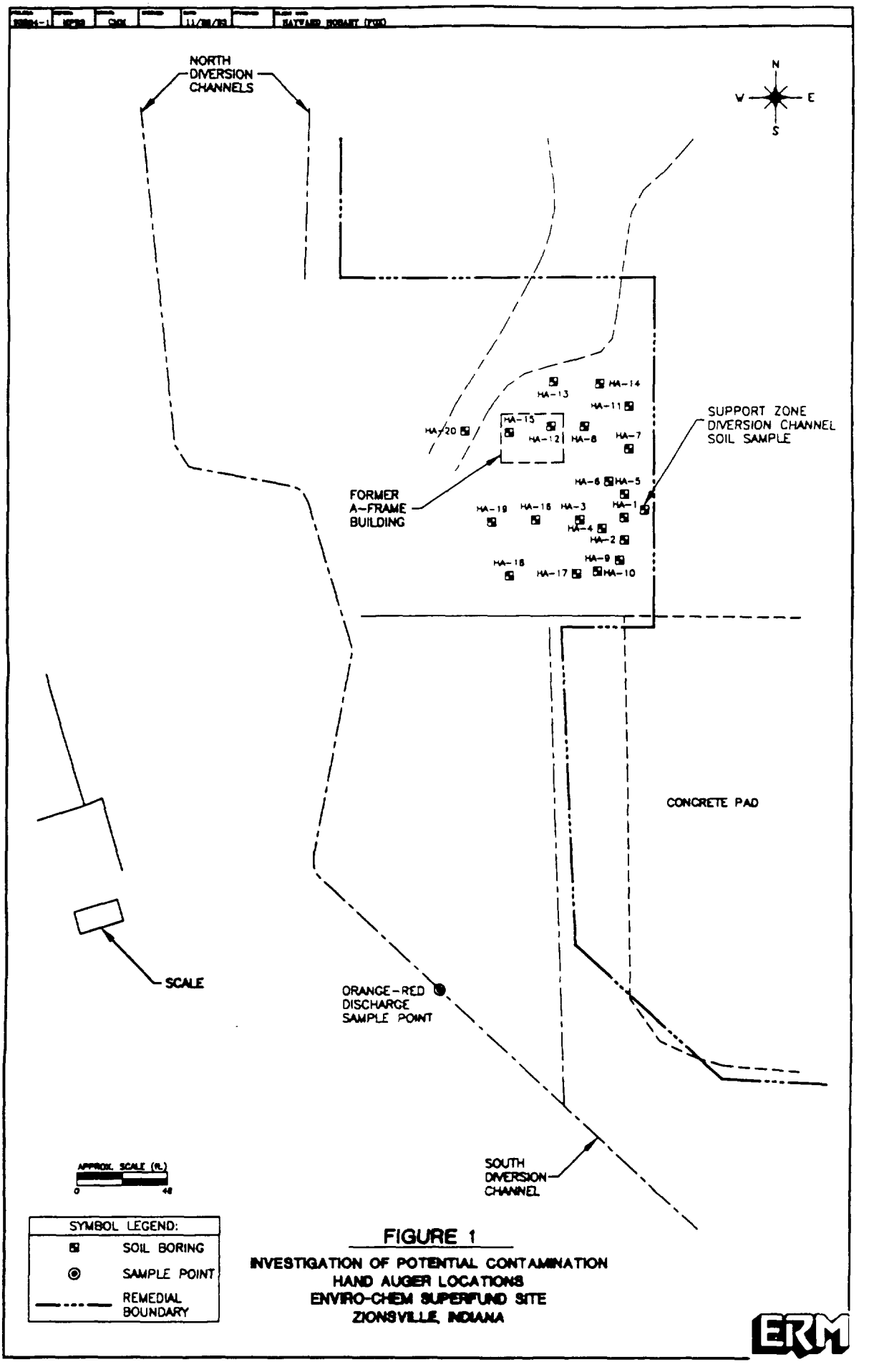


FIGURE 1

INVESTIGATION OF POTENTIAL CONTAMINATION
HAND AUGER LOCATIONS
ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA

RESPONSES TO NOVEMBER 29, 1993
U.S. EPA COMMENTS

Comment No. 1 Response

The South Parcel 45 diversion channel outfall proposed in RFC 11B will be completed during SPMR construction as an open channel. The diversion channel construction will be an open trench as described in RFC 19B.

Comment No. 2 Response

The black oily discharge is a seepage from a 30 foot length of the western wall of the South Parcel 45 diversion channel. At first it was thought that a septic field had been discovered, because this slow seepage had a septic odor and no measurable organic vapors. A limited investigation did not uncover septic field tiles or a point source for the discharge and Boone County Resource Recovery's septic field is on the west side of their facilities. The discharge is very slow accounting for only about 1 gallon per day across the 30 foot length. There is only a very slight oil sheen on the discharge. Also, since this area is approximately 100 feet further west from sample HA-16 (1.5 to 2.0) which only showed contamination less than the allowable concentrations (see Table 1), it is clearly not associated with the contamination located northwest of the concrete pad. For these reasons there is no concern that the channel was constructed in contaminated soil.

Comment No. 3 Response

Figures A and B are attached to the Responses to November 1, 1993 U.S. EPA Comments, Comment No. 9 Response, and show the locations of the soil samples taken during the SPMR.

Comment No. 4 Response

The Enviro-Chem Trustees will initiate quarterly inspections of the diversion channels, starting December 3, 1993, and continuing until further measures for the channels are assessed and implemented, if necessary. The Enviro-Chem Trustees will also provide maintenance to the channels, as necessary, to prevent sediment transport and minimize erosion. The first three quarterly inspections will be as follows:

Inspection No. 1 - December 3, 1993
Inspection No. 2 - First week of March 1994
Inspection No. 3 - First week of June 1994

The actual number of inspections will be determined by the schedule for final disposition of the diversion channels, after the November 30, 1993 completion of the SPMR construction.

General

RFC 27A (Security Fence) was submitted to U.S. EPA on November 24, 1993, in response to U.S. EPA comments of November 24, 1993 on RFC 27. AWD has also prepared a letter response, dated November 29, 1993, to U.S. EPA comments of November 24, 1993, concerning undocumented revisions to the December 1992 design documents.

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/30/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-8, Rev. 1	**Entitled:** Sections and Details, Details 7 and 8	
Sketch No.: 1, Rev. 1	**Dated:** 11/22/93	**Entitled:** Revised Diversion Channels

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   Subsurface conditions along approximately 70 percent of the length of the Parcel 45 and support zone diversion channels vary from the till soil conditions which were used as the basis for design. Debris fill was encountered consisting of building demolition materials, trees, boulders, and miscellaneous bulky wastes. The diversion channels cannot be constructed as designed (V-ditch) because the debris cannot be excavated to a uniform slope.

   A V-ditch channel could be constructed if the debris materials are over-excavated along the channel length and select fill is replaced into the excavation. This option presents two problems. First, overexcavation would result in significant quantities of debris materials that would have to be managed, and secondly, overexcavation would require a wide excavation that would cut into the support zone and, in the case of the Parcel 45 channels, into adjoining BCRRS property. The most suitable alternative at this time is to leave the channels as an open trench, since they do function as upslope diversions, and provide further safety and environmental precautions.

2. Detailed Solution Proposed or Accomplished:

   Revise the Parcel 45 and Support Zone diversion channel details (7 and 8) to eliminate the V-ditch section and substitute an open trench section as an interim measure to complete the SPMR construction phase. This trench section has been constructed in the field. The channel bottom has been set at design grade ($\pm$6 inches) and the depth below ground surface varies from 2 to 3 feet. The open channel section is 2 to 3 feet wide and has an irregular rectangular cross-section, with near-vertical side slopes. The irregular

section is a result of numerous debris and bulky materials being excavated and protruding from the channel. The open channels shall have single staked - straw bales placed at 100 foot spacings to prevent sediment transport and minimize erosion of the channels.

