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Site Inspection Report

Amspec Chemical Corporation
Foot of Water St.
Gloucester City, Camden County, N.J.

EPA ID# NJD000312371

Hours worked: 104

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 1 - SITE LOCATION AND INSPECTION INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO. OR SPECIFIC LOCATION IDENTIFIER				
Amspec Chemical Corporation	Foot of Water St.				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Gloucester City	NJ	08030	Camden	07	

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
39 53 19	75 07 50	☒ A. PRIVATE ☐ B. FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION	02 SITE STATUS	03 YEARS OF OPERATION
08 11 87 (MONTH DAY YEAR)	☒ ACTIVE ☐ INACTIVE	1950* (BEGINNING YEAR) Present (ENDING YEAR) ___ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☐ B. EPA CONTRACTOR _____ (Name of firm) ☐ C. MUNICIPAL ☐ D. MUNICIPAL CONTRACTOR _____ (Name of firm)
☒ E. STATE ☐ F. STATE CONTRACTOR _____ (Name of firm) ☐ G. OTHER _____ (Specify)

05 CHIEF INSPECTOR	06 TITLE	07 ORGANIZATION	08 TELEPHONE NO.
Edward Gaven	HSMS IV	NJDEP	(609) 292-4320
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO.**
Richard Gervasio	Supervisory Env. Tech.	NJDEP	(609) 292-3241
Dennis Gray	HSMS IV	NJDEP	609) 984-3015
Ray Nichols	Senior Environ. Spec.	NJDEP	609) 984-3017
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO.
Kevin Stewart	Plant Manager	Foot of Water St Gloucester City	609) 456-3930
David Lewis	President	Same as above	(609) 456-3930
			( )
			( )
			( )
			( )
Block 110 Lot 2,7-7A,8,9,14,16, 17,52A			

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	10:00 a.m.	80°F, sunny, slight breeze

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Bill Dumphee	NJDEP/DHWM/Southern Region Enforcement	(609) 346-8000

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Ed Gaven	NJDEP	DHWM/BPA	(609) 292-4320	08 14 87 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

* Harshaw Chemical Company operated at the site from 1950-1983, and was purchased by Amspec Chemical Corporation in 1983.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D000312371

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (check all that apply)

- X A SOLID
- B POWDER, FINES
- X C SLUDGE
- D SLURRY
- X E LIQUID
- F GAS
- G OTHER _____ (specify)

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS 175/yr est.
CUBIC YARDS _____
NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (check all that apply)

- X A TOXIC
- X B CORROSIVE
- C RADIOACTIVE
- X D PERSISTENT
- E SOLUBLE
- F INFECTIOUS
- X G FLAMMABLE
- X H IGNITABLE
- I HIGHLY VOLATILE
- J EXPLOSIVE
- K REACTIVE
- L INCOMPATIBLE
- M NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE	50	drums	annual waste tar residue (x 726)
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS	unknown		
ICC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES	150	tons	annual quantity
MES	HEAVY METALS	5000	gallons	annual quantity

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OLW	waste tar residue	N/A	drums	unknown	
OCC	methanol	67-56-1	drums	variable	
	ethanol	64-17-5	drums	variable	
	propanol	71-23-8	drums	variable	
	butanol	71-36-3	drums	variable	
	sodium methylate	124-41-4	drums	variable	
BAS	Sodium hydroxide	1310-73-2	drums	variable	
MES	chromium/	7440-47-3	pumped from tank	variable	
	acetylacetonates	123-54-6	into tanker	variable	

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/DHWM/Southern Region Enforcement-RCRA Inspection Report 6/25/85
Letter: Amspec Information on Raw Materials and Hazardous Wastes 6/10/85

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ (Specify)
- ☐ E. SLURRY
- ☐ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE (Measures of waste quantities must be independent)

TONS _____

CUBIC YARDS _____

NO. OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- ☐ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☐ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES (See Appendix for most frequently cited CAS Numbers)

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
OCC	Benzo(b)fluoranthene			78000	ppb
	Benzo(a)pyrene	50-32-8		46000	ppb
	Indeno(1,2,3-cd)pyrene		Concentration shown	35000	ppb
	Benzo(g,h,i)perylene		are the highest	30000	ppb
	Arochlor 1260		levels detected in	1800	ppb
			samples		
MES	Antimony	7440-36-0		1200	ppm
	Arsenic	7440-38-2		27	ppm
	Cadmium	7440-43-9		18	ppm
	Chromium	7440-47-3		750	ppm
	Copper	7440-50-8		370	ppm
	Lead	7439-92-1		1100	ppm
	Mercury	7439-97-6		1.3	ppm
	Nickel	7440-02-0		160	ppm
	Zinc	7440-66-6		550	ppm

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

Analytical Sampling Data - Analytikem 8/11/87

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: NJ | 02 SITE NUMBER: D000312371

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 X A. GROUNDWATER CONTAMINATION — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Potential exists since soil beneath the site is sandy, course grained with relatively high permeability. The water table is very shallow and most likely subject to tidal influence.

01 X B. SURFACE WATER CONTAMINATION — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The site borders on the Delaware River and is prone to flooding, especially during high tides. Steam condensate, treated sanitary wastewater, cooling tower and boiler blow-down, and non-contact cooling water are discharged to the Delaware River under NJPDES Permit # NJ0005495.

01 X C. CONTAMINATION OF AIR — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Potential exists through routine operation of the facility. NJDEP/BAPC stack log listing indicates 51 air permits at the Amspec facility.

01 X D. FIRE/EXPLOSIVE CONDITIONS — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Potential exists due to ignitable and reactive nature of materials handled at the facility. An explosion occurred in 1980 from a reaction involving diethylene glycol mono propargyl ether and drums of sodium methoxide.

01 ( ) E. DIRECT CONTACT — 02 ( ) OBSERVED (DATE: _____) ( ) POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
No potential exists since facility is fenced-in and maintains 24 hour per day security.

01 X F. CONTAMINATION OF SOIL — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 AREA POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
The pre-sampling assessment and site inspection conducted 7/31/87 and 8/11/87, respectively, indicated sloppy housekeeping and evidence of spillages associated with tank storage and former drum storage. Soil gas monitoring indicates above background levels of volatile organics in various locations throughout the site.

01 X G. DRINKING WATER CONTAMINATION — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 13,000 A 04 NARRATIVE DESCRIPTION
Potential for contamination is low since residents of Gloucester City receive drinking water from the municipal supply. The Gloucester City Water Dept. has 3 public supply wells (260-306' deep) located approximately 1 mile northeast of the facility.

01 X H. WORKER EXPOSURE/INJURY — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 70 B 04 NARRATIVE DESCRIPTION
Potential exists due to nature of operations through accidents, worker error, and equipment malfunctions.

01 X I. POPULATION EXPOSURE/INJURY — 02 ( ) OBSERVED (DATE: _____) X POTENTIAL ( ) ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 93,500 C 04 NARRATIVE DESCRIPTION
Potential exists due to nature of operations and location of site in a heavily populated urban area.

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A- Gloucester City Water Department.

B- Total number of employees at Amspec.

C- Estimated population within 3 mile radius of facility.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D000312371

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Limited potential exists since site is located in an urban industrialized area.

01 [X] K. DAMAGE TO FAUNA — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Potential exists for migration of contaminants from site into the Delaware River, which could adversely affect river fauna.

01 [X] L. CONTAMINATION OF FOOD CHAIN — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Potential migration of contaminants from site into the Delaware River could adversely affect food chain.

01 [X] M. UNSTABLE CONTAINMENT OF WASTES (Spills, runoff, standing liquids, leaking drums) — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ 04 NARRATIVE DESCRIPTION
Evidence of spillages associated with tank storage and former drum storage were observed during the site inspection. Several tank storage areas used for raw materials have diking, but are unpaved within the diked area.

01 [X] N. DAMAGE TO OFFSITE PROPERTY — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists through possible migration of contaminants into Delaware River.

01 [X] O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 [ ] OBSERVED (DATE: _____) — [X] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
Potential exists for stormwater runoff from site into the Delaware River. The low elevation of site and influence of tides may carry contaminants upstream & downstream of site.

01 [ ] P. ILLEGAL/UNAUTHORIZED DUMPING — 02 [ ] OBSERVED (DATE: _____) — [ ] POTENTIAL — [ ] ALLEGED
04 NARRATIVE DESCRIPTION
There is no evidence of any illegal or unauthorized dumping at the facility.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
The manufacturing plant is below-grade and floods occassionally. Metallic sodium is received via railroad car, which is also used as a storage tank prior to transfer of material by self contained pipe system to process. The preliminary assessment conducted in 1984 indicated a possibility for illegal storage of wastes.

