EPA Region 5 Records Ctr.
362225

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792859

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
Sherex Chemical Co., Inc.	US. Route 24, PO Box 9

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Mapleton	IL	61547	Peoria	143	17

09 COORDINATES LATITUDE	LONGITUDE	10 TYPE OF OWNERSHIP (Check one)
40°24'20"	89°43'53.2"	☒ A PRIVATE ☐ B FEDERAL ☐ C. STATE ☐ D. COUNTY ☐ E MUNICIPAL ☐ F OTHER ☐ G UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION (MONTH DAY YEAR)	02 SITE STATUS	03 YEARS OF OPERATION
Feb 24, 1984	☐ ACTIVE ☒ INACTIVE	1964 (BEGINNING YEAR) ~1975 (ENDING YEAR) ☐ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply)

☐ A. EPA ☒ B EPA CONTRACTOR Ecology & Environment (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.
Anne C Sause	Team Leader/Biologist	Ecology & Environment	(312) 663-9415

09 OTHER INSPECTORS	10 TITLE	11 ORGANIZATION	12 TELEPHONE NO.
Fran Allano	Technician	E & E	(312) 663-9415
Mike McCarrin	Geologist	E & E	(312) 663-9415
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Howard Hickman	Manager Regulatory Affairs	Sherex Chemical. Box 646, Dublin, Ohio	(614) 764-6500
Dennis Jurowicz		Sherex Chemical US Rte 24, Mapleton, IL	(309) 697-6220
Dale C. Kumpf	Administration Manager	Sherex Chemical US Rte. 24, Mapleton	(309) 697-6220
Percy L. Angelo	Lawyer with	Mayer, Brown & Platt. 231 S. LaSalle St., Chicago	(312) 750-3546
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
☒ PERMISSION ☐ WARRANT	9:15 am	Cool ~ 40°F, light wind.

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO
Rick Hersemann	Springfield Dist. Office Illinois Environmental Protection Agency	(217) 786-6842

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Anne C Sause	E&E/USEPA	Ecology & Environment	312/663-9415	3 29 84 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

Approved MV 9/5/84

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792859

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 454 to 545

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	25 to 30,000	gallons	Cadmium nitrate ①
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

① Waste was dumped in bulk into a "low area" on site, and, possibly, flyash was mixed or dumped in too. Company representatives think that the acidic properties of the chemical would be neutralized by the "... lime in the soil..." and the naturally occuring clay soils would bind up the chemical.
Cadmium Nitrate is soluble in water, and the cadmium is toxic to aquatic life in low concentrations. Shellfish will concentrate cadmium 900 to 1600 times.
Total waste is 25 to 30,000 gallons. At 55 gallons per drum, that equals 454 to ___ drums.

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)

Interview with site officials, Feb. 24, 1984.
File information from Illinois E.P.A., Springfield Office.
References on chemical information: Merc index, and CHRIS handbook of toxic chemicals.

EPA FORM 2070-13 (7-81)

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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
IL	ILD095792859

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE: ____) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION
Wastes were dumped in bulk liquid into a low area on the facility. Shallow layers of sandy soil may exist at the surface above a thick layer of clay. Water collecting in this layer could become contaminated from cadmium in soil.

01 ☐ B SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable; even if chemicals reached the river, its dilution factor is so great the chemical wouldn't be seen

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable.

01 ☐ D FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable.

01 ☐ E DIRECT CONTACT — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable, waste is buried.

01 ☒ F. CONTAMINATION OF SOIL — 02 ☒ OBSERVED (DATE: 1963-1977, 1980) ☐ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: ~400 sq. ft. (Acres) — 04 NARRATIVE DESCRIPTION
Waste was dumped in bulk into a low area on site. No lining was put down prior to dumping. Company took soil borings and located site by cadmium concentrations in the soil.

01 ☐ G DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable, most residents obtain drinking water from municipal sources, or wells below a 30 ft layer of clay.

01 ☐ H WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable.