The stability of the present channel is marginal. The majority of the channel has remained open, however, minor cave-ins have occurred along the length of the Parcel 45 channel. A section of the Parcel 45 channel south of the main gate has experienced sloughing because of wet conditions. This area was backfilled with coarse aggregate, as an interim measure, to stabilize the trench. The concrete culverts have been set in the channels at the locations and inverts as designed.

Contaminated soils were encountered during excavation of the South Support Zone diversion channel based on AWD field monitoring. This segment of the diversion channel was backfilled with the excavated soils to prevent accumulation of runoff. The extent of the soil contamination in the channel area and the Support Zone is being assessed by the Enviro-Chem Trustees, and this area is presently fenced off to prevent access, pending the results of ongoing soil samples being planned by the Enviro-Chem Trustees. This backfilled channel section completes the SPMR construction phase at this time.

This measure will provide suitable performance as a diversion channel on an interim basis until additional sampling is performed by the Enviro-Chem Trustees and future construction options are evaluated for the channels.

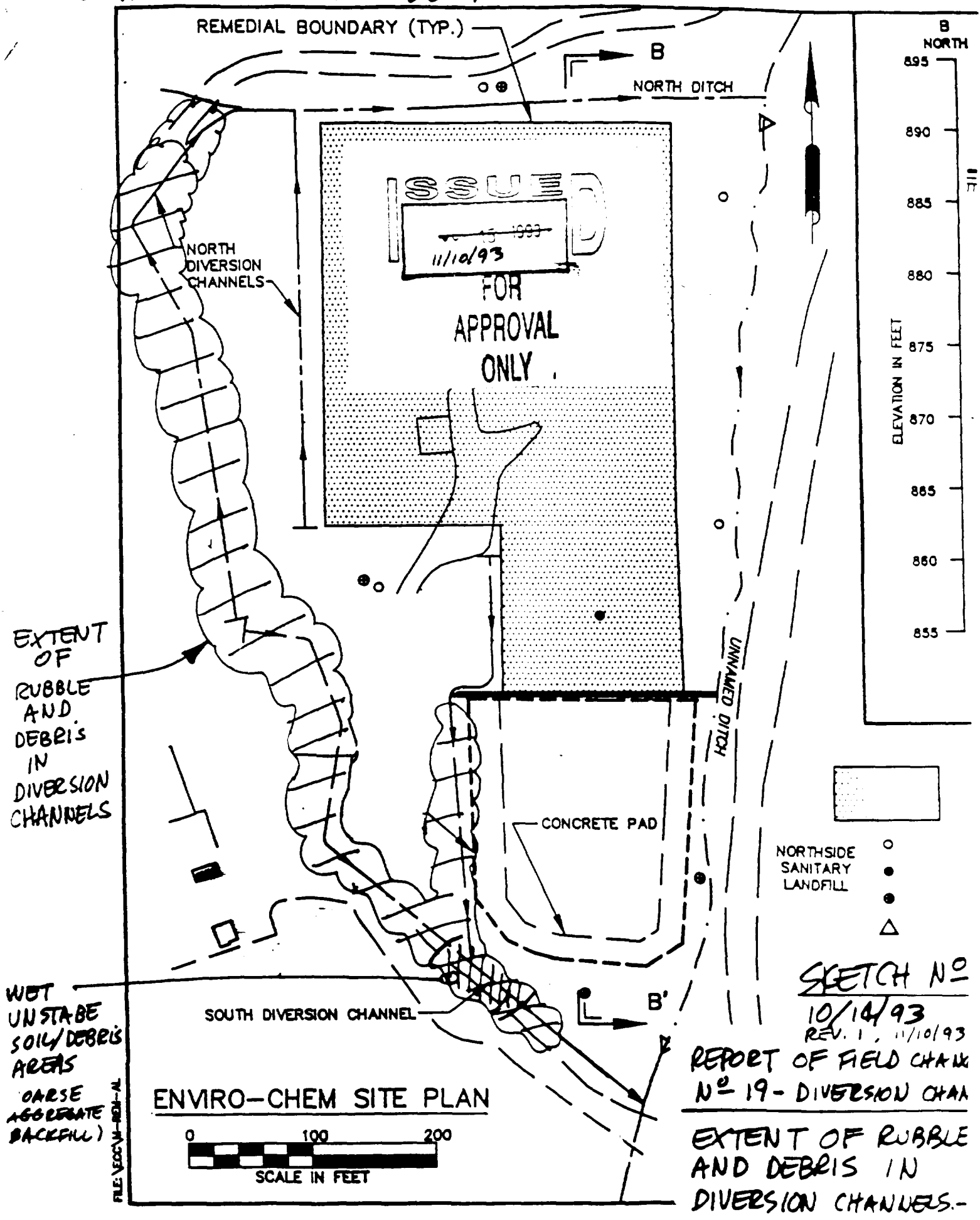
The Enviro-Chem Trustees will provide quarterly inspections and maintenance, if necessary, of the diversion channels until final measures are determined.

3. Is the Problem an Isolated Case or General? General

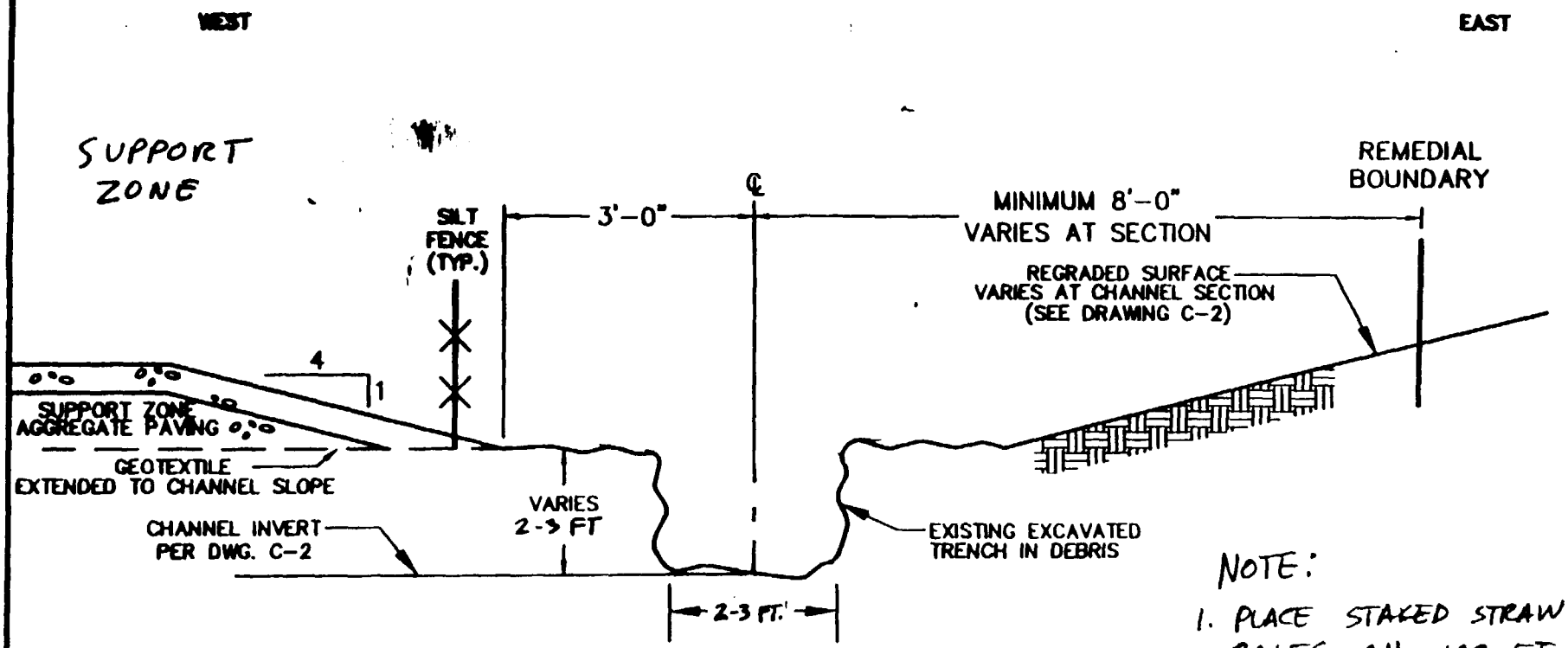
4. Submit Sketches as Necessary. (See attached revised detail 7 and 8, Drawing C-8)

By: M. Danish	**Title:** DESIGN ENG. MGR
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	

RE. AWD TECHNOLOGIES 2259.882



FILE: \ECC\CHANNEL2.DWG



NOTE:

1. PLACE STAKED STRAW BALES ON 100 FT. CENTERS ALONG THE DIVERSION CHANNEL

7 / C-2 SUPPORT ZONE DIVERSION CHANNEL (TYP.)