III. TOTAL POPULATION POTENTIALLY AFFECTED: ~~93,500 est. population within 3 mile radius.~~

IV. COMMENTS
Amspec Chemical Corporation purchased the facility from Harshaw Chemical Company in 1983. Amspec currently has generator only status and stores in drums from less than 90 days.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
NJDEP/DHWM/BPA Pre-Sampling Assessment (7/31/87) and Site Inspection (8/11/87)
NJDEP/DHWM/Southern Region Enforcement RCRA Inspection Report 6/25/85
NJPDES Permit # NJ0005495
NJDEP Preliminary Assessment 1984

EPA FORM 2070-13 (7-81)

Phone Conversation with T. Auschlander DHWM/Southern Enforcement 8/6/87

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION
PART 4 - PERMIT AND DESCRIPTIVE INFORMATION

I. IDENTIFICATION

01 STATE: NJ | 02 SITE NUMBER: D000312371

II. PERMIT INFORMATION

01 TYPE OF PERMIT ISSUED (Check all that apply)	02 PERMIT NUMBER	03 DATE ISSUED	04 EXPIRATION DATE	05 COMMENTS
A. NPDES	NJ0005495	6/30/86	7/31/91	1 outfall to Delaware R.
B. UIC				
C. AIR				
D. RCRA	numerous	various	various	Facility has 51 air permits
E. RCRA INTERIM STATUS				- Plant ID# 30046
F. SPCC PLAN				
G. STATE (Specify)				
H. LOCAL (Specify)				
I. OTHER (Specify)				
J. NONE				

III. SITE DESCRIPTION

01 STORAGE/DISPOSAL (Check all that apply)	02 AMOUNT	03 UNIT OF MEASURE
☐ A. SURFACE IMPOUNDMENT		
☐ B. PILES		
☒ C. DRUMS, ABOVE GROUND	50	Drums
☒ D. TANK, ABOVE GROUND	135,000	~~Gallons~~
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply)
☐ A. INCINERATION N/A
☐ B. UNDERGROUND INJECTION
☐ C. CHEMICAL/PHYSICAL
☐ D. BIOLOGICAL
☐ E. WASTE OIL PROCESSING
☐ F. SOLVENT RECOVERY
☐ G. OTHER RECYCLING/RECOVERY
☐ H. OTHER (Specify)

05 OTHER

☒ A. BUILDINGS ON SITE: 2

06 AREA OF SITE: 10-15 (Acres)

07 COMMENTS

OID. Various raw materials are stored in above-ground tanks as follows:
- 3 methyl alcohol tanks (12,000 gallons each)
- 2 sodium methylate tanks (12,000 gallons each)
- 1 sodium methylate tank (20,000 gallons)
- 1 fuel oil tank (55,000 gallons)

IV. CONTAINMENT

01 CONTAINMENT OF WASTES (Check one)

☐ A. ADEQUATE, SECURE ☒ B. MODERATE ☐ C. INADEQUATE, POOR ☐ D. INSECURE, UNSOUND, DANGEROUS

02 DESCRIPTION OF DRUMS, DIKING, LINERS, BARRIERS, ETC

The drum storage area is indoors with adequate secondary containment.
The raw material tank storage areas are diked, but are unpaved within the diked area.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE: ☐ YES ☒ NO

02 COMMENTS

The entire facility is fenced in.

VI. SOURCES OF INFORMATION (Cite specific references, e.g. state files, sample analysis, reports)

NJPDES Permit # NJ0005495 and Fact Sheet
NJDEP/BAPC Stack Log Listing
NJDEP/DHWM/BPA Pre-Sampling Assessment (7/31/87) and Site Inspection (8/11/87)

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
NJ	D000312371

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as appropriate)

	SURFACE	WELL
COMMUNITY	A. ☐	B. ☒
NON-COMMUNITY	C. ☐	D. ☐

02 STATUS

ENDANGERED	AFFECTED	MONITORED
A. ☐	B. ☐	C. ☒
D. ☐	E. ☐	F. ☐

03 DISTANCE TO SITE

A. 1 (mi)

B. _____ (mi)

III. GROUNDWATER

01 GROUNDWATER USE IN VICINITY (Check one)

☐ A. ONLY SOURCE FOR DRINKING

☒ B. DRINKING (Other sources available)
COMMERCIAL, INDUSTRIAL, IRRIGATION (No other water sources available)

☐ C. COMMERCIAL, INDUSTRIAL, IRRIGATION (Limited other sources available)

☐ D. NOT USED, UNUSEABLE

02 POPULATION SERVED BY GROUND WATER 13,000*

03 DISTANCE TO NEAREST DRINKING WATER WELL ½ - 1 (mi)

04 DEPTH TO GROUNDWATER	05 DIRECTION OF GROUNDWATER FLOW	06 DEPTH TO AQUIFER OF CONCERN	07 POTENTIAL YIELD OF AQUIFER	08 SOLE SOURCE AQUIFER
< 10 (ft)	west-southwest	150-200 (ft)	_____ (gpd)	☐ YES ☒ NO

09 DESCRIPTION OF WELLS (including usage, depth, and location relative to population and buildings)

Gloucester City Water Dept. has 3 public supply wells (260-306' deep) located about 1 mile northeast of the facility which tap the Potomac-Raritan-Magothy aquifer.

10 RECHARGE AREA

☒ YES ☐ NO

COMMENTS

11 DISCHARGE AREA

☐ YES ☐ NO

COMMENTS

IV. SURFACE WATER

01 SURFACE WATER USE (Check one)

☒ A. RESERVOIR, RECREATION, DRINKING WATER SOURCE

☐ B. IRRIGATION, ECONOMICALLY IMPORTANT RESOURCES

☐ C. COMMERCIAL, INDUSTRIAL

☐ D. NOT CURRENTLY USED

02 AFFECTED/POTENTIALLY AFFECTED BODIES OF WATER

NAME:	AFFECTED	DISTANCE TO SITE
Delaware River	☐	Border (mi)
	☐	(mi)
	☐	(mi)

V. DEMOGRAPHIC AND PROPERTY INFORMATION

01 TOTAL POPULATION WITHIN

ONE (1) MILE OF SITE	TWO (2) MILES OF SITE	THREE (3) MILES OF SITE
A. 15,300 NO. OF PERSONS	B. 20,400 NO. OF PERSONS	C. 93,500 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 1/10 (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE

Numerous (urban area)

04 DISTANCE TO NEAREST ON-SITE BUILDING 1/10 (mi)

05 POPULATION WITHIN VICINITY OF SITE (Provide narrative description of nature of population within vicinity of site (e.g., rural, village, densely populated urban area)

The site is located in a densely populated industrialized urban area.

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* Gloucester City Water Dept.

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 5 - WATER, DEMOGRAPHIC, AND ENVIRONMENTAL DATA

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

VI. ENVIRONMENTAL INFORMATION

01 PERMEABILITY OF UNSATURATED ZONE (Check one)

☐ A. 10^{-6} – 10^{-8} cm/sec ☐ B. 10^{-4} – 10^{-6} cm/sec ☒ C. 10^{-4} – 10^{-3} cm/sec ☐ D. GREATER THAN 10^{-3} cm/sec

02 PERMEABILITY OF BEDROCK (Check one)

☒ A. IMPERMEABLE (Less than 10^{-6} cm/sec) ☐ B. RELATIVELY IMPERMEABLE (10^{-4} – 10^{-6} cm/sec) ☐ C. RELATIVELY PERMEABLE (10^{-2} – 10^{-4} cm/sec) ☐ D. VERY PERMEABLE (Greater than 10^{-2} cm/sec)

03 DEPTH TO BEDROCK	04 DEPTH OF CONTAMINATED SOIL ZONE	05 SOIL pH
> 300 (ft)	unknown (ft)	7.5 ±

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
12 (in)	2.5 (in)	< 5 %	west	< 5 %

09 FLOOD POTENTIAL

SITE IS IN 100 YEAR FLOODPLAIN

10 ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum) N/A

ESTUARINE: A. _____ (mi)

OTHER: B. _____ (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species) N/A

_____ (mi)

ENDANGERED SPECIES: _____

13 LAND USE IN VICINITY

DISTANCE TO:

COMMERCIAL/INDUSTRIAL	RESIDENTIAL AREAS, NATIONAL/STATE PARKS, FORESTS, OR WILDLIFE RESERVES	AGRICULTURAL LANDS: PRIME AG LAND	AGRICULTURAL LANDS: AG LAND
A. 1/10 (mi)	B. ½ (mi)	C. > 15 (mi)	D. > 15 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

The topography of the site is relatively flat and is low in elevation, about 5 feet. The site is bordered by the Delaware River to the west; there is a bulkhead around the portion of the site which borders the river. An former industrial site borders the facility to the south which is owned by Gulf and Western, and GAF Roofing Materials is located to the north. Several vacant buildings and lots are located across Water St. to the east.