01 ☐ I POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: ____) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: ____ — 04 NARRATIVE DESCRIPTION
Not applicable.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD095792859

II. HAZARDOUS CONDITIONS AND INCIDENTS *(Continued)*

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not observed

01 ☐ K DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION *(Include name(s) of species)*

Not observed.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not applicable

01 ☒ M UNSTABLE CONTAINMENT OF WASTES *(Spills/Runoff/Standing liquids, Leaking drums)* — 02 ☒ OBSERVED (DATE: 1963-1977, 1980) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0 — 04 NARRATIVE DESCRIPTION

Wastes were dumped as bulk liquid into a low area on site. There was no containment (e.g. drums, tanks, or liner), and cover is not graded to preclude ponding.

01 ☐ N DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not applicable.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not applicable.

01 ☐ P ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION

Not applicable

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

Current owner took soil borings to determine exact location of wastes and found cadmium contaminated soil. No well were installed to determine whether cadmium had leached into the groundwater.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 0

IV. COMMENTS

With only two well logs, the geology at the site is still questionable. It appears that there a shallow sand layer which may be in danger of being contaminated by the cadmium. Additional hydrogeologic information could be gained by installing monitoring wells near the dump.

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

Interview with site officials and personal observations during on-site inspection, Feb. 24, 1984.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792859

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				
☐ B. UIC				
☐ C. AIR				
☐ D. RCRA				
☐ E. RCRA INTERIM STATUS				
☐ F. SPCC PLAN				
☐ G. STATE (Specify)				
☐ H. LOCAL (Specify)				
☐ I. OTHER (Specify)				
☒ J. NONE None Required at time of dumping.				

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		
☐ D. TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F LANDFILL		
☐ G LANDFARM		
☒ H OPEN DUMP	25 to 30,000	gallons
☐ I OTHER (Specify)		

04 TREATMENT (Check all that apply)
- ☐ A. INCENERATION
- ☐ B. UNDERGROUND INJECTION
- ☐ C. CHEMICAL/PHYSICAL
- ☐ D BIOLOGICAL
- ☐ E WASTE OIL PROCESSING
- ☐ F. SOLVENT RECOVERY
- ☐ G OTHER RECYCLING/RECOVERY
- ☐ H. OTHER None (Specify)

05 OTHER
- ☒ A BUILDINGS ON SITE

06 AREA OF SITE
<1/2 acre (Acres)

07 COMMENTS

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

Wastes were dumped as bulk liquids onto the ground. It was a low area (now between to railroad spurs and covered) that was not lined. Grading of cover does not preclude ponding.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE. ☐ YES ☒ NO

02 COMMENTS

Wastes were liquid, and depression is now covered.

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

Interview with site representatives and personal observations during site inspection, Feb. 24, 1984.

EPA FORM 2070-13 (7-81)

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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
IL	ILD095792859

II. DRINKING WATER SUPPLY

01 TYPE OF DRINKING SUPPLY (Check as applicable)

	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. _____ (mi)
B. ~1/2 mile (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 _____

03 DISTANCE TO NEAREST DRINKING WATER WELL ~1/2 mile (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
~80 ft (ft)	Unknown	~80 ft (ft)	up to 1000 gpm (gpd)	☒ YES ☐ NO

09 DESCRIPTION OF WELLS (Including useage, depth, and location relative to population and buildings)
There are shallow pockets of sand which may provide water, but majority of wells are below 80 ft. A 30 to 60 ft. layer of clay is over the main aquifer.

10 RECHARGE AREA
☐ YES
☒ NO
COMMENTS

11 DISCHARGE AREA
☒ YES
☐ NO
COMMENTS Site is close enough to River to be a discharge area.

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
Illinois River	☐	~1/2 mile (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. ~555	B. ~1022	C. ~1999
NO OF PERSONS	NO OF PERSONS	NO OF PERSONS

02 DISTANCE TO NEAREST POPULATION
<1/2 mile (mi)

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE
~344

04 DISTANCE TO NEAREST OFF-SITE BUILDING
<1/2 mile (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)
Site is southeast of Pekin, Illinois along the Illinois River. The area is not heavily populated, but the facility is one of a string of manufactureas along Highway 24.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792859

