RS-8410-01A

IL-0346-05

EPA Region 5 Records Ctr.
362872

INSPECTION REPORT
FOR
EAGLE ZINC CO.
HILLSBORO, ILLINOIS
ILD980606941
RO-8410-01A
FEBRUARY 21, 1986

ecology and environment, inc.
111 WEST JACKSON BLVD., CHICAGO, ILLINOIS 60604, TEL. 312-663-9415
International Specialists in the Environment

MEMORANDUM

DATE: February 21, 1986
TO: File
FROM: Ronald Bock
SUBJECT: Illinois/R05-8410-01A/IL0346
Hillsboro/Eagle Zinc Company
ILD980606941

Eagle Zinc Company is involved in the production of zinc oxide from impure zinc oxide. The resulting product is sold primarily to the rubber industry for use during the rubber vulcanization process. The company is a division of T.L. Diamond, Inc. and was purchased from Sherwin-Williams in 1984. Prior to this, Sherwin-Williams purchased the facility from Eagle Pitcher Company in 1980. Eagle Pitcher had owned and operated the company from its inception, sometime in the 1920's.

During Sherwin-Williams ownership, they filed an EPA form 8900-1 Notification of Hazardous Waste Site in accordance with Section 103c of CERCLA, indicating that waste slag from the process was stockpiled over 5-10 acres of the company property. Becuase of this, the Illinois EPA submitted a Potential Hazardous Waste Site Preliminary Assessment to the U.S. EPA, and the site was subsequently assigned to FIT for a Site Inspection.

On February 10, 1986, FIT visited Eagle Zinc Company in Hillsboro, Illinois and performed a Site Inspection, which consisted of an interview with a site representative followed by a visual inspection of the process and waste disposal practices. The zinc oxide manufactured at Eagle Zinc Company is produced by a pyrometallurgical process. Impure zinc oxide is fed into a rotary furnace with coal

recycled paper

and heated to approximately 2400°C. At this temperature pure zinc oxide sublimes and is fed to and recovered in a baghouse. The residual slag, which consists of zinc silicates, zinc ferrites, and iron silicates is removed from the furnace and disposed of in piles on company property.

The disposed slag is a solid which is insoluble in water, so migration of the wastes to groundwater is very unlikely. However, the surface topography slopes considerably to the southwest, toward a pond located approximately 1/4 mile west-southwest from the zinc slag piles. All surface runoff from the property appears to drain toward this pond. There is a concrete break wall bordering the pond on the east side of the pond which regulates runoff flowing into the pond. This pond in turn discharges into a tributary of Shoal Creek Middle Fork. Sampling done by the IEPA on March 23, 1982 showed a confirmed release of zinc migrating from the pond to this tributary (See Section 5). However, the confluence of this tributary with Shoal Creek is downstream of a surface water intake located in Glenn Shoals Lake, which is used for municipal water supply for the communities of Hillsboro, Schram City, and Taylor Springs. Therefore, since groundwater contamination is unlikely due to the solid, insoluble nature of the wastes, and since surface water contamination occurs downstream from the municipal intake, the threat to the surrounding population appears to be minimal.

Several comments were made in the IEPA Preliminary Assessment Executive Summary which need to be clarified. First, it was stated that Sherwin-Williams initiated a clean-up activity in 1983. According to Eagle Zinc Company, this was not a remedial activity. The purpose was to recover high zinc bearing dross which had been accumulating on the property and was of considerable value. Secondly, this facility also used to be engaged in the productin of lead oxide (white lead) for use in paint pigments. This production occurred during the ownership of Eagle Pitcher, and ceased about 20 years ago due to federal regulations banning white lead from paint.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD 980 606 941

II SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
EAGLE ZINC CO.	Rte. 16E (P.O. BOX 340)				
03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
Hillsboro	IL	62049	Montgomery	135	21

09 COORDINATES — LATITUDE 39° 09' 45." — LONGITUDE 89° 29' 00."

10 TYPE OF OWNERSHIP (Check one): ■ A. PRIVATE ☐ B. FEDERAL ____ ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL ☐ F. OTHER ____ ☐ G. UNKNOWN

III. INSPECTION INFORMATION

01 DATE OF INSPECTION: 02 / 10 / 86 (MONTH DAY YEAR)

02 SITE STATUS: ■ ACTIVE ☐ INACTIVE

03 YEARS OF OPERATION: 1914 (BEGINNING YEAR) | present (ENDING YEAR) ____ UNKNOWN

04 AGENCY PERFORMING INSPECTION (Check all that apply): ☐ A. EPA ■ B. EPA CONTRACTOR Ecology and Environment Inc. (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
Ronald Bock	FIT - Chemical Engineer	E+E	(312) 663-9415
09 OTHER INSPECTORS	**10 TITLE**	**11 ORGANIZATION**	**12 TELEPHONE NO**
David Carnock	FIT - Agronomist/Biologist	E+E	(312) 663-9415
			( )
			( )
			( )
			( )

13 SITE REPRESENTATIVES INTERVIEWED	14 TITLE	15 ADDRESS	16 TELEPHONE NO
Art Martel	Plant Manger	Eagle Zinc Co. Division T.L. Diamond - PO BOX 340 Hillsboro IL 62049	(217) 532-3971
Max W. Page	Technical - Supt.	"	( ) "
			( )
			( )
			( )
			( )

