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Lefton Iron & Metal
ILD 984809244
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CERCLA
Screening Site Inspection Report

Illinois Environmental Protection Agency
P.O. Box 19276
Springfield, IL 62794-9276

Printed on Recycled Paper

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E TARGET COMPOUND LIST ANALYTICAL RESULTS

SECTION 1

INTRODUCTION

On September 22, 1992, the Illinois Environmental Protection Agency's (IEPA) Site Assessment Unit was tasked by Region V of the United States Environmental Protection Agency (U.S. EPA) to conduct a CERCLA Screening Site Inspection (SSI) of Lefton Iron & Metal located in East St. Louis, Illinois.

Lefton Iron & Metal was initially placed on Comprehensive Environmental Response, Compensation, and Liability Act Information System (CERCLIS) on July 4, 1991. This action was the result of the Illinois Environmental Protection Agency's concern of potential exposure of hazardous wastes to the population and the environment.

Lefton Iron & Metal received its initial CERCLA evaluation in the form of a Preliminary Assessment (PA) completed by a representative of the IEPA in September of 1992. In April of 1993, the IEPA's Site Assessment Unit prepared and submitted a Screening Site Inspection work plan for Lefton Iron & Metal to the Region V offices of the U.S. EPA. The Screening Site Inspection sampling was conducted by the IEPA on April 13 and 14, 1993 which consisted of the collection of a total of 13 soil samples.

The purposes of a Screening Site Inspection have been stated by the U.S. EPA in a directive outlining Site Assessment Unit

strategies. The directive states:

> All sites will receive a screening SI to:
>
> 1) Collect additional data beyond the PA to enable a more refined preliminary HRS [Hazard Ranking System] score.
>
> 2) Establish priorities among site most likely to qualify for the NPL [National Priorities List].
>
> 3) Identify the most critical data requirements for the Listing SI step. A screening SI will not have rigorous data quality objectives (DQOs). Based on the refined preliminary HRS score and other technical judgement factors, the site will then either be designated as NFRAP [no further remedial action planned], or carried forward as an NPL listing candidate. A Listing SI will not automatically be done on these sites, however. First, they will go through a management evaluation to determine whether they can be addressed by another authority such as RCRA [Resource Conservation and Recovery Act]... Sites that are designated NFRAP or deferred to other statutes are not candidates for a Listing SI.
>
> The Listing SI will address all the data requirements of the revised HRS using field screening and NPL level DQOs. It may also provide needed data in a format to support remedial investigation work plan development. Only sites that appear to score high enough for listing and that have not been deferred by another authority will receive a Listing SI (U.S. EPA 1988).

The Region V of the U.S. EPA has also requested that the IEPA identify sites during the Screening Site Inspection that may require removal action to remediate an immediate human health and/or environmental threat. This site may pose an immediate threat that may warrant a response/removal action. A removal action has already been conducted at the site. As stated in the site summary and recommendation, fencing was erected in order to keep locals out of the area where contaminated soils had been dumped.

SECTION 2

SITE BACKGROUND

2.1 INTRODUCTION

This section includes information obtained over the course of the formal CERCLA Screening Site Inspection investigation and previous IEPA activities involving Lefton Iron & Metal.

2.2 SITE DESCRIPTION

The Lefton Iron & Metal Company has been in the metal reclamation and recycling business at this location since 1961. It is owned and operated by Mr. Norman Lefton, Chairman of the Board, and Mr. Benjamin Lefton, President. Current activities take place on two parcels of property which are physically separated by approximately two city blocks. These properties will be referred to as the 17th Street facility and the Converse Avenue facility throughout the rest of the report. The 17th Street facility is approximately 3.4 acres and the Converse Avenue facility is approximately 2.9 acres in size.

The Lefton's properties are located in the northwest quarter of Section 19, Township 2 North, Range 10 West of the Third Principal Meridian, St. Clair County. The mailing address given for Lefton Iron & Metal Company is 205 South 17th Street. A 4-mile radius map of the area surrounding the facility may be found in Appendix A.