VII. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

USGS Quad Map
NJDEP Water Supply Overlay Map
USDA Soil Survey - Camden County 1961 Series No. 42
USGS Open - File Report 84-737 - Water Quality Data for the Potamic-Raritan-Magothy Aquifer System in Southwestern N.J. 12/84

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POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 6 - SAMPLE AND FIELD INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER			
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL	9	AnalytiKEM, Cherry Hill, NJ	9/4/87
VEGETATION			
OTHER	2	TRIP BLANK & FIELD BLANK	

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
Ambient Air	-OVA flame ionization detector and HNu photoionization
	detector indicated no significant levels above background.
Soil Gas	- Levels above background detected in various locations:
	OVA (Span 300): 50 to >1000 ppm
	HNu (Span 2.0, 10.2 eV probe): N.D. to 30 ppm

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL

02 IN CUSTODY OF _____ (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS NJDEP/DHWM/BPA Files

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

Based upon soil sampling results, further soil and/or ground water investigation may be necessary at the site.

VI. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/DHWM/BPA Pre-Sampling Assessment (7-31-87) and Site Inspection (8-11-87)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 7 - OWNER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER
Amspec Chemical Corp.	10-141-5842

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Foot of Water St.	2819/2869/2899/5161

05 CITY	06 STATE	07 ZIP CODE
Gloucester City	NJ	08030

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

PARENT COMPANY (if applicable)

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

08 NAME	09 D+B NUMBER

10 STREET ADDRESS (P.O. Box, RFD #, etc.)	11 SIC CODE

12 CITY	13 STATE	14 ZIP CODE

III. PREVIOUS OWNER(S) (List most recent first)

01 NAME	02 D+B NUMBER
Harshaw Chemical Company	12-339-9578

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Foot of Water St.	2816/2819/2851/3559

05 CITY	06 STATE	07 ZIP CODE
Gloucester City	NJ	08030

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

IV. REALTY OWNER(S) (If applicable, list most recent first)

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA FORM 2070-13 (7-81)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 8 - OPERATOR INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME	02 D+B NUMBER
Amspec Chemical Corp.	10-141-5842

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Foot of Water St.	2819/2869 2899/5161

05 CITY	06 STATE	07 ZIP CODE
Gloucester City	NJ	08030

08 YEARS OF OPERATION	09 NAME OF OWNER
4	Amspec Chemical Corporation

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

III. PREVIOUS OPERATOR(S) (List most recent first; provide only if different from owner)

01 NAME	02 D+B NUMBER
Harshaw Chemical Company	12-339-9578

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Foot of Water St.	2816/2819 2851/3559

05 CITY	06 STATE	07 ZIP CODE
Gloucester City	NJ	08030

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD
33	Harshaw Chemical Company

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE

08 YEARS OF OPERATION	09 NAME OF OWNER DURING THIS PERIOD

10 NAME	11 D+B NUMBER

12 STREET ADDRESS (P.O. Box, RFD #, etc.)	13 SIC CODE

14 CITY	15 STATE	16 ZIP CODE

IV. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/DHWM/BPA Site Inspection 8/11/87
NJDEP Correspondence 2/7/85

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 9 - GENERATOR/TRANSPORTER INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Amspec Chemical Corp.	10-141-5842

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
Foot of Water St.	2819/2869 2899/5161

05 CITY	06 STATE	07 ZIP CODE
Gloucester City	NJ	08030

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

IV. TRANSPORTER(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/DHWM/BPA Site Inspection 8/11/87

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II. PAST RESPONSE ACTIVITIES N/A

01 ☐ A. WATER SUPPLY CLOSED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ C. PERMANENT WATER SUPPLY PROVIDED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ D. SPILLED MATERIAL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ E. CONTAMINATED SOIL REMOVED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ F. WASTE REPACKAGED 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ G. WASTE DISPOSED ELSEWHERE 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ H. ON SITE BURIAL 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ I. IN SITU CHEMICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ J. IN SITU BIOLOGICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ K. IN SITU PHYSICAL TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ L. ENCAPSULATION 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ M. EMERGENCY WASTE TREATMENT 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ N. CUTOFF WALLS 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ O. EMERGENCY DIKING/SURFACE WATER DIVERSION 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ P. CUTOFF TRENCHES/SUMP 04 DESCRIPTION	02 DATE	03 AGENCY
01 ☐ Q. SUBSURFACE CUTOFF WALL 04 DESCRIPTION	02 DATE	03 AGENCY

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
NJ	D000312371

II PAST RESPONSE ACTIVITIES (Continued)

01 ☐ R. BARRIER WALLS CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ S. CAPPING/COVERING — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ T. BULK TANKAGE REPAIRED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ U. GROUT CURTAIN CONSTRUCTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ V. BOTTOM SEALED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ W. GAS CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ X. FIRE CONTROL — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Y. LEACHATE TREATMENT — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ Z. AREA EVACUATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 1. ACCESS TO SITE RESTRICTED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 2. POPULATION RELOCATED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION

Not applicable

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

EPA

POTENTIAL HAZARDOUS WASTE SITE
SITE INSPECTION REPORT
PART 11 - ENFORCEMENT INFORMATION

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
N.J	D000312371

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION [X] YES [ ] NO

02 DESCRIPTION OF FEDERAL, STATE, LOCAL REGULATORY/ENFORCEMENT ACTION

The Harshaw Chemical Company closed in 1983 after submitting a RCRA Part A application and operating under interim status with USEPA and NJDEP. A 5000-gallon tank used to store waste acetylacetonates was closed in 1983 with US EPA. Amspec Chemcial Corporation purchased the facility during 1983 and currently has generator only status, storing in drums for less than 90 days. A RCRA Inspection was conducted 6/4/85 by NJDEP/DHWM/Southern Regional Enforcement and a Notice of Violation was subsequently issued for several paperwork violations. There have been allegations by employees at the plant with regard to OSHA and local fire code violations, and illegal storage of wastes.

III. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)

NJDEP/DHWM/Southern Regional Enforcement RCRA Inspection 6/4/85
NJDEP/DHWM/BHWE Correspondence
NJDEP/DHWM/BPA Pre-Sampling Assessment (7-31-87) and Site Inspection (8-11-87)

NEW JERSEY DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT

BUREAU OF PLANNING AND ASSESSMENT

FIELD SAMPLING EPISODE REPORT

AMSPEC CHEMICAL CORPORATION
FOOT OF WATER STREET
GLOUCESTER CITY, CAMDEN COUNTY

Edward C Haven
SIGNATURE

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Acting Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

M E M O R A N D U M

TO: ALBERT PLEVA, ACTING SECTION CHIEF
BUREAU OF PLANNING AND ASSESSMENT

THROUGH: ROBERT KUNZE, ACTING SECTION CHIEF
BUREAU OF PLANNING AND ASSESSMENT

FROM: ED GAVEN, HSMS IV
BUREAU OF PLANNING AND ASSESSMENT

SUBJECT: SAMPLING EPISODE REPORT FOR AMSPEC CHEMICAL CORPORATION, GLOUCESTER CITY, CAMDEN COUNTY.

PURPOSE OF MEMO:
To summarize the sampling activities conducted by representatives of the Bureau of Planning and Assessment at the subject site.

NJDEP REPRESENTATIVES:
R. Gervasio, Surpervisory Environmental Technician
E. Gaven, HSMS IV
D. Gray, HSMS IV
R. Nichols, Senior Environmental Specialist

DATE OF SAMPLING:
August 11, 1987

DATE OF REPORT:
August 14, 1987

BACKGROUND INFORMATION:
The site has been used for chemical manufacturing since 1950. Prior to that date, the site was used as a shipyard, which dates back to the 1920's. Harshaw Chemical began operations at the site in 1950 and was purchased by Amspec Chemcial Corporation in 1983. A preliminary assessment completed on the site in 1984 indicated a potential for soil contamination from leaks and spillages associated with drum and tank storage, and possible illegal storage of wastes. A high priority was assigned to the site due to the nature of operations and the location of the site next to the Delaware River. During a pre-sampling assessment conducted on 7/31/87, various areas on-site were identified for sampling due to the presence of

discolored soil or because above background levels of volatile organics were detected at the soil headspace using portable air monitoring equipment. Historical usage of the site was another factor in selecting the sampling locations.

Scheduled for sampling on August 11, 1987 were 8 on-site soil samples and 1 background sample. A trip blank and field blank were provided by the contract laboratory, AnalytiKEM of Cherry Hill, N.J. All samples were analyzed for priority pollutants plus forty, with the exception of the trip blank which was analyzed for volatile organics only.