17 ACCESS GAINED BY (Check one)	18 TIME OF INSPECTION	19 WEATHER CONDITIONS
■ PERMISSION ☐ WARRANT	1.00 PM	Sunny, cold, breezy ~ 20°F

IV. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NO.
Fran Savage	Mgr. - IEPA Central Region	(217) 786-6592

04 PERSON RESPONSIBLE FOR SITE INSPECTION FORM	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NO.	08 DATE
Ronald Bock	—	E+E / FIT	(312) 663-9415	02 / 21 / 86 (MONTH DAY YEAR)

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606741

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [x] A SOLID
- [x] 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 1000
CUBIC YARDS _____
NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [x] A TOXIC
- [ ] B CORROSIVE
- [ ] C RADIOACTIVE
- [x] 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	1000	tons	See description below

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

The only waste generated at this site is zinc slag residue from the pyrometallurgic process used to produce Zinc Oxide (ZnO) from impure Zinc Oxide. In this process, the impure ZnO is heated to approx 2400°C in a rotary furnace using coal as heat source.

The ZnO sublimes and is collected in a baghouse, while the slag remains. The process presently produces about 150 tons/month product. There is presently approximately 1000 tons of zinc slag stocked in piles on property. The composition of the waste slag is primarily iron silicates, zinc silicates, and zinc ferrites. Mr. Page supplied us with an approximate elemental analysis of the slag:

Zn - 3-30%
Si - 10%
Fe - 2-3%
Pb - <.001% (insignificant)

V. FEEDSTOCKS (See Appendix for CAS Numbers)

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS	Impure Zinc Oxide		FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

SI interview with Art Martel + Max Page of Eagle Zinc Co. 2-10-86.

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD 750 606 941

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☐ A. GROUNDWATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 395
04 NARRATIVE DESCRIPTION
The waste slag is disposed in piles on Eagle Zinc Property. The potential exists for this waste to migrate to groundwater, which is used as a drinking supply by a small number of residents in the area. However, the potential for contamination is low due to the nature of the wastes: the slag is a solid composed primarily of zinc silicates, iron silicates, and zinc ferrites, all insoluble in water.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE: 3-23-82) — ☐ POTENTIAL — ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION
Sampling done by IEPA/DWPC on above date showed contamination of zinc from site migrating from surface water pond at SW part of property to creek which feeds into Shoal Creek System, which is used by area as municipal drinking water supply. This creeks feeds into Shoal Creek downstream of intakes; therefore population affected is only recreational - not drinking water.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5750
04 NARRATIVE DESCRIPTION
Site Inspection observations revealed zinc oxide dust covering certain buildings and portions of the property. Since the product is a fine dust, there is a potential for air contamination. The site is monitored closely by the IEPA - Air Pollution Division.

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE _____) — ☐ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____
04 NARRATIVE DESCRIPTION
N/A

01 ☐ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2750
04 NARRATIVE DESCRIPTION
See C. Site is partially fenced.

01 ☐ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 5-10 (Acres)
04 NARRATIVE DESCRIPTION
Since wastes are dumped in piles on property, potential exists for contamination. However since wastes are solid and insoluble in water, it is unlikely that wastes migrate to soils.

01 ☐ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 395
04 NARRATIVE DESCRIPTION
See A + B.

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE _____) — ☒ POTENTIAL — ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED: 18
04 NARRATIVE DESCRIPTION
See C.

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 2750
04 NARRATIVE DESCRIPTION
See C.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606941

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☐ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None Observed or detected

01 ☐ K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
Since surface water contamination feeds Shoal Creek system, there is potential for damage to fauna

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

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills, Runoff, Standing liquids, Leaking drums) — 02 ☐ OBSERVED (DATE 3-23-82) ☐ POTENTIAL ☒ ALLEGED
03 POPULATION POTENTIALLY AFFECTED 0 — 04 NARRATIVE DESCRIPTION
Surface water runoff from waste piles contributed to contamination of creek from pond overflow. See Sec. B.

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None. Wastes are solid piles which would not migrate to off-site property.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None Reported.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
None Reported

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
None

III. TOTAL POPULATION POTENTIALLY AFFECTED: 5750 (AIR)

IV. COMMENTS
Groundwater contamination appears to be of little concern since wastes are insoluble and would not migrate to water. Site topography suggests physical movement of surface water runoff wastes towards pond at SW of property. Overflow from this pond feeds a creek which feeds into Shoal Creek Middle Fork downstream of intakes.

V. SOURCES OF INFORMATION (Cite specific references, e.g., state files, sample analysis, reports)
Memo to Field Operations Section / DWPC from: Timothy B. Kludge Subject: Sherwin-Williams Co. - Wastewater Discharge Reconnaissance Inspection Date: March 23, 1982
Topographic Map - Hillsboro Quadrangle 7.5"

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606941

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	72100673	—	6-7-87	Covers Total Particulates
☐ D RCRA				
☐ E RCRA INTERIM STATUS				
☐ 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	1000	tons
☐ C DRUMS, ABOVE GROUND		
☐ D TANK, ABOVE GROUND		
☐ E. TANK, BELOW GROUND		
☐ F. LANDFILL		
☐ G. LANDFARM		
☐ H. OPEN DUMP		
☐ I. OTHER (Specify)		

04 TREATMENT (Check all that apply) N/A

- ☐ A. INCENERATION
- ☐ 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

10

06 AREA OF SITE

50-60 (Acres)

07 COMMENTS

Waste slag is disposed of in piles near rear of property. The site slopes considerably to the southwest, and all surface water run-off feeds a pond on SW corner of property. There is a concrete retaining wall upstream of pond. Outflow from this pond feeds a tributary to Shoals Creek - Middle Fork. This outfall to Shoals Creek is downstream of surface water intakes.