Figure 2-1

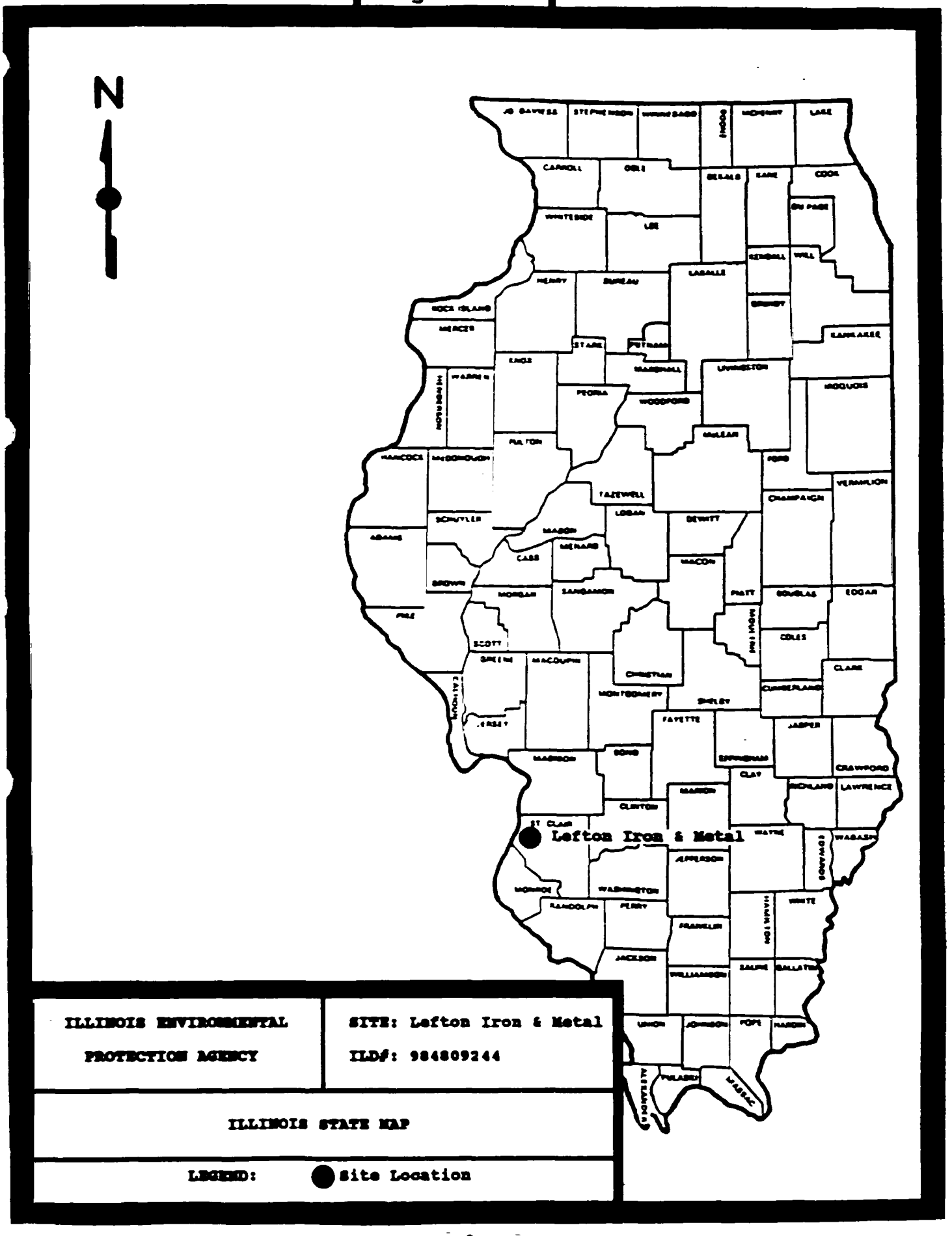

N
Lefton Iron & Metal
ILLINOIS ENVIRONMENTAL PROTECTION AGENCY
SITE: Lefton Iron & Metal
ILD#: 984809244
ILLINOIS STATE MAP
LEGEND: Site Location