SAMPLING EPISODE:

Weather conditions: 80°F, sunny, slight breeze

Level of Protection: Level D

Field Monitoring Equipment: Ambient air and soil gas monitoring were conducted throughout the sampling episode with a Foxboro OVA flame ionization detector (Span 300) and an HNu Systems photoionization detector (Span 2.0, 10.2 eV probe).

1005: R. Gervasio, E. Gaven, D. Gray, R. Nichols arrive at site. Meet with Kevin Stewart, Plant Manager for Amspec, who remains present during the entire sampling episode. Take brief tour around site to point out sampling locations.

1035: R. Gervasio opens Seal 0883A and 0883B on Shuttle 19. Shuttle contains trip blank and field blank bottles.

1040: R. Gervasio opens Seal 0880A and 0881B on Shuttle 3. Shuttle contains 9 sets of soil sample bottles, one 1-liter and two 40 ml glass vials per sample. Kevin Stewart brings bottles for split samples for facility, one 16 oz. glass jar per sample.

1042: R. Gervasio and E. Gaven prepare field blanks (BSA 0811754).

1055: Field blank is complete.

1100: R. Gervasio collects sample #7 (BSA 0811751). Soil is sandy and moist. Depth of sample is 2-6 inches. Soil gas survey prior to sample collection: OVA up to 400 ppm/HNu-12 ppm.

1115: Sample #7 is complete.

1125: R. Nichols collects sample #8 (BSA 0811752). Soil is sandy and moist with some pebbles. Sample depth is 4-5 inches. Soil gas survey prior to sample collection: OVA - 80 ppm/HNu - 5 ppm.

1134: D. Gray collects sample #6 (BSA 0811750). Soil is silty and moist with some gravel, with slight petroleum odor. Sample depth is 6-8 inches. Soil gas survey prior to sample collection: OVA - 500 ppm/HNu N.D.

1137: Sample #8 is complete.

1138: Sample #6 is complete.

1150: D. Gray collects sample #5 (BSA 0811749). Soil is dark brown to black silty clay with reddish streaks. Sample depth is 4-5 inches. Soil gas survey prior to sample collection: OVA - 50 ppm/HNu 20-25 ppm.

1200: Sample #5 is complete.

1214: D. Gray collects sample #4 (BSA 0811748). Soil is dark brown to black silt with slight petroleum odor. Sample depth is 5-6 inches. Soil gas survey prior to sample collection: OVA > 1000 ppm/HNu 20-30 ppm.

1225: R. Nichols collects sample #3 (BSA 0811747). Soil is dark brown to black clay, very moist, with slight petroleum odor. Sample depth is 8-12 inches. Soil gas survey prior to sample collection: OVA > 1000 ppm/HNu - 10 ppm.

1228: Sample #4 is complete.

1240: Sample #3 is complete.

1246: R. Gervasio and D. Gray collect sample #2 (BSA 0811746). Soil is light brown to gray sand, very moist. Sample depth is 1-2 feet. Soil gas survey prior to sample collection: OVA > 1000 ppm/HNu N.D.

1300: Sample #2 is complete.

1320: R. Gervasio collects sample #1 (BSA 0811745). Soil is black silt with some gravel, slight oil stain. Sample depth is 4-6 inches. Soil gas survey prior to sample collection: OVA and HNu - N.D.

1330: Sample #1 is complete. NJDEP representatives depart site to collect background sample. Kevin Stewart retains split sample jars; does not wish to collect background sample.

1335: D. Gray collects background sample #9 (BSA 0811753). Sample location is about 1/2 mile north of the Amspec facility, at a ballfield on the corner of Water St. and Jersey Ave. (Gloucester Park). Soil is brown sand. Sample depth is 4 inches.

1340: Sample #9 is complete.

1400: NJDEP crew complete sample analyses request and chain of custody paperwork.

1430: R. Gervasio and E. Gaven seal shuttles.
Cooler #3 (soil samples): Reseal # 0880B and 0881B.
Cooler #19 (trip blank and field blanks): Reseal # 0883B and 0884B.
E. Gaven transports shuttle to AnalytiKem, Cherry Hill, N.J.

1500: E. Gaven delivers shuttle to AnalytiKEM. Laboratory representative Bernadette Fini takes custody of samples.

All samples were collected in accord with the methods outlined in the NJDEP/DHWM Field Sampling Procedures Manual. Photographs of each sample location were taken during the sampling episode. It should be noted that two of the soil samples and the background sample were taken in slightly different locations from the proposed location in the original sampling plan, as follows:

Sample #5 was taken next to the inactive tank containing glycerin heels.

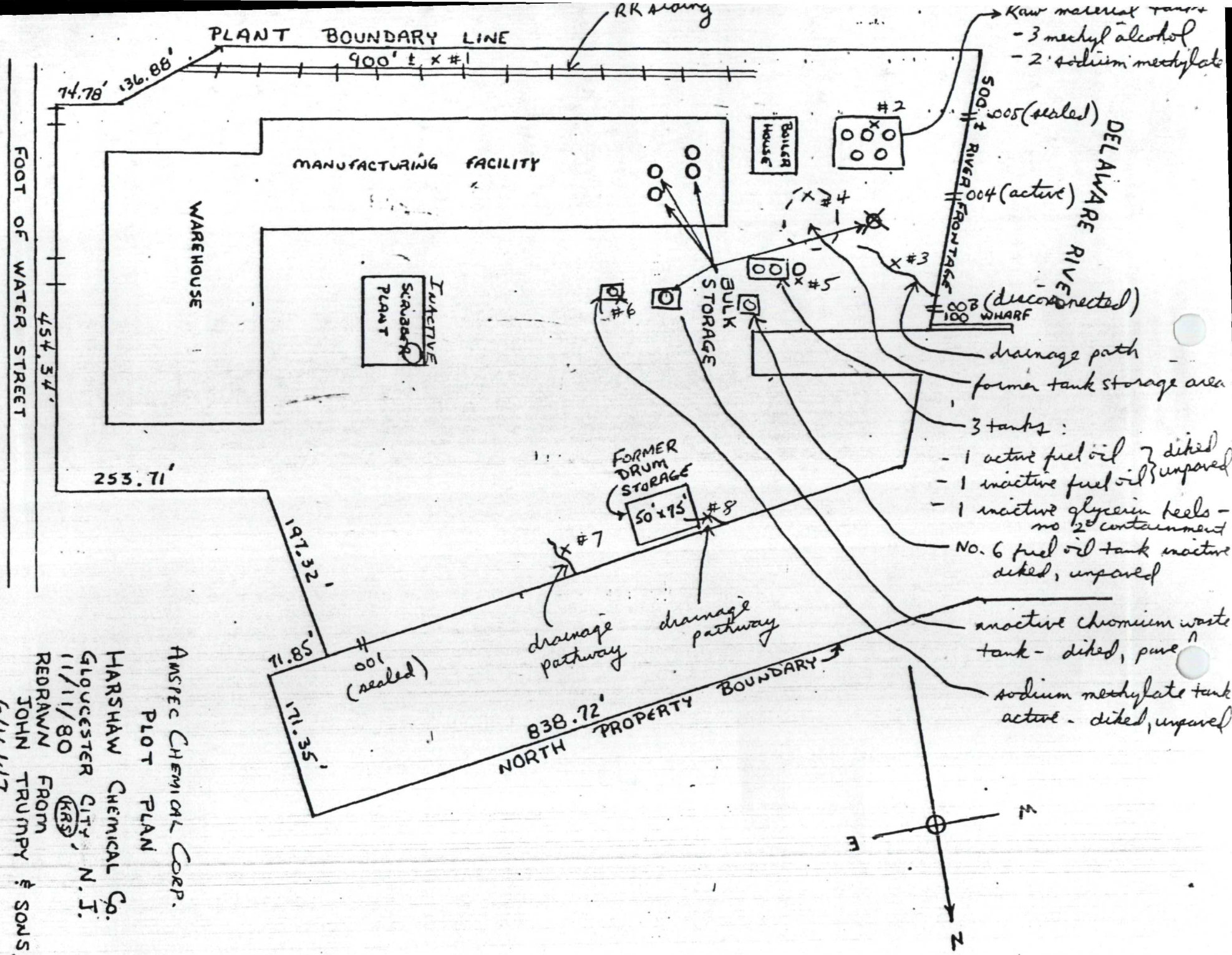
Sample #8 was taken along a drainage path about 30-40 feet east of the former drum storage area.

Background sample: refer to sampling episode description for location.