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

There are no liners, diking of wastes - they are just disposed of in piles.

V. ACCESSIBILITY

01 WASTE EASILY ACCESSIBLE ☐ YES ☒ NO

02 COMMENTS

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

SI interview with Mr. Art Martel and Max Page, of Eagle Zinc Co. 2-10-86

SI field notes

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606741

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. 1.5 (mi)
B. 1/2 (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 395

03 DISTANCE TO NEAREST DRINKING WATER WELL 0.5 (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
35 (ft)	unk	35 (ft)	70 gpm ~~(gpd)~~	☒ YES ☐ NO

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

Most of area is on surface water supply. There are two small areas to the northeast of site which use private wells. Plus all residents outside Hillsboro, Schram City, & Taylor Springs City Limits use private wells.

10 RECHARGE AREA		11 DISCHARGE AREA	
☐ YES	COMMENTS	☐ YES	COMMENTS
☒ NO		☒ NO	

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
Tributary to Shoal Creek - Mid Fork	☒	1/4 (mi)
Shoal Creek - Middle Fork	☐	1.0 (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. 2750 NO. OF PERSONS	B. 4750 NO. OF PERSONS	C. 6160 NO. OF PERSONS

02 DISTANCE TO NEAREST POPULATION 2000 ft. ~~(mi)~~

03 NUMBER OF BUILDINGS WITHIN TWO (2) MILES OF SITE 1250

04 DISTANCE TO NEAREST OFF-SITE BUILDING 1500 ft. ~~(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 located in East Hillsboro, IL. It is bordered on the north by rural area, to the west and south by Hillsboro Residential area, and to the southeast by Schram City. Directly to the east is Hillsboro Glass Company.

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606941

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
125 (ft)	0 (ft)	unk

06 NET PRECIPITATION	07 ONE YEAR 24 HOUR RAINFALL	08 SLOPE: SITE SLOPE	DIRECTION OF SITE SLOPE	TERRAIN AVERAGE SLOPE
4.0 (in)	3.0 (in)	5-7 %	S-SW	5-7 %

09 FLOOD POTENTIAL: SITE IS IN unk YEAR FLOODPLAIN

10: N/A ☐ SITE IS ON BARRIER ISLAND, COASTAL HIGH HAZARD AREA, RIVERINE FLOODWAY

11 DISTANCE TO WETLANDS (5 acre minimum)

ESTUARINE	OTHER
A. >3 (mi)	B. >3 (mi)

12 DISTANCE TO CRITICAL HABITAT (of endangered species): _____ (mi)

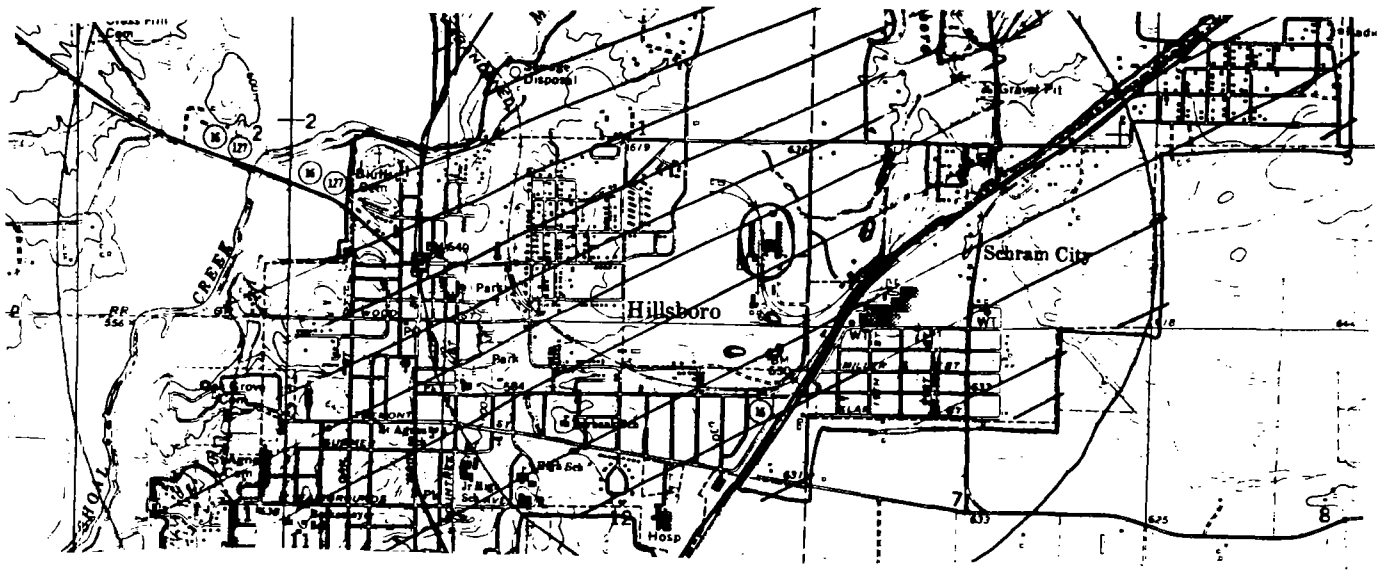
ENDANGERED SPECIES: NONE

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. 0.5 (mi)	B. 1/2 (mi)	C. N/A (mi)	D. 3/4 (mi)