ISSUED
~~OCT 15 1993~~
~~11/10/93~~
~~11/22/93~~
FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

AWD TECHNOLOGIES, INC
AWD TECHNOLOGIES

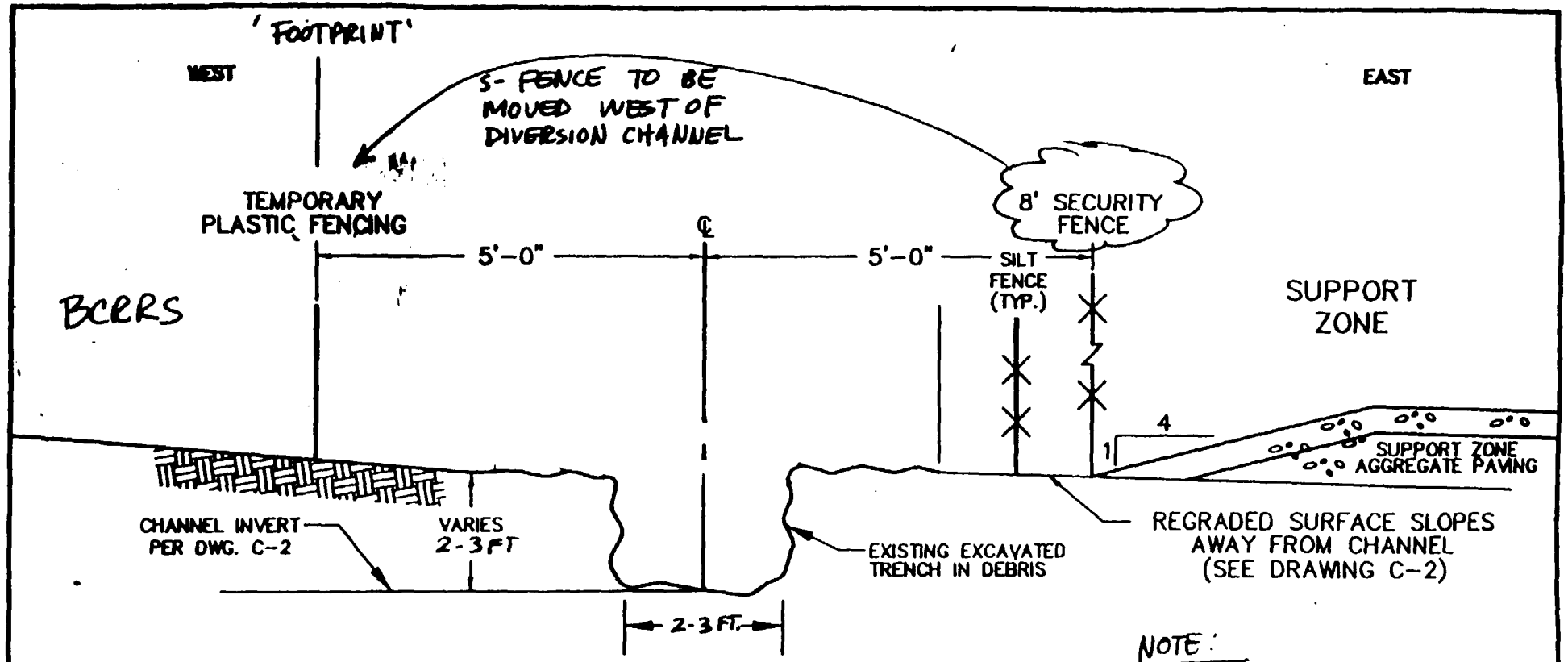
REVISED DIVERSION CHANNEL IN DEBRIS
SOUTH DIVERSION CHANNEL

ENVIRO-CHEM SUPERFUND SITE — ZIONSVILLE, IN

CLIENT: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST — JOB NO. 0000-000

SCALE: 1/2" = 1'-0" — FIGURE NUMBER — REV 0

FILE: \EDC\CHANNEL1.DWG



NOTE:

1. PLACE STAKED STRAW BALES ON 100 FT CENTERS ALONG THE DIVERSION CHANNEL

8 / C-2 PARCEL 45 DIVERSION CHANNEL (TYP.)

ISSUED
~~11/10/93~~
~~OCT 19 1993~~
11/22/93
FOR APPROVAL ONLY

REFERENCE: AWD DWG. C-8, REV 1, 6/3/93

AWD TECHNOLOGIES, INC
AWD TECHNOLOGIES

REVISED DIVERSION CHANNEL IN DEBRIS
NORTH AND SOUTH DIVERSION CHANNELS
ENVIRO-CHEM SUPERFUND SITE ZIONSVILLE, IN
CLIENT: ENVIRONMENTAL CONSERVATION AND CHEMICAL CORPORATION TRUST | JOB NO. 0000-000
SCALE: 1/2" = 1'-0" | FIGURE NUMBER | REV 0

REPORT OF FIELD CHANGE
PAGE 1 OF 1

REPORT NO. 020

REPORT TITLE SAMPLING SUPPORT

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: OCTOBER 20, 1993

REFERENCE DATA

Specification Section No.: N/A Page No.: N/A Paragraph No.: N/A

Drawing No.: N/A Entitled: N/A

Sketch No.: N/A Dated: N/A Entitled: N/A

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: A REQUEST HAS BEEN MADE BY ERM AND QEM FOR ASSISTANCE FROM AWD TECHNOLOGIES, INC. WITH THE INVESTIGATION CURRENTLY BEING PERFORMED BY R. AUTIO (QEM).

2. Detailed Solution Proposed or Accomplished: AWD WILL PROVIDE LABOR AND EQUIPMENT TO REMOVE AGGREGATE DOWN TO EXISTING GEOTEXTILE AT LOCATIONS DESIGNATED BY R. AUTIO. THIS WORK WILL BE PERFORMED IN "LEVEL D" PPE WITH ADDITIONAL PPE UPGRADES AS REQUIRED BY HEALTH AND SAFETY PROTOCOLS. AWD ~~QEM~~ WILL PROVIDE PERIMETER AIR MONITORING AT THE QEM EXCLUSION ZONE BOUNDARY. AWD SHALL BE PAID ON A TIME AND MATERIALS BASIS IN ACCORDANCE WITH THE DAILY AND HOURLY LABOR AND EQUIPMENT RATES PREVIOUSLY SUBMITTED AND APPROVED WITH THE SCHEDULE OF VALUES. AWD WILL SUPPLY THESE SERVICES AS TIME PERMITS TO PROHIBIT ANY INTERFERENCE WITH AWD'S ONGOING CONSTRUCTION ACTIVITIES AT THE SITE.

3. Is the Problem an Isolated Case or General? GENERAL

4. Submit Sketches as Necessary.

By: [signature] Title: site Superintendent

Approved By: [signature] QEM, 10/21/93, WITH NOTED EXCEPTIONS AND REFER FIELD ORDER NO. X

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

TWO (2) HOURS OF TIME & MATERIALS HAVE BEEN PROVIDED UP TO 10/20/93 AND AN ESTIMATED TWO (2) ADDITIONAL HOURS ARE EXPECTED FOR SAMPLING & REFILLING AGGREGATE HOLES.