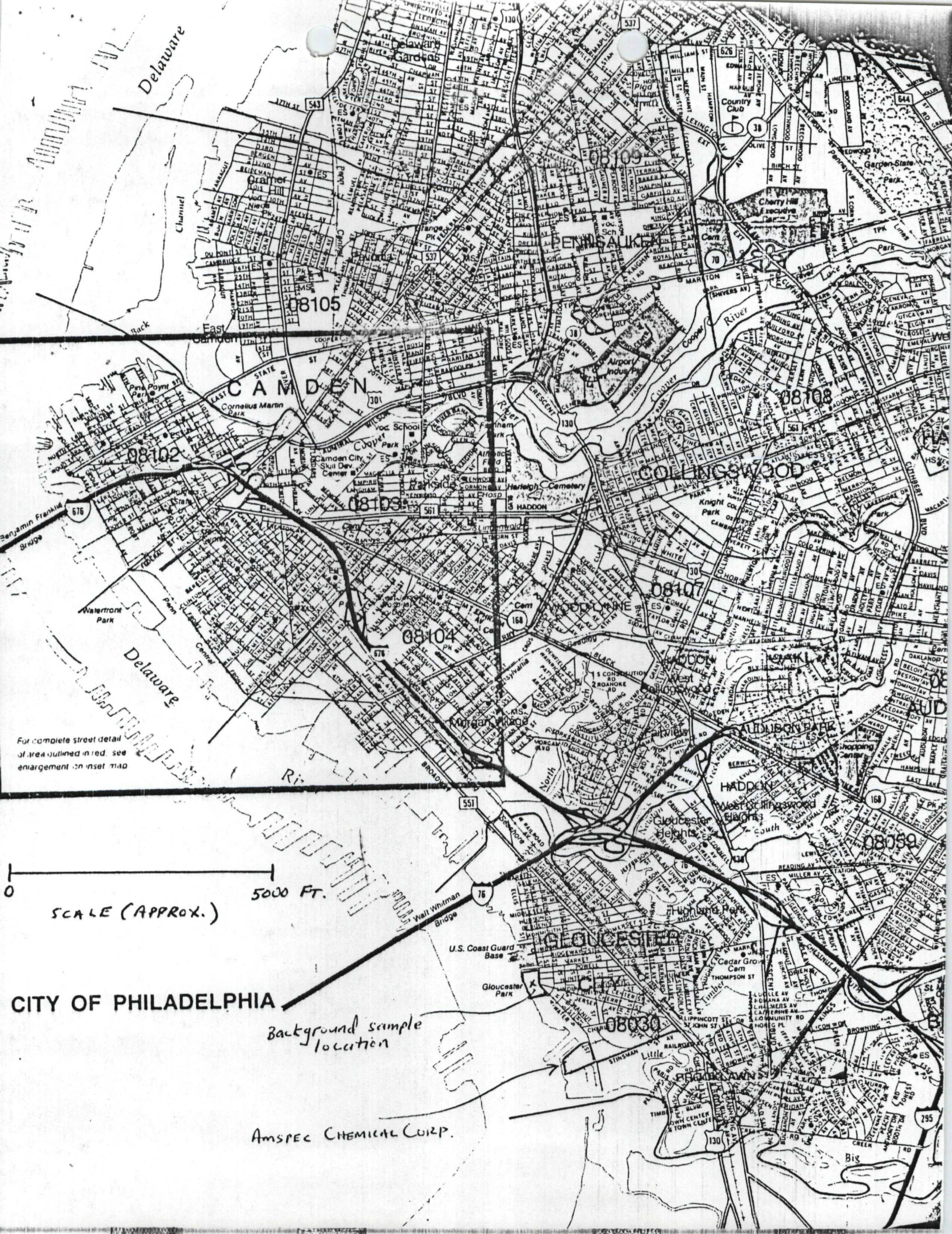
A map showing all sample locations is attached.

RECOMMENDATIONS:
Soil gas monitoring conducted during the pre-sampling assessment and sampling episode indicates evidence of soil contamination throughout the site. Housekeeping at the facility is very poor and soil staining has been observed in some areas. Some of the raw material storage tanks are diked but are unpaved within the diked area, representing a potential for release of contaminants into the soil and ground water and possible migration into the Delaware River. According to facility representatives, the site is prone to flooding, and the manufacturing plant is below-grade and occasionally floods. Based upon the soil sampling results, further investigation may be necessary to characterize the extent of soil contamination, as well as any adverse impact on the ground water and surface water (Delaware River).

HS216:mz
attachment



AMSPEC CHEMICAL CORP.
PLOT PLAN
HARSHAW CHEMICAL Co.
GLOUCESTER CITY, N.J.
11/11/80 (KRS)
REDRAWN FROM
JOHN TRUMPY & SONS, INC.
6/16/47


Delaware
Delaware
Channel
Gardens
Cramer Hill
Pennsauken
08105
East Camden
CAMDEN
Cornelius Martin Park
Pine Point Park
08102
Camden City Skill Dev Center
Cooper Park
Parkside
08103
Harleigh Cemetery
HADDON
Benjamin Franklin Bridge
Waterfront Park
Delaware
08104
Morgan Village
For complete street detail of area outlined in red, see enlargement on inset map
0
5000 FT.
SCALE (APPROX.)
Walt Whitman Bridge
U.S. Coast Guard Base
Gloucester Park
CITY OF PHILADELPHIA
Background sample location
AMSPEC CHEMICAL CORP.
PENNSAUKEN
08109
Cherry Hill Executive Park
Country Club
Garden State Park
Pennsylvania Reading
Airport Indus Pk
Cooper River
08108
COLLINGSWOOD
Knight Park
08107
WOODLANE
West Collingswood
AUDUBON PARK
Shopping Center
HADDON
West Collingswood Heights
Gloucester Heights
08059
Highland Park
GLOUCESTER CITY
Cedar Grove Cem
08030
BROOKLAWN
Little
Big

Let's protect our earth

State of New Jersey

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF HAZARDOUS WASTE MANAGEMENT
John J. Trela, Ph.D., Acting Director
401 East State St.
CN 028
Trenton, N.J. 08625
609 - 633 - 1408

17 AUG 1987

M E M O R A N D U M

TO: AL PLEVA, ACTING SECTION CHIEF
BUREAU OF PLANNING AND ASSESSMENT

THROUGH: ROBERT KUNZE, ACTING SECTION CHIEF
BUREAU OF PLANNING AND ASSESSMENT

FROM: ED GAVEN, HSMS IV
BUREAU OF PLANNING AND ASSESSMENT

SUBJECT: SAMPLING PLAN FOR AMSPEC CHEMICAL CORPORATION
GLOUCESTER CITY, CAMDEN COUNTY, N.J.

PROPOSED SAMPLING DATE: 8/11/87

FACILITY CONTACTS: Kevin Stewart, Plant Manager
David Lewis, President
(609) 456-3930

SAMPLING OBJECTIVES:
To determine the presence of contamination by hazardous substances and potential for releases to the environment through collection of samples from suspected areas of contamination identified on-site for laboratory analysis.

BACKGROUND:
The site has been used for chemical manufacturing since 1950. Prior to that date, the site was used for shipbuilding purposes, which dates back to the 1920's. Harshaw Chemical Company began operations at the site in 1950 and was purchased by the Amspec Chemical Corporation in 1983. The primary products manufactured at the facility include antimony trioxide, sodium methoxide, and acetyl acetonates. Raw materials used at the plant include various acids, caustic, alcohols, glycols, and methylene chloride. Hazardous wastes generated at the facility include acetylacetonate liquors containing chromium, waste alcohols and sodium methylate solutions, caustic wastes containing sodium hydroxide, and waste oils. Currently, the facility has generator only status and stores in drums for less than 90 days.

A preliminary assessment conducted on the site in 1984 indicated a potential for soil contamination from leaks and spillages associated with

drum and tank storage, and possible illegal storage of wastes. A high priority was assigned to the site due to its location next to the Delaware River. There are no records of any previous environmental sampling conducted at the site. During the pre-sampling assessment on 7/31/87, 8 areas were identified for which analytical data will be collected. These areas were identified due to the presence of discolored soil or because above background levels of volatile organics were detected at the soil headspace using portable air monitoring equipment.

SAMPLING PLAN:

A total of 11 soil samples will be collected including one background sample, one field blank, and one trip blank. A site map is attached showing approximate sampling locations.

Soil #1: along railroad siding near southern boundary of site; proposed sample depth 1-2 feet.

Soil #2: within diked tank storage area housing methyl alcohol and sodium methylate tanks; proposed sample depth 2-3 feet.

Soil #3: located along drainage path between former tank storage areas and Delaware River; proposed sample depth 2-6 inches.

Soil #4 located at site of former tank storage area; proposed sampling depth 2-6 inches.