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
> 80 ft (ft)	Unknown (ft)	Unknown

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
1 inch (in)	2.75 in. (in)	<3% %	Flat, on site; Terrain towards SE	1% %

09 FLOOD POTENTIAL

SITE ☐ 100 YEAR FLOODPLAIN

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

N/A

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE: A N/A (mi) OTHER: B ~1½ miles (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. ~½ mile (mi)	B ~½ mile (mi)	C _____ (mi)	D. ~½ mile (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY

Site is at the edge of the Illinois River floodplain. North of the site are steep hills which mark the edge of the Illinois River Valley. South of the site is the Illinois River and more of its floodplain.

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

U.S.G.S. Topographic Map, Pekin, Ill. Quadrangle, 7.5 minute series.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792858

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	5 12 + 20H	Daily Labs (1980)	Available From Company
VEGETATION			
OTHER - Drinking Water	1 bimonthly	Illinois Dept. of Public Health	Available

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
None	

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☐ GROUND ☐ AERIAL None

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

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS E&E files, Chicago; Illinois E.P.A., Springfield Dist. Office

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

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

Interview with site officials during on-site inspection, Feb. 24, 1984.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095792859

II. CURRENT OWNER(S)

01 NAME	02 D+B NUMBER	03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE	05 CITY	06 STATE	07 ZIP CODE
Sherex Chemical	095031035	P.O. Box 9, U.S. Rte 24	2899	Mapleton	IL	61547

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
Schering A.G.	Unk.	POFauch 65-03-11, Muellerstrasse 170-178	Unk.	D-1000 Berlin 65	West Germany	

III. PREVIOUS OWNER(S) (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
Ashland Chemical	Unk	5200 Paul Blazer Pkwy	2851	Dublin	OH	43017
Archer Daniels Midland	Unk	Unk.	Unk	Unk.		

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
Sherex Chemical Co.	Unk	Box 646	2869	Dublin	OH	43017
Ashland Chemical	Unk.	2788 Glendale-Milford Rd.	2851	Cincinnati	OH	45241

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

Interview with site representatives during site inspection, Feb. 24, 1984

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD095 72859

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Ashland Chemical	Unk

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
PO Box 7, Rte. 24	Unk

05 CITY	06 STATE	07 ZIP CODE
Mapleton	IL	61547

III. OFF-SITE GENERATOR(S)

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
None			

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
Ashland Chemical			

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

05 CITY	06 STATE	07 ZIP CODE	05 CITY	06 STATE	07 ZIP CODE
from on-site -					

01 NAME	02 D+B NUMBER	01 NAME	02 D+B NUMBER
Archer Daniels			

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

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)

Interview with site officials during site inspection, Feb. 24, 1984.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD095728597

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE — 03 AGENCY
04 DESCRIPTION: Not applicable (N/A)

01 ☐ B. TEMPORARY WATER SUPPLY PROVIDED — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ C. PERMANENT WATER SUPPLY PROVIDED — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ D SPILLED MATERIAL REMOVED — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ E CONTAMINATED SOIL REMOVED — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ F. WASTE REPACKAGED — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ G WASTE DISPOSED ELSEWHERE — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ H ON SITE BURIAL — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ I IN SITU CHEMICAL TREATMENT — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ J IN SITU BIOLOGICAL TREATMENT — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ K. IN SITU PHYSICAL TREATMENT — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ L. ENCAPSULATION — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ M EMERGENCY WASTE TREATMENT — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ N CUTOFF WALLS — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ O EMERGENCY DIKING/SURFACE WATER DIVERSION — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ P CUTOFF TRENCHES/SUMP — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

01 ☐ Q SUBSURFACE CUTOFF WALL — 02 DATE — 03 AGENCY
04 DESCRIPTION: N/A

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD095728259

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

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

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

Interview with site representatives during on-site inspection, Feb. 24, 1984.