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 21
Report Title - WATER IN WASTEWATER collection PIPE TRENCH

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10-22-93

REFERENCE DATA

Specification Section No.: 2091 **Page No.:** 2091-4 **Paragraph No.:** E.

Drawing No.: C-6 R1 **Entitled:** PLANS and SECTIONS

Sketch No.: NA **Dated:** NA **Entitled:** NA

DESCRIPTION

1. **Detailed Identification of Problem or Reason for Change Request:** GROUND WATER CONTINUES TO FILL THE collection PIPE TRENCH TO A DEPTH OF 2".

2. **Detailed Solution Proposed or Accomplished:** PLACE A 2" LAYER OF WASHED Gravel ON THE Bottom OF THE Collection PIPE TRENCH TO Provide Adequate support FOR THE Liner SYSTEM. THIS CHANGE HAS NO COST or schedule IMPLICATIONS

3. **Is the Problem an Isolated Case or General?** ISOLATED

4. **Submit Sketches as Necessary.**

By: [signature] **Title:** site superintendent

Approved By: [signature], DRM 10/22/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Report No. 022

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10-27-93

REFERENCE DATA

Specification Section No.: 01510 Page No.: 01510-3 Paragraph No.: 3.03 C.

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Tanker truck to be replaced by Frac Tank for ease of availability and to eliminated possible repeated impact to wastewater storage pond. Frac Tank to be pumped to chemical transport as needed.

2. Detailed Solution Proposed or Accomplished: Allow Frac Tanks (sketch attached) to be set in place of tanker truck.

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: John W Harris Title: Resident Superintendent

Approved By: [illegible] GRM, 10/27/93 WITH CONDITIONS:

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer – FAXED TO GRM ON 10/27/93
3. Remedial Design Project Manager

CONDITIONS: (1) AWS WILL USE EXTREME CAUTION WHEN TRANSFERRING DECONTAMINATION WATER FROM FRAC TANK TO TANKER TRUCK ~~DURING~~ FOR OFF SITE DISPOSAL

(2) AWS WILL BE FULLY RESPONSIBLE FOR CLEANING UP ANY RELEASE FROM TRANSFER OPERATION.

1. (cont.) Additional Frac Tank will be used to store water for job site activities (i.e. decon or equipment and materials for disposal, dust control).

3.03 CLEAN WATER

A. The Contractor shall supply a quantity of clean water required for equipment and personnel decontamination, safety and emergency response activities, and potable water needs. The Contractor shall provide certificates stating the water is potable, and the Contractor shall store and handle potable water in accordance with county health regulations.

B. The Contractor shall install service at time of site mobilization.

C. The Contractor shall supply clean water by tank truck and pump. Tank will hold not more than 8,000 gallons and will be kept not less than 35 percent full.

D. The Contractor shall provide pump and piping from the clean water tank to the decontamination pad and other potable uses. The Contractor shall size meters, valves, and piping to provide ample flow of water.

E. The Contractor shall provide a drinking water source inside trailers for all site workers.

3.04 SANITATION

A. The Contractor shall provide facilities in accordance with OSHA Regulations at time of site mobilization.

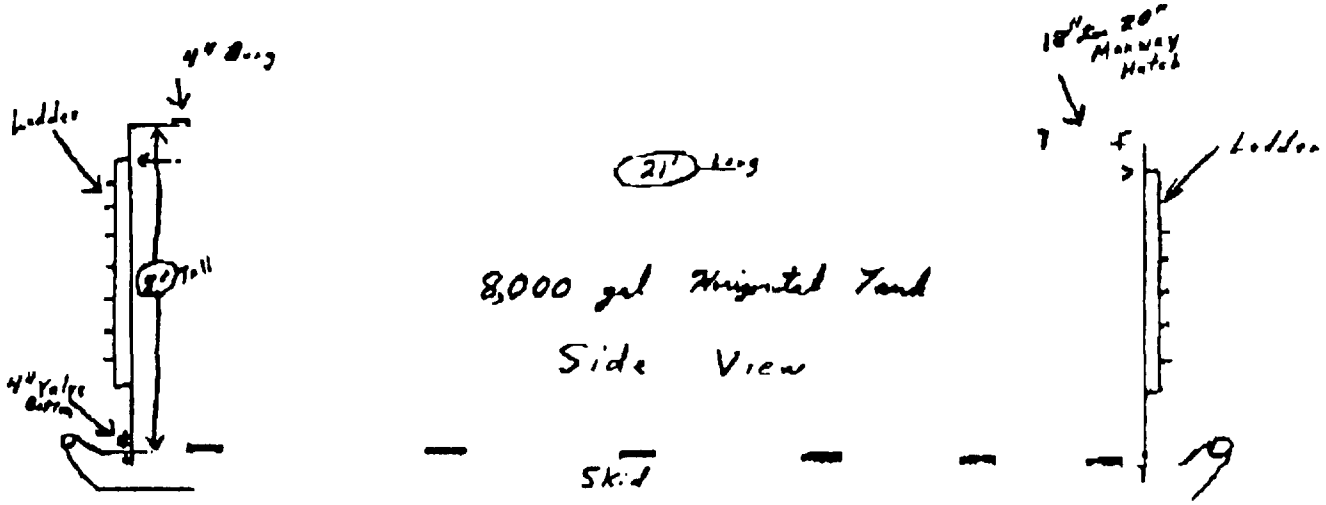
B. All toilets shall be in compliance with local and state regulations.

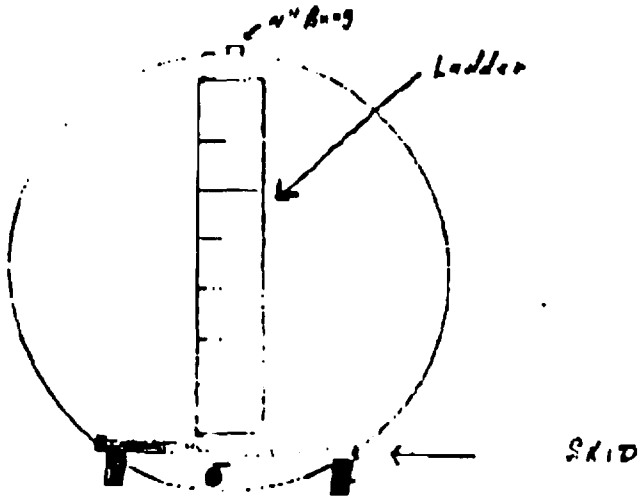
C. The Contractor shall provide services to collect and remove sanitary wastes from the Site in an appropriate manner on a regular schedule (weekly unless otherwise specified) and dispose of properly.

1. Clean areas of facilities daily and maintain in sanitary condition.

2. Provide toilet paper, paper towels, and soap in suitable dispensers.

END OF SECTION


4" Bung
Ladder
4" Valve Bottom
21' Long
8,000 gal Horizontal Tank
Side View
Skid
Manway Hatch
Ladder


4" Bung
Ladder
Skid

Front View

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 023
Potable water

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10-27-93

REFERENCE DATA

Specification Section No.: 01510 Page No.: 01510-3 Paragraph No.: 3.03 A.

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Potable water was specified as a requirement for industrial hygiene purposes in showering and personnel "decon". These activities have been waivered by Aud Health & Safety personnel.

2. Detailed Solution Proposed or Accomplished: Waiver submittal requirement of Certificate on potable water. Water will still be acquired from originally intended source (city Fire Hydrant). Hauler will sign letter indicating origin of water.