Soil #5 located within diked fuel oil tank storage area; proposed sample depth 2-6 inches.

Soil #6 located within diked sodium methylate tank storage area; proposed sample depth 2-6 inches.

Soil #7 located at former drum storage area; proposed sample depth 2-6 inches.

Soil #8 located along drainage path between former drum storage area and Delaware River; proposed sample depth 2-6 inches.

Soil #9 Background sample - located in a field near northeast boundary of facility; proposed sample depth 2-6 inches.

QA/QC:

A trip blank will be carried throughout the sampling episode. One field blank will be transferred to a lab cleaned bottle using a lab cleaned trowel.

LABORATORY ANALYSIS & FUNDING:

Sampling will be conducted in accord with NJDEP standard operating procedures. AnalytiKEM of Cherry Hill, N.J. will be contracted to do the Priority Pollutant + 40 analyses. The total cost of the analyses is estimated to be $22,403.15. The source of funding will be the Multi-Site Cooperative Agreement.

SAFETY PROCEDURES:
Ambient air conditions before and during sampling will be monitored using an Hnu Systems PID and a Foxboro OVA FID. Level D protection is recommended based upon the findings of the pre-sampling assessment 7/31/87. A map showing the route to the nearest hospital is attached.

SHIPPING AND HANDLING:
Collected samples will be stored at 4°C in coolers supplied by the lab. Samples will be delivered to AnalytiKEM on the same day as the sampling episode.

HS216:mz
attachment

| | | | | | (1-5)
(DO NOT USE)

FORM A: GENERAL FACILITY INFORMATION

Company Name: The Harshaw Chemical - A Div. of Gulf Oil Corp.

Facility Name: Gloucester City Plant

Address: Foot of Water Street
No. Street
Gloucester City, New Jersey 08030
City State Zip Code

Name of Person Completing Form: C. W. Carroll

Position: Process Engineer

Phone Number: (609) 456-3930

1. Year Facility Opened 19 4 8 (10-11)

2. Primary SIC Code 2 8 1 9 (12-15)

3. Estimate the total amounts of process wastes (excluding wastes sold for use) generated by this facility during 1978:

thousand gallons ..... (16-24)

hundred tons 9 2 (25-32)

thousand cubic yards ..... (33-41)

4. Estimate (in whole percents) how these process wastes generated in 1978 were disposed of:

in landfill 5 9 (42-44)

in pit/pond/lagoon 0 (45-47)

in deep well 0 (48-50)

incinerated 0 (51-53)

reprocessed/recycled 2 (54-56)

evaporated 2 9 (57-59)

unknown 0 (60-62)

other (Specify _____) 0 (63-65)

5. What is the total number of known sites (including disposal on the property where this facility is located as one site) that have been used for the disposal of process wastes from this facility since 1950?..... 4 (66-68)

COMPLETE ONE FORM "B" FOR EACH OF THE SITES

6. Have any of the process wastes generated at this facility been hauled (removed) from this facility for disposal? (Yes=1; no=2) 1 (69)

IF YES, COMPLETE FORM "C"

7. Do you know the disposal site locations of all of the process waste hauled from your facility since 1950? (Yes=1; no=2) 2 (70)

IF NO, COMPLETE ONE FORM "D" FOR EACH FIRM OR CONTRACTOR WHO TOOK WASTE TO AN UNKNOWN LOCATION

8. Specify the earliest year represented by information from company or facility records supplied on this and other forms 19 7 2 (71-72)

9. Specify the earliest year represented by information from employee knowledge supplied on this and other forms 19 5 0 (73-74)

FORM B: DISPOSAL SITE INFORMATION

(DO NOT USE) (1-8)

COMPLETE THIS FORM FOR EVERY SITE (INCLUDING THE LOCATION OF THIS FACILITY AS ONE SITE) USED FOR THE DISPOSAL OF PROCESS WASTES GENERATED BY THIS FACILITY SINCE 1950.

NJS 000 001397

Company Name: The Harshaw Chemical Company - A Div. of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Site: As Above
Address of Site: Foot of Water Street
no. street

Gloucester City, NJ 08030
city state zip code

Name of Owner (while used by facility): As Above
Address:
no. street

city state zip code

Current Owner (if different from above):
Address:
no. street

city state zip code

1. Location (1= the property on which facility is located; 2= off-site) 1 (10)
2. Ownership at time of use (1= company ownership; 2=private but not company ownership) 3=public ownership) 1 (11)
3. Current status (1= closed; 2= still in use; 9=don't know) 2 (12)
   IF CLOSED, specify year closed 19 (13-14)
4. Year first used for process waste from this facility 19 50 (15-16)
5. Year last used for process waste from this facility (enter "79" if still in use) 19 79 (17-18)
6. Total amount of process waste from this facility disposed at site:
   thousand gallons ..... (19-26)
   hundred tons 4 (27-33)
   thousand cubic yards ..... (34-41)
7. Specify type(s) of disposal method(s) used at site and whether method is still in use (1=currently in use; 2=no longer in use; 3=never used; 9=don't know)
   landfill, mono industrial waste 9 (42)
   landfill, mixed industrial waste 9 (43)
   landfill, drummed waste 9 (44)
   landfill, municipal refuse co-disposed ... 9 (45)
   pits/ponds/lagoons 9 (46)
   deep well injection 9 (47)
   land farming 9 (48)
   incineration 9 (49)
   treatment (eg. neutralizing) 9 (50)
   reprocessing/recycling 1 (51)
   other (specify) Evaporation 1 (52)
8. Users of this site (1=this facility; 2=this facility and other company facilities only; 3=this company and others; 9=don't know) 1 (53)

LIST NAMES AND ADDRESSES OF OTHER KNOWN USERS BELOW

None

FORM B CONTINUED ON SECOND PAGE

1 (80)

FORM C: HAULER INFORMATION

(DO NOT USE)

PROVIDE A COMPLETE LIST OF ALL FIRMS AND INDEPENDENT CONTRACTORS, INCLUDING THE COMPANY AND ITS AFFILIATES AND SUBSIDIARIES, USED TO REMOVE PROCESS WASTES FROM THIS FACILITY SINCE 1950.

Company Name: The Harshaw Chemical - A Div. of Gulf Oil Corp.

Facility Name: Gloucester City Plant

Name of Firm or Contractor	Address	ICC # (If Known)	Years Used
Harshaw Chemical Co.	Foot of Water Street Gloucester City, NJ 08030		1950 - 1979
Browning-Ferris Industries	1075 Central Avenue Clark, NJ 07066		1972-1979
Newco Chemical Waste Systems Inc.	4626 Royal Avenue Niagra Falls New York 14303		1977-1979
Thorofare Trash Co.	Crown Point Road Thorofare, NJ 08086		1972-1979
Alnid Anti-Pollution Services Corp.	East Academy Street Clayton, NJ 08312		1974-1978
Petroleum Tank Cleaning & Disposal, Inc.	132 Hulme Street Mt. Holly, NJ 08060		1972-1975
Inland Pumping & Dredging Corp	P.O. Box 140 Downington, PA 19335		1972-1973
King of Prussia Technical Co.	P.O. Box 529 Bryn Mawr PA. 19010		1972
Modern Transportation Co.	75 Jacobs Avenue So. Kearny, NJ 07022		1978
Chemical Recovery Corp.	656 Georges Road North Brunswick, NJ 08902		1975

COMPLETE THIS FORM FOR EVERY FIRM OR INDEPENDENT CONTRACTOR (INCLUDING YOUR OWN COMPANY, ITS AFFILIATES & SUBSIDIARIES) WHO REMOVED PROCESS WASTE FROM THIS FACILITY SINCE 1950 AND TOOK IT TO AN UNKNOWN LOCATION

| | | (1-8)
(DO NOT USE)

Company Name: The Harshaw Chemical - A Div of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Hauling Firm/Contractor: Petroleum Tank Cleaning & Disposal Inc.
Address: (no.) 132 (street) Hume Street
(city) Mt. Holly (state) N.J. (zip code) 08060