14 DESCRIPTION OF SITE IN RELATION TO SURROUNDING TOPOGRAPHY



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

U.S. Climatic Atlas
Handbook of Illinois Stratigraphy - ISGS Bulletin No. 95
Groundwater Withdrawals from Aquifers in Illinois with Emphasis of Public Water Supply Wells.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD7806 00741

II. SAMPLES TAKEN

SAMPLE TYPE	01 NUMBER OF SAMPLES TAKEN	02 SAMPLES SENT TO	03 ESTIMATED DATE RESULTS AVAILABLE
GROUNDWATER			
SURFACE WATER		NO SAMPLES COLLECTED	
WASTE			
AIR			
RUNOFF			
SPILL			
SOIL			
VEGETATION			
OTHER			

III. FIELD MEASUREMENTS TAKEN

01 TYPE	02 COMMENTS
HNU	No Readings above background
Rad Mini	No Readings above background

IV. PHOTOGRAPHS AND MAPS

01 TYPE ☒ GROUND AERIAL

02 IN CUSTODY OF Ecology + Environment (Name of organization or individual)

03 MAPS ☒ YES ☐ NO

04 LOCATION OF MAPS Ecology + Environment - Region V Chicago

V. OTHER FIELD DATA COLLECTED (Provide narrative description)

None

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

E+E Site Safety Log - 2-10-86

EPA FORM 2070-13 (7-81)

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606741

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
Eagle Zinc Co.		P.O. Box 340		Hillsboro	IL	62049

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
T.L. Diamond + Co. Inc				New York	NY	

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
Sherwin-Williams Chemical Co.		Rte.		Hillsboro	IL	62049
Eagle Pitcher Co.		P.O. Box 340		Hillsboro	IL	62049

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
Sherwin-Williams						
SAME						

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

SI interview w/ Art Martel + Max Page 2-10-86

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606941

II. CURRENT OPERATOR (Provide if different from owner)

01 NAME: Eagle Zinc Co.	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): P.O. Box 340	04 SIC CODE:
05 CITY: Hillsboro	06 STATE: IL
07 ZIP CODE:	
08 YEARS OF OPERATION: 1954-present	09 NAME OF OWNER: T.L. Diamond & Co. Inc.

OPERATOR'S PARENT COMPANY (If applicable)

10 NAME: T.L. Diamond & Co., Inc.	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY: New York	15 STATE:
16 ZIP CODE:	

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

01 NAME: Sherwin-Williams Chemical Co.	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.):	04 SIC CODE:
05 CITY: Hillsboro	06 STATE: IL
07 ZIP CODE: 62049	
08 YEARS OF OPERATION: 1930-1954	09 NAME OF OWNER DURING THIS PERIOD: unknown

PREVIOUS OPERATORS' PARENT COMPANIES (If applicable)

10 NAME: Sherwin-Williams Co. Inc.	11 D+B NUMBER:
12 STREET ADDRESS (P.O. Box, RFD #, etc.):	13 SIC CODE:
14 CITY:	15 STATE:
16 ZIP CODE:	

01 NAME: Eagle-Pitcher	02 D+B NUMBER:
03 STREET ADDRESS (P.O. Box, RFD #, etc.): P.O. Box 340	04 SIC CODE:
05 CITY: Hillsboro	06 STATE: IL
07 ZIP CODE: 62049	
08 YEARS OF OPERATION: 1914-1930	09 NAME OF OWNER DURING THIS PERIOD: unknown

10 NAME: SAME	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)

SI interview with Mr. Art Martel + Max Page - 2-10-86

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
IL	ILD980606741

II. ON-SITE GENERATOR

01 NAME	02 D+B NUMBER
Eagle Zinc Co.	

03 STREET ADDRESS (P.O. Box, RFD #, etc.)	04 SIC CODE
P.O. Box 340	

05 CITY	06 STATE	07 ZIP CODE
Hillsboro	IL	

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
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

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

Site Inspection Interview 2-10-86.

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD980606741

II. PAST RESPONSE ACTIVITIES

01 ☐ A. WATER SUPPLY CLOSED — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION 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 10 - PAST RESPONSE ACTIVITIES

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD980606741

II PAST RESPONSE ACTIVITIES *(Continued)*

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

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

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

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

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

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

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

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

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

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

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

01 ☐ 3. OTHER REMEDIAL ACTIVITIES — 02 DATE _____ — 03 AGENCY _____
04 DESCRIPTION NONE

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

N/A

EPA

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

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
IL	ILD980607941

II. ENFORCEMENT INFORMATION

01 PAST REGULATORY/ENFORCEMENT ACTION ☐ YES ☒ NO

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

NONE

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

N/A

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY (Attachment B) MEMORANDUM

DATE: March 23, 1982

TO: Field Operations Section & Records Unit/DWPC

FROM: Timothy R. Kluge, Region V Springfield, FOS/DWPC TK

SUBJECT: Sherwin-Williams Chemical Company (Hillsboro, Montgomery County) -- Wastewater Discharge Reconnaissance Inspection

Interviewed: Pete Meehan, General Manager
Dave Lewis, Site Manager
Rich Mulcahy, Former Site Manager

On the above date, I revisited the Sherwin-Williams site to collect additional samples and document possible water quality violations caused by runoff from the zinc smelting spoil on the site. Previous site visits had been made on September 22 and November 19, 1981, and limited sampling indicated possible cadmium, iron, lead, zinc, and copper violations from site runoff.