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: John W. Harris Title: Resident Superintendent

Approved By: [signature] GEM, 11/01/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer — [illegible] 10/27/
3. Remedial Design Project Manager

3.03 CLEAN WATER

A. The Contractor shall supply a quantity of clean water required for equipment and personnel decontamination, safety and emergency response activities, and potable water needs. The Contractor shall provide certificates stating the water is potable, and the Contractor shall store and handle potable water in accordance with county health regulations.

B. The Contractor shall install service at time of site mobilization.

C. The Contractor shall supply clean water by tank truck and pump. Tank will hold not more than 8,000 gallons and will be kept not less than 35 percent full.

D. The Contractor shall provide pump and piping from the clean water tank to the decontamination pad and other potable uses. The Contractor shall size meters, valves, and piping to provide ample flow of water.

E. The Contractor shall provide a drinking water source inside trailers for all site workers.

3.04 SANITATION

A. The Contractor shall provide facilities in accordance with OSHA Regulations at time of site mobilization.

B. All toilets shall be in compliance with local and state regulations.

C. The Contractor shall provide services to collect and remove sanitary wastes from the Site in an appropriate manner on a regular schedule (weekly unless otherwise specified) and dispose of properly.

1. Clean areas of facilities daily and maintain in sanitary condition.

2. Provide toilet paper, paper towels, and soap in suitable dispensers.

END OF SECTION

REPORT OF FIELD CHANGE
PAGE 1 OF 1
Report No. 23A
Potable WATER

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 10-27-93

REFERENCE DATA

Specification Section No.: 01390- Page No.: 01390-16 Paragraph No.: 1.15 G. 1.

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Shower Facility as indicated has been supplied except for engagement of showers with potable water. Requirement of showers has been waived (See ROFC Report No. 23). Drinking water shall be used as potable water for washing of hands and face.

2. Detailed Solution Proposed or Accomplished: AWO will have Drinking water vendor supply certificates of potable water (See attached).

3. Is the Problem an Isolated Case or General? _____

4. Submit Sketches as Necessary.

By: [signature] Title: 10-27-93

Approved By: [signature] QAM 11/1/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

CLARIFICATION: SHOWERS ARE ONLY REQUIRED IF PROJECT DURATION IS LONGER THAN SIX (6) MONTHS (29 CFR 1910.120 n 7.)

All work performed at NSF *International*, Ann Arbor, Michigan, USA

References to Testing Procedures:

Parameter/Test Description	NSF Reference
Alkalinity as CaCO3	- I56001310
Arsenic	- I3AS021
Barium	- I3BA031
Cadmium	- I3CD021
Calcium	- I3CA031
Chloride	- I26002300
Chromium	- I3CR021
Color	- I52001110
Copper	- I3CU031
Corrosivity	- N12015203
Cyanide, Total	- I26004335
Fluoride	- I56005340
Herbicides, Drinking Water ASTM	- 036003ASTM
Iron	- I3FE031
Lead	- I3PB021
Magnesium	- I3MG031
Manganese	- I3MN031
Mercury	- I3HG050
Nitrogen, Nitrate	- I26007300
Nitrogen, Nitrite	- I26011300
Odor, Threshold	- B72004140
Pesticides, Drinking Water ASTM	- 034004ASTM
pH	- I52005150
Phenolics	- I28012420
Potassium	- I3K0031
Selenium	- I3SE021
Silver	- I3AG021
Sodium	- I3NA031
Solids Total Dissolved	- I420071601
Specific Conductance	- I52002120
Sulfur, Sulfate	- I26017300
Surfactants (MBAS)	- I48014425
Turbidity	- I42011180
Volatiles: 8 VOC's (and additional compounds)	- 032083502
Volatiles: EDB and DBCP	- 038066504
Volatiles: Unregulated VOC's	- 032077502
Zinc	- I3ZN031

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NSF International

SEP 24, 1992

Customer

HINCKLEY & SCHMITT, INC.
6055 S HARLEM AVENUE
CHICAGO, IL 60638
Attn: MR. TOM CONDON

Plant

HOOSIER BOTTLED WATER
4660 EAST 62ND STREET
INDIANAPOLIS, IN 46220
Attn: MR. DAVID GAUSE

BOTTLED WATER CERTIFICATION PROGRAM

Description: Hoosier Product Drinking
Lab Number: S20806202
Sampled: AUG 5, 1992 Received: AUG 6, 1992

Brand Name: Product Drinking
Sampled from: Bottle
Product Name: Hoosier Product Drinking

Parameter	Result	Units	Entered	FDA Req.
FDA Quality Standards				
Alkalinity as CaCO3	160	mg/L CaCO3	08-06-92	
Arsenic	<0.001	mg/L	08-07-92	0.050
Barium	0.07	mg/L	08-10-92	1.0
Cadmium	<0.0001	mg/L	08-13-92	0.010
Calcium	56	mg/L	08-10-92	
Chloride	30	mg/L	08-17-92	250
Chromium	<0.001	mg/L	08-07-92	0.050
Color	<5	Color Unit	08-11-92	15.
Copper	<0.01	mg/L	08-07-92	1.0
Fluoride	0.15	mg/L	09-02-92	1.4-2.4
Surfactants (MBAS)	<0.2	mg/L	08-06-92	0.50
Iron	<0.01	mg/L	08-07-92	0.30
Lead	<0.001	mg/L	08-13-92	0.015
Magnesium	21	mg/L	08-07-92	
Manganese	<0.01	mg/L	08-10-92	0.050
Mercury	<0.0002	mg/L	08-17-92	0.0020
Nitrogen, Nitrate	1.1	mg/L N	08-17-92	
Odor, Threshold	1	TON	08-07-92	3.
pH	7.2		08-12-92	6.50-8.50
Phenolics	<0.001	mg/L	08-10-92	0.001
Potassium	<0.2	mg/L	08-07-92	
Selenium	<0.001	mg/L	08-07-92	0.010
Silver	<0.0001	mg/L	08-07-92	0.050
Sodium	<0.05	mg/L	08-07-92	

2475 Plymouth Road, PO Box 130140, Ann Arbor, Michigan 48113-0140 USA
Telephone: 313-769-8010 FAX: 313-769-0109 Telex: 753215 NSF INTL

S20806202 Continued

Parameter	Result	Units	Entered	PQA Req.
Volatiles: Unregulated VOC's Continued				
1,3-Dichloropropane	<0.50	ug/L	08-14-92	
Tetrachloroethylene	<0.50	ug/L	08-14-92	
Chlorodibromomethane	<0.50	ug/L	08-14-92	100
Chlorobenzene	<0.50	ug/L	08-14-92	
1,1,1,2-Tetrachloroethane	<0.50	ug/L	08-14-92	
Bromoform	<0.50	ug/L	08-14-92	100
1,1,2,2-Tetrachloroethane	<0.50	ug/L	08-14-92	
1,2,3-Trichloropropane	<0.50	ug/L	08-14-92	
1,3-Dichlorobenzene	<0.50	ug/L	08-14-92	
1,4-Dichlorobenzene	<0.50	ug/l	08-14-92	75.
1,2-Dichlorobenzene	<0.50	ug/L	08-14-92	
Methyl-tert-Butyl Ether	<0.50	ug/L	08-14-92	
Methyl Isobutyl Ketone	<5.0	ug/L	08-14-92	
Methyl Ethyl Ketone	<5.0	ug/L	08-14-92	
Toluene	<0.50	ug/L	08-14-92	
Ethyl Benzene	<0.50	ug/L	08-14-92	
m-Xylene	<0.50	ug/L	08-14-92	
p-Xylene	<0.50	ug/L	08-14-92	
o-Xylene	<0.50	ug/L	08-14-92	
Styrene	<0.50	ug/L	08-14-92	
Isopropylbenzene (Cumene)	<0.50	ug/L	08-14-92	
n-Propylbenzene	<0.50	ug/L	08-14-92	
Bromobenzene	<0.50	ug/L	08-14-92	
2-Chlorotoluene	<0.50	ug/L	08-14-92	
4-Chlorotoluene	<0.50	ug/L	08-14-92	
1,3,5-Trimethylbenzene	<0.50	ug/L	08-14-92	
tert-Butylbenzene	<0.50	ug/L	08-14-92	
1,2,4-Trimethylbenzene	<0.50	ug/L	08-14-92	
sec-Butylbenzene	<0.50	ug/L	08-14-92	
p-Isopropyltoluene (Cymene)	<0.50	ug/L	08-14-92	
1,2,3-Trimethylbenzene	<0.50	ug/L	08-14-92	
n-Butylbenzene	<0.50	ug/L	08-14-92	
1,2,4-Trichlorobenzene	<0.50	ug/L	08-14-92	
Hexachlorobutadiene	<0.50	ug/L	08-14-92	
1,2,3-Trichlorobenzene	<0.50	ug/L	08-14-92	
Naphthalene	<0.50	ug/L	08-14-92	
Benzene	<0.50	ug/L	08-14-92	5.0
Total Trihalomethanes	ND	ug/L	08-14-92	100
Additional Analytical Testing				
Cyanide, Total	<0.003	mg/L	08-14-92	
Corrosivity	-0.69		09-23-92	
Nitrogen, Nitrite	<0.05	mg/L N	08-17-92	