1. Year first used 19 7 2 (10-11)
2. Year last used (enter "79" if still in use) 19 7 3 (12-13)
3. Total amount of process waste hauled from this facility:
   thousand gallons ..... | | | | | | | | (14-21)
   hundred tons ..... | | | | | | | 1 (22-28)
   thousand cubic yards ..... | | | | | | | | (29-36)
4. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know):
   FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3	2	(37)
pickling liquor	2	(38)
metal plating waste	2	(39)
circuit etchings	2	(40)
inorganic acid manufacture	2	(41)
organic acid manufacture	2	(42)
Base solutions, with pH>10	2	(43)
caustic soda manufacture	2	(44)
nylon and similar polymer generation	2	(45)
scrubber residual	2	(46)
Heavy metals & trace metals (bonded organically & inorganically)	1	(47)
arsenic, selenium, antimony	2	(48)
mercury	2	(49)
iron, manganese, magnesium	1	(50)
zinc, cadmium, copper, chromium (trivalent)	1	(51)
chromium (hexavalent)	2	(52)
lead	1	(53)
Radioactive residues, >3 pico curies/liter	2	(54)
uranium residuals & residuals for UF_6 recycling	2	(55)
lathanide series elements and rare earth salts	2	(56)
phosphate slag	2	(57)
thorium	2	(58)
radium	2	(59)
other alpha, beta & gamma emitters	2	(60)
Organics	1	(61)
pesticides & intermediates	2	(62)
herbicides & intermediates	2	(63)
fungicides & intermediates	2	(64)
rodenticides & intermediates	2	(65)
halogenated aliphatics	2	(66)
halogenated aromatics	2	(67)
acrylates & latex emulsions	2	(68)
PCB/PBB's	2	(69)
amides, amines, imides	2	(70)
plastizers	2	(71)
resins	1	(72)
elastomers	2	(73)
solvents polar (except water)	9	(74)
carbontetrachloride	2	(75)
trichloroethylene	2	(76)
other solvents nonpolar	2	(77)
solvents halogenated aliphatic	9	(78)
solvents halogenated aromatic	9	(79)
oils and oil sludges	1	(10)
esters and ethers	1	(11)
alcohols	1	(12)
ketones & aldehydes	1	(13)
dioxins	2	(14)
Inorganics	1	(15)
salts	1	(16)
mercaptans	2	(17)
Misc.	9	(18)
pharmaceutical wastes	2	(19)
paints & pigments	2	(20)
catalysts (eg. vanadium, platinum, palladium)	2	(21)
asbestos	2	(22)
shock sensitive wastes (eg. nitrated toluenes)	2	(23)
air water reactive wastes (eg. P_4, aluminum chloride)	2	(24)
wastes with flash point below 100° F	2	(25)

COMPLETE THIS FORM FOR EACH FT. OR INDEPENDENT CONTRACTOR (IN CLUDING YOUR OWN COMPANY, ITS AFFILIATES & SUBSIDIARIES) WHO REMOVED PROCESS WASTE FROM THIS FACILITY SINCE 1950 AND TOOK IT TO AN UNKNOWN LOCATION

(DO NOT USE) (1-8)

Company Name: The Harshaw Chemical Co. - A Div. of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Hauling Firm/Contractor: Inland Pumping & Dredging Corp.
Address: (no.) P.O. Box 140 (street) Downington, PA
(city) (state) (zip code) 19335

1. Year first used ..... 19[7 2] (10-11)
2. Year last used (enter "79" if still in use) ..... 19[7 3] (12-13)
3. Total amount of process waste hauled from this facility:
   thousand gallons ..... [ ] (14-21)
   hundred tons ..... [3] (22-28)
   thousand cubic yards ..... [ ] (29-36)
4. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know): FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3	2	(37)
pickling liquor	2	(38)
metal plating waste	2	(39)
circuit etchings	2	(40)
inorganic acid manufacture	2	(41)
organic acid manufacture	2	(42)
Base solutions, with pH>10	2	(43)
caustic soda manufacture	2	(44)
nylon and similar polymer generation	2	(45)
scrubber residual	2	(46)
Heavy metals & trace metals (bonded organically & inorganically)	1	(47)
arsenic, selenium, antimony	2	(48)
mercury	2	(49)
iron, manganese, magnesium	1	(50)
zinc, cadmium, copper, chromium (trivalent)	1	(51)
chromium (hexavalent)	2	(52)
lead	1	(53)
Radioactive residues, >3 pico curies/liter	2	(54)
uranium residuals & residuals for UF_6 recycling	2	(55)
lathanide series elements and rare earth salts	2	(56)
phosphate slag	2	(57)
thorium	2	(58)
radium	2	(59)
other alpha, beta & gamma emitters	2	(60)
Organics	1	(61)
pesticides & intermediates	2	(62)
herbicides & intermediates	2	(63)
fungicides & intermediates	2	(64)
rodenticides & intermediates	2	(65)
halogenated aliphatics	2	(66)
halogenated aromatics	2	(67)
other solvents nonpolar	2	(76)
solvents halogenated aliphatic	2	(77)
solvents halogenated aromatic	9	(78)
oils and oil sludges	9	(79)
esters and ethers	1	(10)
alcohols	1	(11)
ketones & aldehydes	1	(12)
dioxins	1	(13)
Inorganics	2	(14)
salts	1	(15)
mercaptans	1	(16)
Misc	2	(17)
pharmaceutical wastes	9	(18)
paints & pigments	2	(19)
catalysts (eg. vanadium, platinum, palladium)	2	(20)
asbestos	2	(21)
shock sensitive wastes (eg. nitrated toluenes)	2	(22)
air water reactive wastes (eg. P_4, aluminum chloride)	2	(23)
wastes with flash point below 100° F	2	(24)
	2	(25)

COMPLETE THIS FORM FOR EACH FI ON INDEPENDENT CONTRACTOR (IN-CLUDING YOUR O COMPANY S AFFILIATES & SUB IARIES) O REMOVED PROCESS WASTE FRO. THIS FACILITY SINCE 1950 AND TOOK IT TO AN UNKNOWN LOCATION

(DO NOT USE)

Company Name: The Harshaw Chemical Co. - A Div. of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Hauling Firm/Contractor: King of Prussia Technical Co.
Address: (no.) PO (street) Box 529
(city) Bryn Mawr (state) PA (zip code) 19010

1. Year first used ..... 19 [ ] (10-11)
2. Year last used (enter "79" if still in use) ..... 19 [ ] (12-13)
3. Total amount of process waste hauled from this facility:
   thousand gallons ..... [ ] (14-21)
   hundred tons ..... [1] (22-28)
   thousand cubic yards ..... [ ] (29-36)
4. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know): FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3	2	(37)
pickling liquor	2	(38)
metal plating waste	2	(39)
circuit etchings	2	(40)
inorganic acid manufacture	2	(41)
organic acid manufacture	2	(42)
Base solutions, with pH>10	2	(43)
caustic soda manufacture	2	(44)
nylon and similar polymer generation	2	(45)
scrubber residual	2	(46)
Heavy metals & trace metals (bonded organically & inorganically)	1	(47)
arsenic, selenium, antimony	2	(48)
mercury	2	(49)
iron, manganese, magnesium	1	(50)
zinc, cadmium, copper, chromium (trivalent)	1	(51)
chromium (hexavalent)	2	(52)
lead	1	(53)
Radioactive residues, >3 pico curies/liter	2	(54)
uranium residuals & residuals for UF_6 recycling	2	(55)
lathanide series elements and rare earth salts	2	(56)
phosphate slag	2	(57)
thorium	2	(58)
radium	2	(59)
other alpha, beta & gamma emitters	2	(60)
Organics	1	(61)
pesticides & intermediates	2	(62)
herbicides & intermediates	2	(63)
fungicides & intermediates	2	(64)
rodenticides & intermediates	2	(65)
halogenated aliphatics	2	(66)
halogenated aromatics	2	(67)
acrylates & latex emulsions	2	(68)
PCB/PBB's	2	(69)
amides, amines, imides	2	(70)
plastizers	2	(71)
resins	1	(72)
elastomers	2	(73)
solvents polar (except water)	9	(74)
carbontetrachloride	2	(75)
trichloroethylene	2	(76)
other solvents nonpolar	2	(77)
solvents halogenated aliphatic	9	(78)
solvents halogenated aromatic	9	(79)
oils and oil sludges	1	(10)
esters and ethers	1	(11)
alcohols	1	(12)
ketones & aldehydes	1	(13)
dioxins	2	(14)
Inorganics	1	(15)
salts	1	(16)
mercaptans	2	(17)
Misc.	9	(18)
pharmaceutical wastes	2	(19)
paints & pigments	2	(20)
catalysts (eg. vanadium, platinum, palladium)	2	(21)
asbestos	2	(22)
shock sensitive wastes (eg. nitrated toluenes)	2	(23)
air water reactive wastes (eg. P_4, aluminum chloride)	2	(24)
wastes with flash point below 100° F.	2	(25)

[1] (8

(DO NOT USE) (1-8)

Company Name: ie Harsh Chemical Co. - A D of Gulf Oil Corp.