Sample locations are shown on the attached area map, and a tabulation of the sample results is also attached. The samples indicate that discharges from the site contribute to water quality violations for iron and zinc. In both cases, the samples taken in a location believed to be upstream of any plant runoff contained concentrations in excess of water quality standards. Since there is no other known sources of these contaminants in the area, this location may also receive runoff from the plant site.

Based on this and previous surveys, runoff from the Sherwin-Williams plant site appears to be causing or contributing to water quality violations for dissolved metals. In addition, orange deposits in the pond on the plant property and in the stream downstream of the plant appear to be precipitated iron, violating Rule 203(a) of Chapter 3. A letter will be sent to the company noting these apparent violations.

It was also learned during the visit that sanitary wastes from the plant are treated in a septic system with no reported surface discharge.

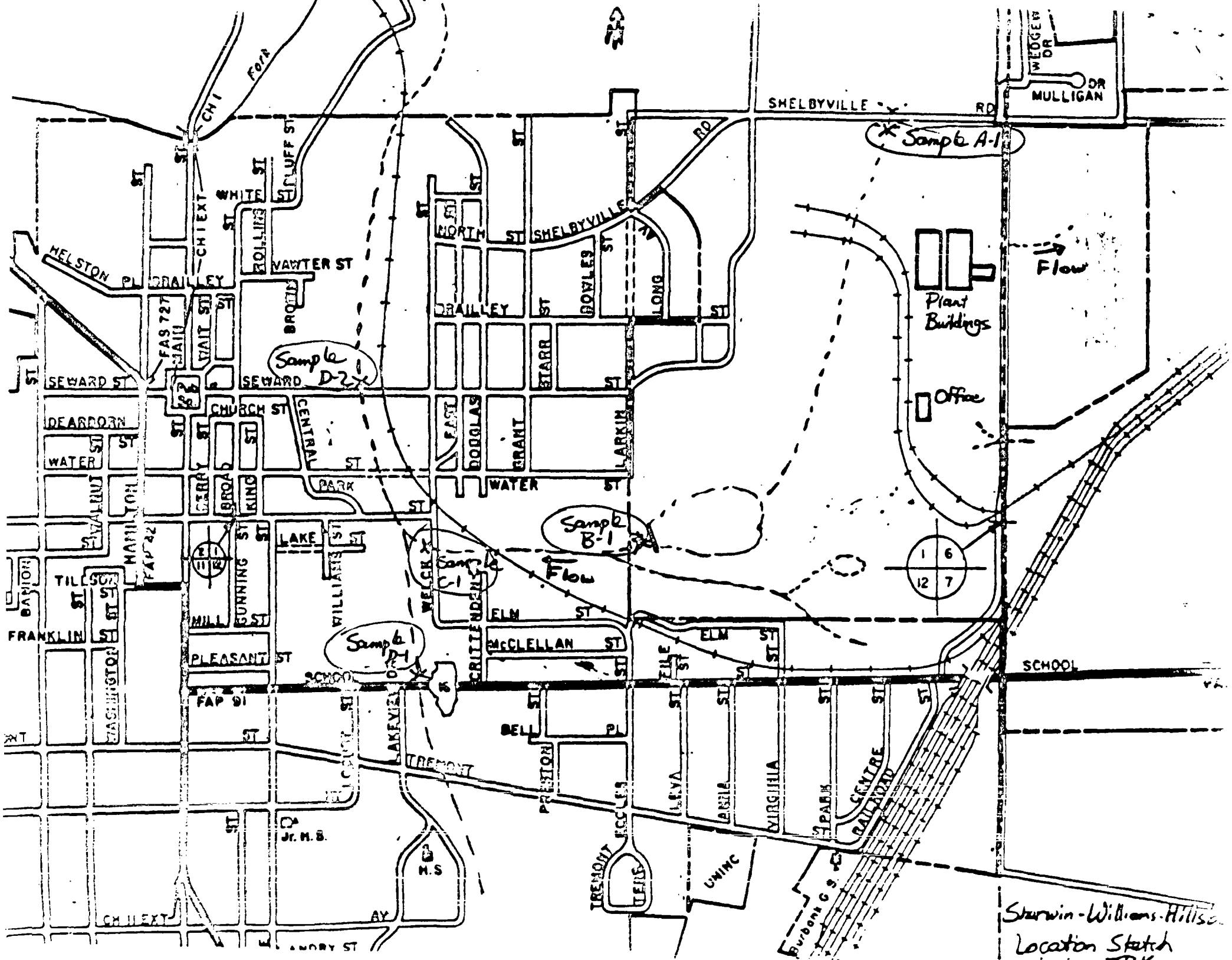
JJF/TRK/mh
6-7-82

cc: Region V Springfield

Sherwin-Williams Sampling

March 23, 1982

Parameter	Station A-1	B-1	C-1	D-1	D-2	Rule 203(f)
TS/EC	300	460	580	300	380	1000
pH	7.1	7.5	7.1	7.7	7.5	6.5-9
R.O.E.	329	514	650	321	450	-----
Arsenic	0.001	0.001	<0.001	0.001	<0.001	1.0
Barium	0.1	0.1	<0.1	0.1	0.1	5.0
Boron	0.2	0.3	0.5	0.3	0.4	1.0
Cadmium	<0.005	<0.005	0.01	<0.005	0.005	0.05
Copper	<0.01	<0.01	<0.01	<0.01	<0.01	0.02
Chromium (Tot.)	<0.05	<0.05	<0.05	<0.05	<0.05	1.05
Chromium (Hex.)	0.0	0.0	0.0	0.0	0.0	0.05
Iron	2.3	1.8	2.8	1.9	0.68	1.0
Lead	<0.05	<0.05	<0.05	<0.05	<0.05	0.1
Manganese	1.7	0.37	0.46	0.22	0.49	1.0
Nickel	<0.05	<0.05	<0.05	<0.05	<0.05	1.0