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REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 23
Asbestos sampling of
A-Frame structure
& three insulated
tanks

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11-2-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Special waste landfill procedures required that suspected bldg materials be tested for asbestos. Initial testing of roof materials indicated trace asbestos fibers on the shingle but not "in" the shingle. This indicated a possible source, other than roofing, within the debris pile.

2. Detailed Solution Proposed or Accomplished: Obtain the services of a certified asbestos survey company to survey the bldg debris and procure material samples for analysis. AWD estimates approximately 6 hours of contractor time @ $52.00/hour, approximately 10 samples at $29.00/each and the assistance of AWD men & equipment (LC-JG-14 operator and track loader) for 3 hours (SOV) totalling approximately $1043.27 work will be performed on a time and mat'l basis using SOV rates + outside rates

3. Is the Problem an Isolated Case or General? Isolated case

4. Submit Sketches as Necessary.

By: [signature] Title: site superintendent

Approved By: [signature], QEM, 11/3/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 24
PCB WARNING ON TANKS

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11-2-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: During the tank handling operation, 3 tanks were observed having "WARNING - PCBS" painted on the exterior surface.

2. Detailed Solution Proposed or Accomplished: In order to determine the special handling procedures that may be necessary, AWD proposes to sample the tanks for PCB contamination. This will require 2 hours for both the health & safety officer and a laborer to procure the 3 wipe samples and approximately 216.00 per sample totalling approximately $813.00. This work will be performed on a time and mat'l basis per sov plus outside charges and may affect the project schedule

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: [signature] Title: site superintendent

Approved By: [signature], QFM, 11/3/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report #25
Boiler Cutting and
on site Roll off
storage Prior to Disposal

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11-9-93

REFERENCE DATA

Specification Section No.: 02089 Page No.: 02089-1 Paragraph No.: A

Drawing No.: — Entitled: —

Sketch No.: — Dated: — Entitled: —

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Boiler disposal requires that the boiler be cut into 3 pieces to minimize voids after land filling

2. Detailed Solution Proposed or Accomplished: Cut the boiler into 3 pieces on the decon pad and storing the pieces on the decon pad in a tarped hazardous waste roll off box during the 6-8 week acceptance period. This work will be performed by personnel dressed in level C protective equipment and using the SOV unit prices + other outside pricing

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: [signature] Title: site superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

REPORT OF FIELD CHANGE

Report # 26
EXCLUSION ZONE FENCE
Release TO ECC TRUST

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11-16-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: The ECC TRUST HAS Requested THAT THE EXCLUSION ZONE FENCE Remain IN PLACE ON site.

2. Detailed Solution Proposed or Accomplished: AWD will Relinquish OWNERSHIP OF THE EXCLUSION ZONE FENCE TO THE ECC TRUST For THE Lump Sum Price of $11,000.00. ACCEPTANCE OF THIS Report of Field Change will Be executed By A CONTRACT AMOUNDMENT.

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: [signature] (REJECTED BY: [signature], QEM, 11/16/93

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

AWD
TECHNOLOGIES

A Subsidiary of
The Dow Chemical Company

PGH-93-MJD-1270

November 17, 1993

Ms. Karen Vendl
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
HSRL-6J
Chicago, Illinois 60604

Subject: Enviro-Chem Superfund Site
Site Preparation and Material Removal
Report of Field Change No. 27 (Security Fence)
AWD Project Number 2396.100

Dear Karen:

Enclosed is the subject Report of Field Change (RFC) for U.S. EPA review and approval as "major" design changes in accordance with the Construction Quality Assurance Plan.

The RFC is self-explanatory. Please call me or Jim Ambrose is you have any comments or questions.

Sincerely,

Mark J. Dowiak

Mark J. Dowiak, P.E.
Project Coordinator

MJD/dh

copies: R. Ball, P.E. - ERM
J. Ambrose - AWD
J. Fife - AWD
S. DeBartolo - AWD

AWD Technologies, Inc.
Penn Center West Building III Suite 300 Pittsburgh Pa [illegible] Telephone 412 788 2717 Fax 412 788 [illegible]

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/16/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-2, Rev. 1	**Entitled:** Site Preparation and Grading Plan	
Sketch No.: N/A	**Dated:**	**Entitled:**

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   The security fence location as shown on Drawing C-2 does not restrict unauthorized access to the Parcel 45 north and south diversion channels.

2. Detailed Solution Proposed or Accomplished:

   Construct the security fence on the footprint line to prevent outside access to the diversion channels and minimize safety hazards resulting from vehicular or public intrusion into the open channel trenches.

3. Is the Problem an Isolated Case or General? General

4. Submit Sketches as Necessary.

By: Mark Daunt	**Title:** DESIGN ENG. MGR.
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	

AWD
TECHNOLOGIES

A Subsidiary of
The Dow Chemical Company

PGH-93-MJD-1306

November 24, 1993

Ms. Karen Vendl
U.S. Environmental Protection Agency
Region V
77 West Jackson Boulevard
HSRL-6J
Chicago, Illinois 60604

Subject: Enviro-Chem Superfund Site
Site Preparation and Material Removal
Report of Field Change No. 27A (Security Fence)
AWD Project Number 2396.100

Dear Karen:

Enclosed is the subject Report of Field Change (RFC) for U.S. EPA review and approval as a "major" design change in accordance with the Construction Quality Assurance Plan. This RFC is being resubmitted in response to your correspondence of November 24, 1993.

The RFC is self-explanatory. Please call me or Jim Ambrose is you have any comments or questions.

Sincerely,

Mark J. Dowiak

Mark J. Dowiak, P.E.
Project Coordinator

MJD/dh
Attachments

copies: R. Ball, P.E., ERM
T. Harrison, CH_2M Hill
J. Smith, IDEM
J. Ambrose, AWD
S. DeBartolo, AWD
J. Fife, AWD

AWD Technologies, Inc.
Penn Center West Building III Suite 300 Pittsburgh Pennsylvania 15276 Telephone 412 788 2717 Fax 412 788 1316

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/24/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-2, Rev. 1	**Entitled:** Site Preparation and Grading Plan	
Sketch No.: N/A	**Dated:**	**Entitled:**

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   The security fence location as shown on Drawing C-2 does not restrict unauthorized access to the Parcel 45 north and south diversion channels. Refer to RFC 19B for the diversion channel construction.

2. Detailed Solution Proposed or Accomplished:

   Construct the security fence on the footprint line adjacent to the Parcel 45 channels to prevent outside access to the diversion channels and minimize safety hazards resulting from vehicular or public intrusion into the open channel trenches. The proposed security fence location is shown on the attached Drawing C-2 markup. The openings at the two locations where the fence crosses the diversion channels will be secured with a skirt consisting of chainlink fence and barbed wire to prevent unauthorized access.