EXECUTIVE SUMMARY

A Remedial Investigation (RI) was performed by Envirodyne Engineers, Inc. (EEI) at Sherex Chemical Company, Mapleton, Illinois during the latter half of 1987. The focus of this project was to determine the extent of environmental contamination caused by past activities within a portion of the Sherex facility referred to as the Waste Disposal Area.

During the 1960s and 1970s, approximately 25,000 to 30,000 gallons of cadmium-containing corrosive liquids generated during reactor cleaning operations were disposed of in a shallow trench in the central portion of the Waste Disposal Area. Analysis of borehole soil samples obtained in 1984 under Sherex's direction indicated high levels of cadmium contamination extending approximately 22 feet below ground to the underlying shale layer. In April of 1984, the UESPA rated the Waste Disposal Area through its Hazard Ranking System (HRS) with a score of 15.90, and in July of 1985, the Illinois Environmental Protection Agency (IEPA) placed the Waste Disposal Area on the State Remedial Action Priorities List (SRAPL).

The IEPA subsequently determined that performance of Remedial Investigation/ Feasibility Study (RI/FS) was the appropriate immediate action to be taken at the site. EEI was contracted by the IEPA to perform a RI/FS. The RI/FS was conducted to determine the extent of the previously identified cadmium contamination and/or the existence of other potential contaminants. The study also included the development of possible remedial alternatives.

The RI included a records review and visual inspection, drilling of nine boreholes with soil sampling, installation of five groundwater monitor wells, collection of groundwater samples from each well, and collection of sediment samples from four locations. Samples from each site were analyzed for total metals, volatile/semi-volatile organics and several conventional parameters. In addition, soil and sediment samples were analyzed for Extraction Procedure (EP) Toxicity metals.

During drilling of wells and borings, groundwater was encountered at relatively shallow depths, ranging from 11.7 feet to 20.0 feet below ground level. The water table reflects a thin unconfined, shallow sand and gravel aquifer above the shale and limestone bedrock. This aquifer becomes deeper and of commercial significance with proximity to the Illinois River, as supply wells draw from a depth of 30 to 80 feet below ground level within this same sand and gravel aquifer. There has not been enough information obtained during this investigation to determine the significance of bedrock fractures and potential relationships with groundwater within the bedrock.

Groundwater flow rates within this shallow aquifer, in the vicinity of the Waste Disposal Area, range from 0.2 to 4 feet per day. This range corresponds well with measured pumping rates at supply wells in the same area, and is considered a high flow rate. Groundwater flow direction in the vicinity of the Waste Disposal Area is to the east and southeast. This generally flows toward the Illinois River. This flow data indicates that the monitor wells installed during this investigation are in position to intercept a potential contaminant plume from the Waste Disposal Area.

Analytical results indicated that a release of cadmium and trichloroethene into the groundwater may have occured within the Waste Disposal Area from past activities. Groundwater samples from one of the downgradient monitor wells installed during the RI contained cadmium concentrations near drinking

water standards. Likewise, trichloroethene was found at a level slightly above the drinking water standard of 5 ug/l in one well. The RI results confirmed that some of the Waste Disposal Area soil samples contained cadmium concentrations slightly higher than the EP Toxicity limit of 1.0 mg/l (the level which defines a waste as hazardous).

A number of unknown hydrocarbons were detected at low levels during the semi-volatile organic library search for the sediment samples. These compounds appeared to be similar to the types of materials used in the production areas of the plant and may be attributable to process wastewater discharges and storm water runoff from these areas. These accumulations in the surface drainage ditches were not fully characterized by the limited sediment sampling.

Recommendations for further consideration include the installation of an additional monitor well within the Waste Disposal Area. This well should be positioned adjacent to Boring B-7 to determine potential source concentrations and variations. The well field should be monitored periodically to determine seasonal fluctuation of contaminant concentrations. It is also recommended that the downgradient industrial supply wells be sampled to determine the extent of potential contamination in these wells. EEI also recommends the collection of additional sediment samples within the drainage system to determine the source and receptor(s) for the pollutants detected during the RI.