Selenium	<0.001	<0.001	<0.001	<0.001	<0.001	1.0
Silver	<0.005	<0.005	<0.005	<0.005	<0.005	0.005
Zinc	3.6	2.2	8.7	<0.05	6.3	1.0



Sherwin-Williams-Hillsdale
Location Sketch

FIELD PHOTOGRAPHY LOG SHEET

Page 1

DATE 2-10-86

TIME 2:30 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy - 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: View of Zinc Slag Piles

DATE 2-10-86

TIME 2:40 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy, 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: View of rusted, empty drums on-site

FIELD PHOTOGRAPHY LOG SHEET

DATE 2-10-86

TIME 2:45 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: carbon/coal settling lagoon

DATE 2-10-86

TIME 2:50 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy -20°F

SITE Eagle Zinc

TDD# R05-8410-01A

PHOTOGRAPHED BY: DAVE CURNOCK

SAMPLE ID# (if applicable) N/A

DESCRIPTION: view of outfall/runoff from settling lagoon

FIELD PHOTOGRAPHY LOG SHEET

DATE 2-10-86

TIME 2:55 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy - 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: Surface water pond ~ 1/4 mile west/SW of site w/ Eagle Zinc Co. in the background

DATE 2-10-86

TIME 3:00 A.M. P.M.

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy - 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: View of additional Zinc Slag Piles

FIELD PHOTOGRAPHY LOG SHEET

DATE 2-10-86

TIME 3:10 A.M. P.M

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER Cloudy 20°F

SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: View of rotary furnace where Zinc Oxide is sublimed from impure ZnO.

DATE 2-10-86

TIME 3:20 A.M. P.M

DIRECTION: N NNE NE ENE
E ESE SE SSE
S SSW SW WSW
W WNW NW NNW

WEATHER cloudy 20°F

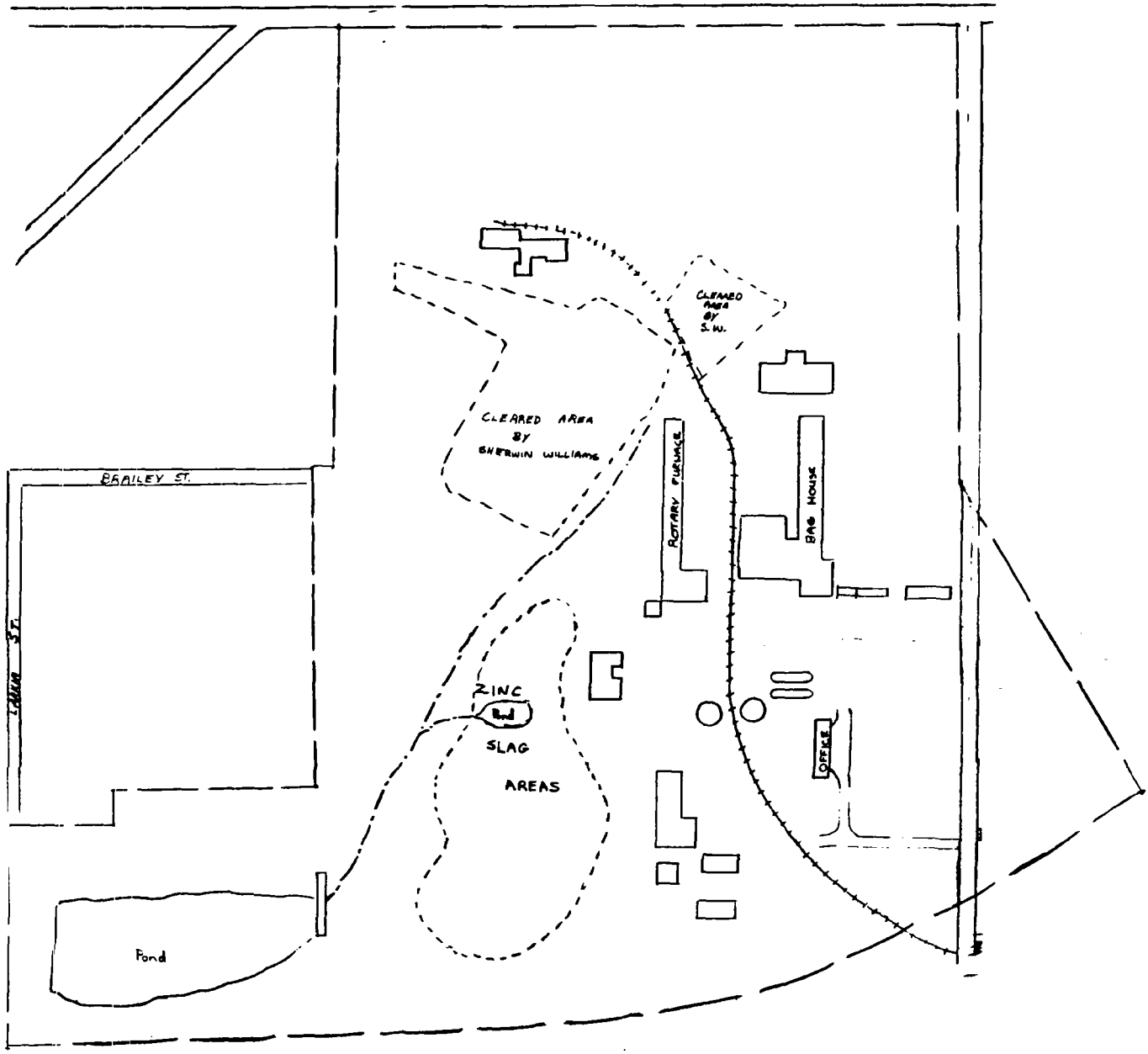
SITE Eagle Zinc Co.