3. Is the Problem an Isolated Case or General? General

4. Submit Sketches as Necessary. Drawing C-2, Rev. 1 Markup

By: Mark Daniels	**Title:** DESIGN ENG. MGR.
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	

REPORT OF FIELD CHANGE
PAGE 1 OF 2
RFC 28
Decontamination Pad
Manhole Valve

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 11/23/93

REFERENCE DATA

Specification Section No.: N/A	**Page No.:**	**Paragraph No.:**
Drawing No.: C-5, Rev. 0	**Entitled:**	Decontamination Pad Plan, Sections, and Details
Sketch No.: N/A	**Dated:**	**Entitled:**

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request:

   The 6-inch PVC gate valve which is shown in Section F-F' on Drawing Number C-5, Rev. 0, was not able to fit properly inside the 12 inch by 12 inch precast valve pit box. Also, the gate valve would not have been accessible for maintenance because of its depth below ground surface.

2. Detailed Solution Proposed or Accomplished:

   The 12 inch by 12 inch precast valve pit box was eliminated, and the 6-inch PVC gate valve was installed inside the manhole. The valve is presently located approximately 2 feet inside the manhole wall. This new valve location allows for greater accessibility to the valve for both operation and maintenance.

   This valve was intended to allow flow to be stopped to the manhole for cleaning and/or maintenance of the manhole. The valve still functions in the same manner as intended by the design in its new position. Additionally, by locating the valve inside the manhole, we have eliminated the possibility of accidental opening of the valve when someone is inside the manhole.

   All applicable OSHA regulations must be adhered to prior to anyone entering the manhole.

3. Is the Problem an Isolated Case or General? Isolated

REPORT OF FIELD CHANGE
PAGE 2 OF 2
RFC 28
Decontamination Pad
Manhole Valve

4. **Submit Sketches as Necessary.**

By: M. Daniels	**Title:** DESIGN ENG. MGR
Approved By:	
Distribution: 1. Independent CQA Officer 2. ECC Trust's Engineer 3. Remedial Design Project Manager	

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 029
Delays Due To "A"-Frame
Drum Handling

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 12-16-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: The Discovery of a Drum containing unknown contents and the special handling of this drum required man and equipment to be retained on site for an additional 2 days

2. Detailed Solution Proposed or Accomplished:

Additional time required 2 days at a cost of $8051.96

3. Is the Problem an Isolated Case or General?

4. Submit Sketches as Necessary.

By: J R [illegible] Title: Resident Superintendent

Approved By:

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 029 – SCHEDULE DELAYS
(Drum ROFC 002 (2 days)

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	2	$82.50	$1,320.00
Site Safety Officer	1	8	2	$55.50	$888.00
Equipment Operator (s)	2	8	2	$36.00	$1,152.00
Laborer (s)	1	8	2	$27.00	$432.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.1	$100.00	$10.00
Service Truck	1	Day	2	$95.00	$190.00
PID	1	Day	2	$100.00	$200.00
LEL/O2	1	Day	2	$35.00	$70.00
Track Loader	1	Day	2	$1,063.81	$2,127.62
Mini Ram (s)	4	Day	2	$50.00	$400.00
Dozer	1	Day	2	$606.17	$1,212.34

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Days	2	$25.00	$50.00

==========

TOTAL $8,051.96

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 030
Delays Due to Submittal Review Delays by site QA and the engineer

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 12-16-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Initial submittals were not promptly reviewed causing critical item delays requiring 5 additional days of men and equipment

2. Detailed Solution Proposed or Accomplished:

Additional time required 5 days at a cost of 20,379.90

3. Is the Problem an Isolated Case or General? Isolated / General

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By:

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 030 – SCHEDULE DELAYS
Submittal Review Delay (5 days)

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Resident Superintendent	1	8	5	$82.50	$3,300.00
Site Safety Officer	1	8	5	$55.50	$2,220.00
Equipment Operator (s)	2	8	5	$36.00	$2,880.00
Laborer (s)	1	8	5	$27.00	$1,080.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Trailer	1	Mth	0.25	$100.00	$25.00
Service Truck	1	Day	5	$95.00	$475.00
PID	1	Day	5	$100.00	$500.00
LEL/O2	1	Day	5	$35.00	$175.00
Track Loader	1	Day	5	$1,063.81	$5,319.05
Mini Ram (s)	4	Day	5	$50.00	$1,000.00
Dozer	1	Day	5	$606.17	$3,030.85

Miscellaneous	Unit	Duration	Unit Rate	Total
Per Diem	Days	5	$25.00	$125.00
Trips	Each	1	$250.00	$250.00
				==========
			TOTAL	**$20,379.90**

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report No. 031
Additional Boiler
Disposal Charges

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: 12-16-93

REFERENCE DATA

Specification Section No.: NA Page No.: NA Paragraph No.: NA

Drawing No.: NA Entitled: NA

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: Boiler Disposal required that the Boiler be cut into pieces instead of being transported and disposed of in one piece. This required an additional haul vessel and an adjustment in the disposal pricing from tons/cy to cubic yards.

2. Detailed Solution Proposed or Accomplished:

Additional Cost 13278.52

3. Is the Problem an Isolated Case or General? Isolated

4. Submit Sketches as Necessary.

By: [signature] Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 031 – Boiler Disposal Changes

	Qty	Unit	Rate	Total
Roll–off Box Spot Charge	1	Each	732.06	$732.06
Additional Box Rental	1	L.S.	1360.8	$1,360.80
Additional Load Transportation	1	Load	732.06	$732.06
Additional Approval Fee	1	Each	453.6	$453.60
Additional Disposal (50 c.y. – 10 c.y.)	40	c.y.	250	$10,000.00

==========

TOTAL **$13,278.52**

REPORT OF FIELD CHANGE
PAGE 1 OF 1

Report #32
DEBRIS REMOVAL AFTER PROJECT COMPLETION

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

Date: JAN 17, 1994

REFERENCE DATA

Specification Section No.: 01010 Page No.: _____ Paragraph No.: _____

Drawing No.: C-4 Entitled: REMOVAL PLAN

Sketch No.: NA Dated: NA Entitled: NA

DESCRIPTION

1. Detailed Identification of Problem or Reason for Change Request: A site walk Conducted By R. Autio (QEM) on November 19, 1993 identified All ITEMS NECESSARY for The Completion OF The MATERIAL Removal Portion OF The Project. A subsequent site walk

2. ~~Detailed Solution Proposed or Accomplished:~~ By V. Oster And R. Autio Held on December 2, 1993 IDENTIFIED Additional MATERIAL For REMOVAL

2. Solution: Per The Letter From R. BALL OF December 16, 1993, MATERIAL WAS REMOVED

3. Is the Problem an Isolated Case or General? ISOLATED

4. Submit Sketches as Necessary.

By: J R Fife Title: Resident Superintendent

Approved By: _____

Distribution:
1. Independent CQA Officer
2. ECC Trust's Engineer
3. Remedial Design Project Manager

Cost Breakdown

Report No. 032 – MATERIAL REMOVAL AFTER CONTRACT COMPLETION

Labor	Qty	Hrs / Day	Duration	Unit Rate	Total
Equipment Operator (s)	1	8	2	$36.00	$576.00
Laborer (s)	1	8	2	$27.00	$432.00

Equipment	Qty	Unit	Duration	Unit Rate	Total
Service Truck	1	Day	2	$95.00	$190.00
Track Loader	1	Day	1	$1,063.81	$1,063.81

Miscellaneous	Unit	Duration	Unit Rate	Total
Loader Transportation	Way	2	$250.00	$500.00
Debris Transportation	Load	1	$427.50	$427.50
Disposal	C.Y.	10	$31.80	$318.00