Facility Name: Gloucester City Plant

Site Name: As Above

9. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know)

FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3	2	(10)
pickling liquor	2	(11)
metal plating waste	2	(12)
circuit etchings	2	(13)
inorganic acid manufacture	2	(14)
organic acid manufacture	2	(15)
Base solutions, with pH>10	1	(16)
caustic soda manufacture	2	(17)
nylon and similar polymer generation	2	(18)
scrubber residual	2	(19)
Heavy metals & trace metals (bonded organically & inorganically)	1	(20)
arsenic, selenium, antimony	1	(21)
mercury	1	(22)
iron, manganese, magnesium	2	(23)
zinc, cadmium, copper, chromium (trivalent)	2	(24)
chromium (hexavalent)	2	(25)
lead	1	(26)
Radioactive residues, >3 pico curies/liter	2	(27)
uranium residuals & residuals for UF_6 recycling	2	(28)
lathanide series elements and rare earth salts	2	(29)
phosphate slag	2	(30)
thorium	2	(31)
radium	2	(32)
other alpha, beta & gamma emitters	2	(33)
Organics	1	(34)
pesticides & intermediates	2	(35)
herbicides & intermediates	2	(36)
fungicides & intermediates	2	(37)
rodenticides & intermediates	2	(38)
halogenated aliphatics	2	(39)
halogenated aromatics	2	(40)
acrylates & latex emulsions	2	(41)
PCB/PBB's	2	(42)
amides, amines, imides	2	(43)
plastizers	2	(44)
resins	2	(45)
elastomers	2	(46)
solvents polar (except water)	2	(47)
carbontetrachloride	2	(48)
trichloroethylene	2	(49)
other solvents nonpolar	1	(50)
solvents halogenated aliphatic	2	(51)
solvents halogenated aromatic	2	(52)
oils and oil sludges	2	(53)
esters and ethers	1	(54)
alcohols	1	(55)
ketones & aldehydes	1	(56)
dioxins	2	(57)
Inorganics	1	(58)
salts	1	(59)
mercaptans	2	(60)
Misc	2	(61)
pharmaceutical wastes	2	(62)
paints & pigments	2	(63)
catalysts (eg. vanadium, platinum, palladium)	2	(64)
asbestos	2	(65)
shock sensitive wastes (eg. nitrated toluenes)	2	(66)
air water reactive wastes (eg. P_4, aluminum chloride)	2	(67)
wastes with flash point below 100° F	2	(68)

2 (80)

COMPLETE THIS FORM FOR EACH F OR INDEPENDENT CONTRACTOR (I. CLUDING YOUR OW COMPANY, S AFFILIATES & SUB IARIES) REMOVED PROCESS ASTE FRO. HIS FACILITY SINCE 50 AND T K IT TO AN UNKNOWN LOCATION

(DO NOT USE) (1-8)

Company Name: The Harshaw Chemical Co. - A Div. of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Hauling Firm/Contractor: Modern Transportation Co.
Address: (no.) 75 (street) Jacobs Avenue
(city) So. Kearny (state) NJ (zip code) 07022

1. Year first used 19 7 5 (10-11)
2. Year last used (enter "79" if still in use) 19 (12-13)
3. Total amount of process waste hauled from this facility:
   thousand gallons ..... (14-21)
   hundred tons 1 (22-28)
   thousand cubic yards ..... (29-36)
4. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know): FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3	2	(37)
pickling liquor	2	(38)
metal plating waste	2	(39)
circuit etchings	2	(40)
inorganic acid manufacture	2	(41)
organic acid manufacture	2	(42)
Base solutions, with pH>10	2	(43)
caustic soda manufacture	2	(44)
nylon and similar polymer generation	2	(45)
scrubber residual	2	(46)
Heavy metals & trace metals (bonded organically & inorganically)	1	(47)
arsenic, selenium, antimony	2	(48)
mercury	2	(49)
iron, manganese, magnesium	1	(50)
zinc, cadmium, copper, chromium (trivalent)	1	(51)
chromium (hexavalent)	2	(52)
lead	1	(53)
Radioactive residues, >3 pico curies/liter	2	(54)
uranium residuals & residuals for UF_6 recycling	2	(55)
lathanide series elements and rare earth salts	2	(56)
phosphate slag	2	(57)
thorium	2	(58)
radium	2	(59)
other alpha, beta & gamma emitters	2	(60)
Organics	1	(61)
pesticides & intermediates	2	(62)
herbicides & intermediates	2	(63)
fungicides & intermediates	2	(64)
rodenticides & intermediates	2	(65)
halogenated aliphatics	2	(66)
halogenated aromatics	2	(67)
acrylates & latex emulsions	2	(68)
PCB/PBB's	2	(69)
amides, amines, imides	2	(70)
plastizers	2	(71)
resins	1	(72)
elastomers	2	(73)
solvents polar (except water)	9	(74)
carbontetrachloride	2	(75)
trichloroethylene	2	(76)
other solvents nonpolar	2	(77)
solvents halogenated aliphatic	9	(78)
solvents halogenated aromatic	9	(79)
oils and oil sludges	1	(10)
esters and ethers	1	(11)
alcohols	1	(12)
ketones & aldehydes	1	(13)
dioxins	2	(14)
Inorganics	1	(15)
salts	1	(16)
mercaptans	2	(17)
Misc	9	(18)
pharmaceutical wastes	2	(19)
paints & pigments	2	(20)
catalysts (eg. vanadium, platinum, palladium)	2	(21)
asbestos	2	(22)
shock sensitive wastes (eg. nitrated toluenes)	2	(23)
air water reactive wastes (eg. P_4, aluminum chloride)	2	(24)
wastes with flash point below 100° F	2	(25)

1 (80

REMOVED PROCESS TE FROM IIS FACILITY SINCE 50 AND 1 IT TO AN UNKNOWN LOCATION

Company Name: Harshaw Chemical - A Div. of Gulf Oil Corp.
Facility Name: Gloucester City Plant
Name of Hauling Firm/Contractor: Almo-Anti Pollution Services Corp.
Address: (no.) East (street) Academy Street
(city) Clayton (state) NJ (zip code) 08312

1. Year first used .....
2. Year last used (enter "79" if still in use) 19 7 4 (10-11)
3. Total amount of process waste hauled from this facility: 19 7 8 (12-13)
   thousand gallons ..... | | | | | | | | (14-21)
   hundred tons ..... | | | | | | | | (22-28)
   thousand cubic yards ..... | | | | | | | | (29-36)
4. Components (or characteristics) of process waste from this facility disposed at site: (1=present in waste; 2=not present in waste; 9=don't know):
FILL IN EVERY BLOCK SPACE

Acid solutions, with pH<3		
pickling liquor	2	(37)
metal plating waste	2	(38)
circuit etchings	2	(39)
inorganic acid manufacture	2	(40)
organic acid manufacture	2	(41)
Base solutions, with pH>10	2	(42)
caustic soda manufacture	2	(43)
nylon and similar polymer generation	2	(44)
scrubber residual	2	(45)
Heavy metals & trace metals (bonded organically & inorganically)	2	(46)
arsenic, selenium, antimony	1	(47)
mercury	2	(48)
iron, manganese, magnesium	2	(49)
zinc, cadmium, copper, chromium (trivalent)	1	(50)
chromium (hexavalent)	1	(51)
lead	2	(52)
Radioactive residues, >3 pico curies/liter	1	(53)
uranium residuals & residuals for UF_6 recycling	2	(54)
lathanide series elements and rare earth salts	2	(55)
phosphate slag	2	(56)
thorium	2	(57)
radium	2	(58)
other alpha, beta & gamma emitters	2	(59)
Organics	2	(60)
pesticides & intermediates	1	(61)
herbicides & intermediates	2	(62)
fungicides & intermediates	2	(63)
rodenticides & intermediates	2	(64)
halogenated aliphatics	2	(65)
halogenated aromatics	2	(66)
acrylates & latex emulsions	2	(67)
PCB/PBB's	2	(68)
amides, amines, imides	2	(69)
plastizers	2	(70)
resins	2	(71)
elastomers	1	(72)
solvents polar (except water)	2	(73)
carbontetrachloride	9	(74)
trichloroethylene	2	(75)
other solvents nonpolar	2	(76)
solvents halogenated aliphatic	9	(77)
solvents halogenated aromatic	2	(78)
oils and oil sludges	2	(79)
esters and ethers	1	(10)
alcohols	1	(11)
ketones & aldehydes	1	(12)
glycols	1	(13)
Inorganics	2	(14)
salts	1	(15)
mercaptans	1	(16)
Misc.	2	(17)
pharmaceutical wastes	9	(18)
paints & pigments	2	(19)
catalysts (eg. vanadium, platinum, palladium)	2	(20)
asbestos	2	(21)
shock sensitive wastes (eg. nitrated toluenes)	2	(22)
air water reactive wastes (e.g. P_4, aluminum chloride)	2	(23)
[illegible]	2	(24)