TDD# R05-8410-01A

PHOTOGRAPHED BY: Dave Curnock

SAMPLE ID# (if applicable) N/A

DESCRIPTION: view of baghouse

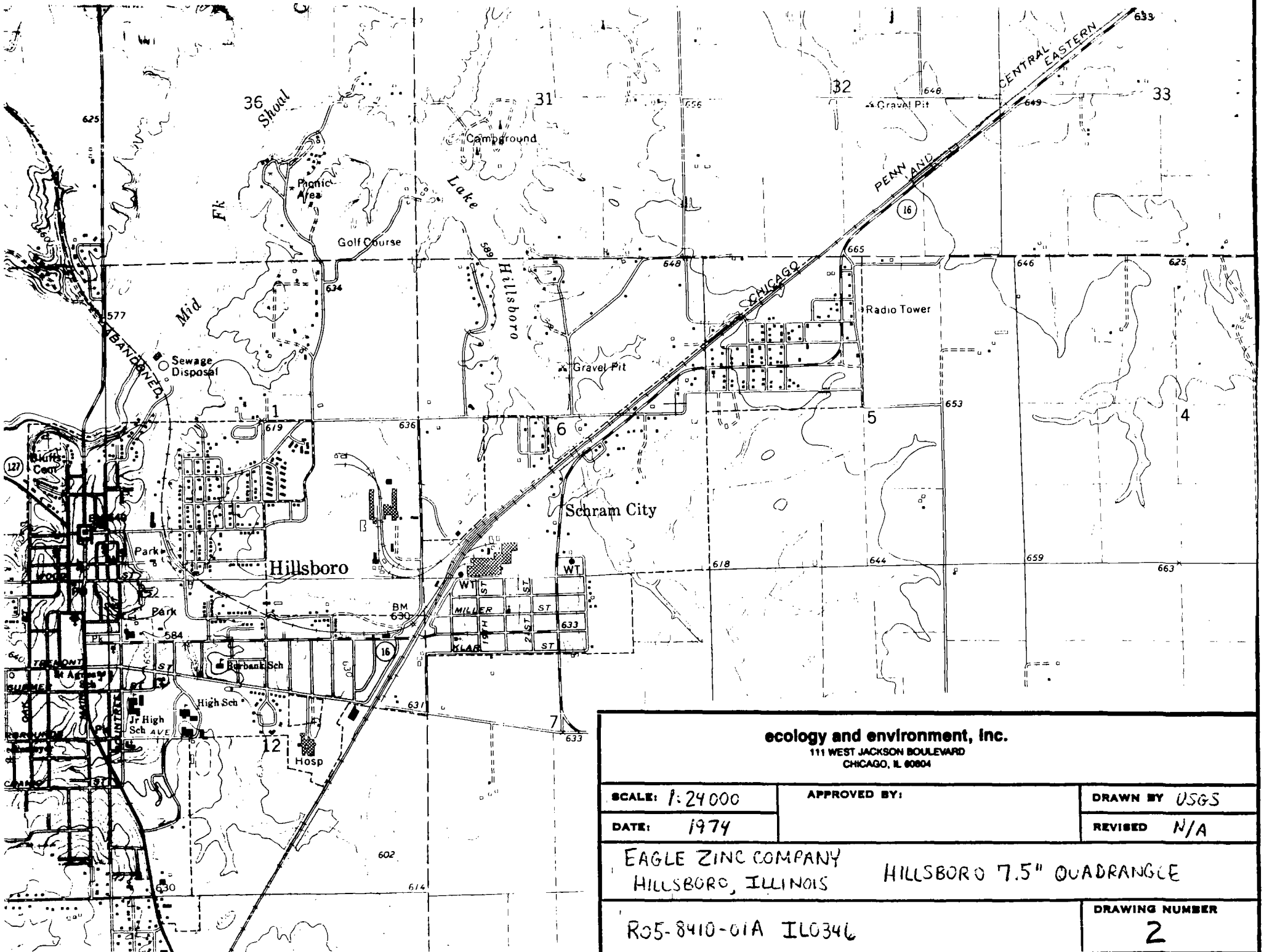


ecology and environment, Inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: NA	APPROVED BY:	DRAWN BY CURNOCK
DATE: 2/25/86		REVISED NA