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TOTAL **$3,507.31**

ECC SITE
ZIONSVILLE, INDIANA
PROJECT NUMBER 2396

To: B. AUTIO, QEM
ENGINEER'S ON-SITE REP./CQA

Project: ECC SITE
SITE PREPARATION AND MATERIAL REMOVAL

Date: JAN 17, 1994

Our Job No.: 2396

We are enclosing 1 copies of the following:

- ☐ Subcontract Agreement
- ☐ Shop Drawings
- ☐ List of Materials
- ☐ Plans
- ☐ Specifications
- ☐ Submittals List
- ☐ Daily Report
- ☐ Progress Report
- ☐ _____
- ☐ Photograph Data Sheet
- ☒ Report of Field Change
- ☐ Daily QC Report
- ☐ Non-Compliance Notification
- ☐ Final Certification
- ☐ For Your Use
- ☐ For Review and Comment
- ☒ For Approval

Remarks: ATTACHED IS REPORT OF FIELD CHANGE REPORT No. - 32

Copies to: V. OSTER, ERM (BCC Trust Engineer)
M. DOWIAK (AWO), Remedial Design Project Manager
SITE FILE

By: [signature]
Resident Superintendent

K

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-1

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6. Final tank survey (no readings above background).	SW	10/29/93
7. Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-2

Signoff Individual(s) - Signatures and Initials		
Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/26/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/26/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/26/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-3

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/03/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/03/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/03/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/03/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/03/93
6.	Final tank survey (no readings above background).	SW	11/03/93
7.	Tank reduced to scrap.	SW	11/03/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-C1

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-5

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: [redacted] T-6

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-7

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6. Final tank survey (no readings above background).	SW	11/01/93
7. Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-8

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/04/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6. Final tank survey (no readings above background).	SW	11/04/93
7. Tank reduced to scrap.	SW	11/04/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-9

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-10

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-11

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/26/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/26/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/26/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-12

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/19/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/19/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/19/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6. Final tank survey (no readings above background).	SW	11/01/93
7. Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T - 13

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-14

Signoff Individual(s) - Signatures and Initials		
Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-15

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6. Final tank survey (no readings above background).	SW	10/29/93
7. Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-16

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/11/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/11/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/11/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/11/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/11/93
6. Final tank survey (no readings above background).	SW	11/11/93
7. Tank reduced to scrap.	SW	11/11/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-17

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/28/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/29/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/29/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-18

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-19

Signoff Individual(s) - Signatures and Initials		
Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-20

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/25/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/25/93
6. Final tank survey (no readings above background).	SW	10/25/93
7. Tank reduced to scrap.	SW	10/25/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-21

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/11/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/11/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/11/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/11/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/11/93
6. Final tank survey (no readings above background).	SW	11/11/93
7. Tank reduced to scrap.	SW	11/11/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-22

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/28/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/21/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/21/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/21/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/28/93
6. Final tank survey (no readings above background).	SW	10/28/93
7. Tank reduced to scrap.	SW	10/28/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-23

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6. Final tank survey (no readings above background).	SW	11/02/93
7. Tank reduced to scrap.	SW	11/02/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-24

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6. Final tank survey (no readings above background).	SW	10/29/93
7. Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-25

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/28/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-26

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/28/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/28/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/28/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-27

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6. Final tank survey (no readings above background).	SW	10/29/93
7. Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-28

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/03/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/03/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/03/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/03/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/03/93
6. Final tank survey (no readings above background).	SW	11/03/93
7. Tank reduced to scrap.	SW	11/03/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-29

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/03/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/03/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/03/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/03/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/03/93
6.	Final tank survey (no readings above background).	SW	11/03/93
7.	Tank reduced to scrap.	SW	11/03/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-30

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW [redacted]	11/04/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6.	Final tank survey (no readings above background).	SW	11/04/93
7.	Tank reduced to scrap.	SW	11/04/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T - 31

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/26/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/26/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/26/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-32

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-33

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/10/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/10/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/10/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/10/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/10/93
6. Final tank survey (no readings above background).	SW	11/10/93
7. Tank reduced to scrap.	SW	11/10/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-34

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/28/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/20/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/20/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/20/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/28/93
6. Final tank survey (no readings above background).	SW	10/28/93
7. Tank reduced to scrap.	SW	10/28/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-35

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6. Final tank survey (no readings above background).	SW	11/02/93
7. Tank reduced to scrap.	SW	11/02/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-36

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/28/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/21/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/21/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/21/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/28/93
6.	Final tank survey (no readings above background).	SW	10/28/93
7.	Tank reduced to scrap.	SW	10/28/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-37

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/29/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/29/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/29/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-38

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/19/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/19/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/19/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-39

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/28/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/28/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/28/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6. Final tank survey (no readings above background).	SW	11/01/93
7. Tank reduced to scrap.	SW	11/01/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-40

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6.	Final tank survey (no readings above background).	SW	11/02/93
7.	Tank reduced to scrap.	SW	11/02/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-41

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6. Final tank survey (no readings above background).	SW	11/01/93
7. Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-42

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/28/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/28/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/28/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6. Final tank survey (no readings above background).	SW	11/01/93
7. Tank reduced to scrap.	SW	11/01/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-43

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/28/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/28/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/28/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/28/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-44

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5. Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6. Final tank survey (no readings above background).	SW	10/29/93
7. Tank reduced to scrap.	SW	10/29/93

ENVIRO-CHEM SUPERFUND SITE
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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-415

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/02/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/02/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/02/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/02/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/02/93
6. Final tank survey (no readings above background).	SW	11/02/93
7. Tank reduced to scrap.	SW	11/02/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-46

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/04/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6.	Final tank survey (no readings above background).	SW	11/04/93
7.	Tank reduced to scrap.	SW	11/04/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-47

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/04/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6. Final tank survey (no readings above background).	SW	11/04/93
7. Tank reduced to scrap.	SW	11/04/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-48

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	[signature]	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/01/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/01/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/01/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/01/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/01/93
6.	Final tank survey (no readings above background).	SW	11/01/93
7.	Tank reduced to scrap.	SW	11/01/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-49

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/29/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-50

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/04/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6.	Final tank survey (no readings above background).	SW	11/04/93
7.	Tank reduced to scrap.	SW	11/04/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-51

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/04/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/04/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/04/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/04/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/04/93
6. Final tank survey (no readings above background).	SW	11/04/93
7. Tank reduced to scrap.	SW	11/04/93

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TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-52

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

Task	Initials	Date
1. Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/03/93
2. Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/03/93
3. Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/03/93
4. Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/03/93
5. Final spraying of tank interior with steam pressure washer.	SW	11/03/93
6. Final tank survey (no readings above background).	SW	11/03/93
7. Tank reduced to scrap.	SW	11/03/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-53

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	11/03/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	11/03/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	11/03/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	11/03/93
5.	Final spraying of tank interior with steam pressure washer.	SW	11/03/93
6.	Final tank survey (no readings above background).	SW	11/03/93
7.	Tank reduced to scrap.	SW	11/03/93

ENVIRO-CHEM SUPERFUND SITE
ZIONSVILLE, INDIANA
AWD PROJECT NUMBER 2396

TANK SPRAYING AND REMOVAL DOCUMENTATION

Tank Number: T-102 (UNKNOWN)

Signoff Individual(s) - Signatures and Initials

Name (Print)	Signature	Initials
SCOTT WEISHAAR	Scott Weishaar	SW

	Task	Initials	Date
1.	Tank exterior and interior visually inspected and sprayed with steam pressure washer.	SW	10/29/93
2.	Tank exterior and interior tested for organic vapor concentrations (no readings above background).	SW	10/25/93
3.	Tank exterior and interior tested for flammable or combustible vapor concentrations (readings show non-flammable and non-combustible environment).	SW	10/25/93
4.	Tank cut open for access to interior (either longitudinally or by removing the ends).	SW	10/25/93
5.	Final spraying of tank interior with steam pressure washer.	SW	10/29/93
6.	Final tank survey (no readings above background).	SW	10/29/93
7.	Tank reduced to scrap.	SW	10/29/93