Eagle Zinc Company
Hillsboro, Illinois

R05-8410-01A ILO346	DRAWING NUMBER 1



ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

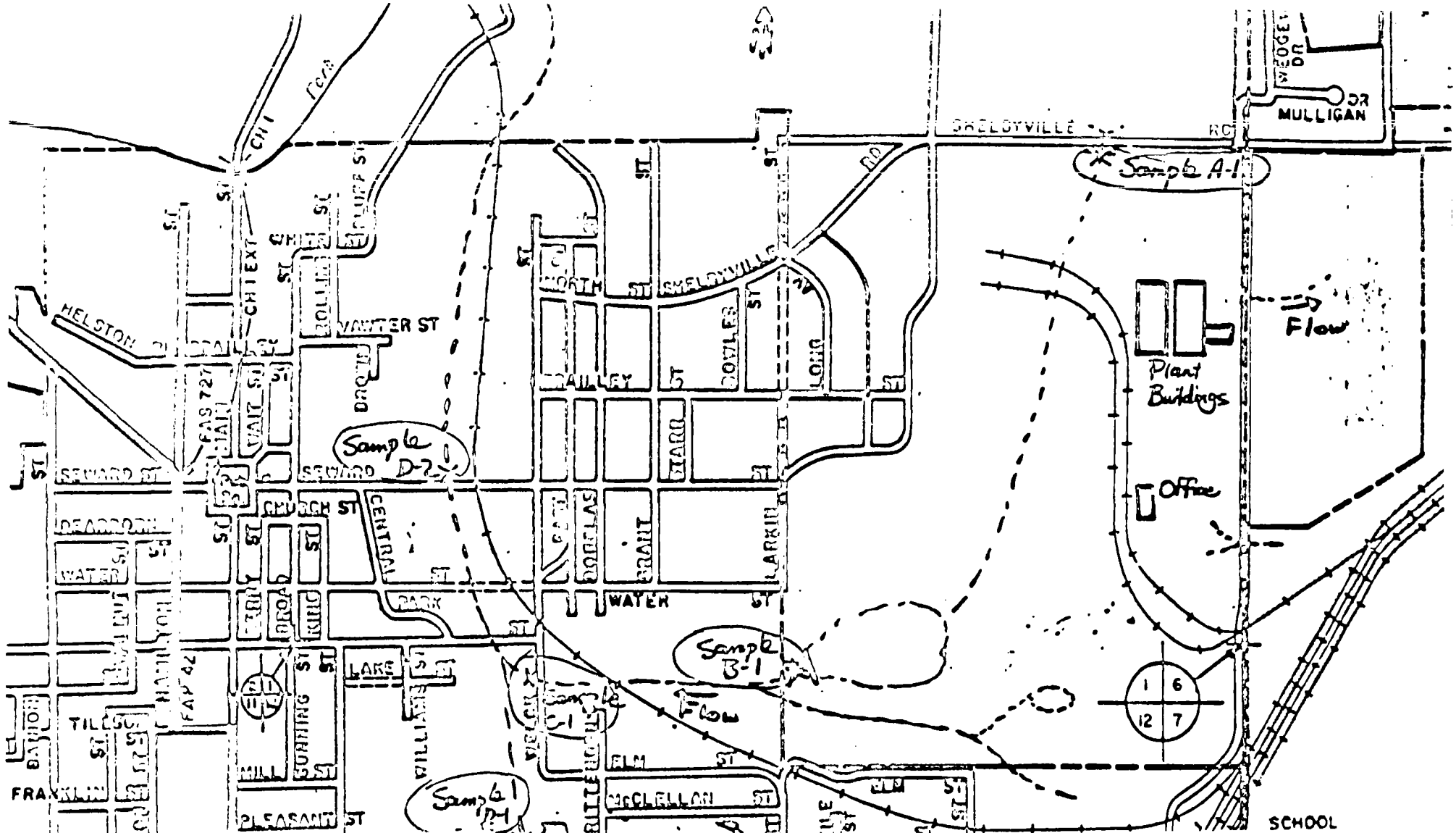
SCALE: 1:24000	APPROVED BY:	DRAWN BY USGS
DATE: 1974		REVISED N/A

EAGLE ZINC COMPANY
HILLSBORO, ILLINOIS

HILLSBORO 7.5" QUADRANGLE

R05-8410-01A IL0346

DRAWING NUMBER
2



ecology and environment, inc.
111 WEST JACKSON BOULEVARD
CHICAGO, IL 60604

SCALE: NONE	APPROVED BY:	DRAWN BY unk	
DATE: 3-23-82		REVISED N/A	

EAGLE ZINC CO. R05-8410-01A

IEPA Sampling Locations

DRAWING NUMBER 3