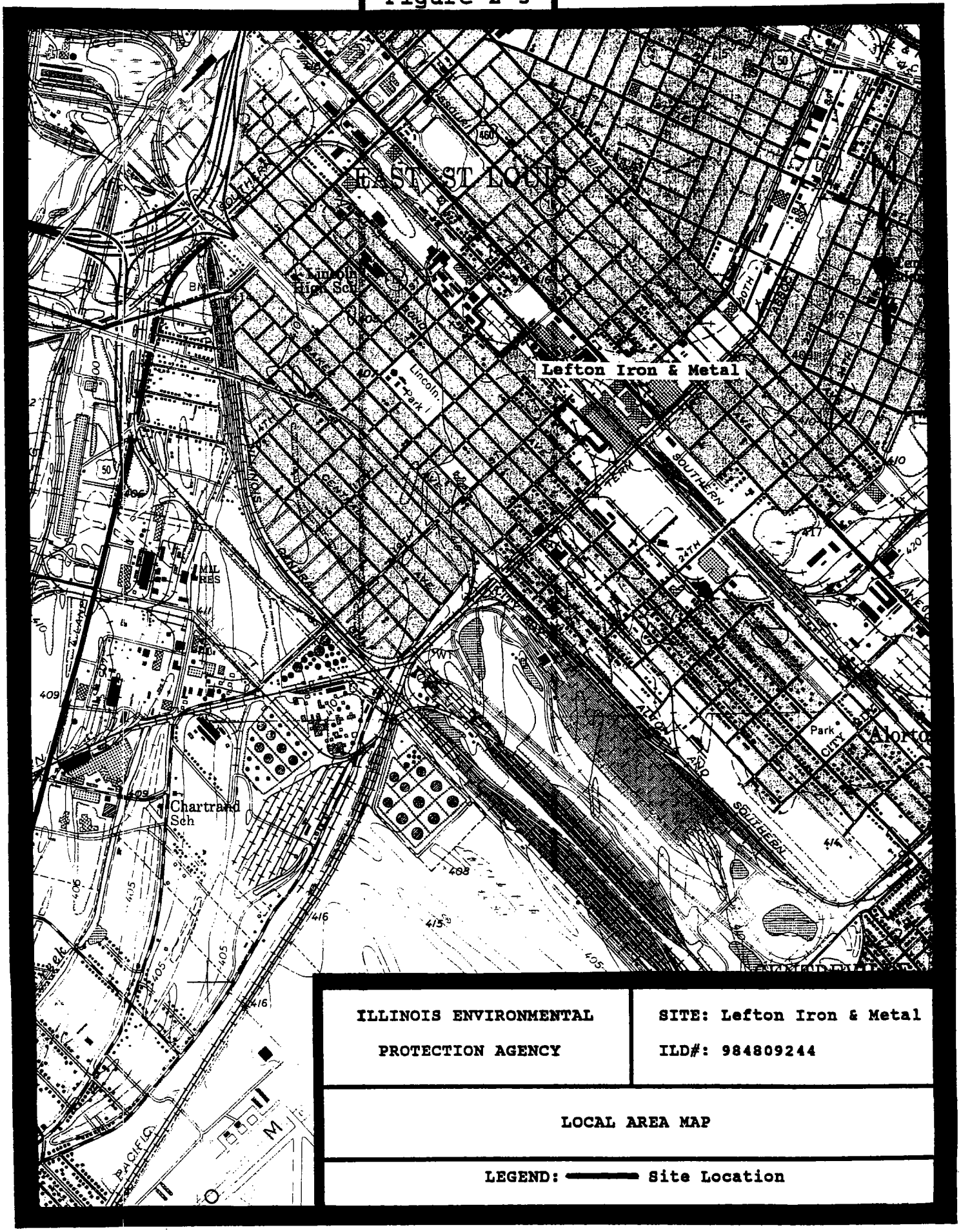
Figure 2-2

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	SITE: Lefton Iron & Metal ILD#: 984809244

COUNTY MAP

LEGEND: ● Site Location

Figure 2-3



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	SITE: Lefton Iron & Metal ILD#: 984809244
LOCAL AREA MAP	
LEGEND: Site Location	

Lefton Iron & Metal is located south of Interstate 55 in a populated urbanized section of East St. Louis, Illinois. The area around the 17th Street facility is primarily residential although not densely populated due to the fact that many of the residences are vacant, condemned, or have been burned out. The area around the Converse Avenue facility is urbanized as well with some industrial properties as well as residences. It also is not densely populated for the same reasons that the area around the 17th Street facility is not. The Obernester Corporation is located directly northeast of the facility, but is no longer in operation and is used as a warehouse at the present time. The Wastex Corporation, which is currently undergoing a state supervised clean-up is also situated northeast of the Converse Avenue facility.

2.3 SITE HISTORY

Records indicate that the 17th Street facility has been used for industrial purposes since at least 1905. A Sanborn Fire Insurance Map from 1905 indicates that the property was occupied by the Missouri Mallable Iron Company which was a metal foundry. A Sanborn Fire Insurance Map from 1938 indicates that the property at 17th Street had changed hands at least once during this time period and operated as a scrap yard under the title of Compressed Steel Corporation. The same Sanborn Map from 1905 indicates that the area which the Converse Avenue facility occupies was zoned for residences.

The Sanborn Map for 1938 indicates the presence of the Steel Baling Company operating on a portion of the property on Converse Avenue. The Steel Baling Company operated a scrap yard on the property as well.

Lefton Iron & Metal, established by Norman Lefton, Benjamin Lefton, and their father began operations at the 17th Street facility in 1961. The Leftons rented the 17th Street property from Converse-Beerman Iron & Metal until 1974 at which time they purchased the property and have owned it outright since. The Leftons purchased the Converse Avenue facility from the Steel Baling Company in 1974 and continue operations at the facility to the present day. The Leftons have continued expanding the size of the Converse Avenue facility by slowly buying up the remaining residential lots located southeast of the property.

Lefton Iron & Metal is a wholesale scrap operation. The company purchases scrap metal in bulk and then separates unwanted items such as wood, paper, wires, and plastic from the metal. The scrap metal is then compacted or chopped, dependent upon the grade of the metal, for resale. Some items, such as wheels from trains, are bought and sold as is. No incinerators have been operated at either property by Lefton Iron & Metal and none of the scrap metal is shredded.

On October 31, 1988 a complaint was received by the Illinois

Environmental Protection Agency expressing concern over the dumping of waste oil and wire burning at Lefton Iron & Metal in East St. Louis, Illinois. The complaint concerned both facilities operated by Lefton. On November 16, 1988 the IEPA made an attempt to conduct an investigation regarding the complaints at the site. Access was denied to conduct a full investigation by Mr. Norman Lefton on the advice of his attorney. An agreement was reached between IEPA attorneys and Mr. Lefton's attorney to conduct the investigation on November 18, 1988 with Mr. Lefton's attorney present.

On the morning of the November 18, 1988 personnel from the Illinois Environmental Protection Agency contacted the complainant and discovered that Lefton Iron & Metal was removing soil and hauling in rock to replace it. These same IEPA personnel then conducted an off-site reconnaissance of the 17th Street facility where they visually observed a loader removing soil and placing it in roll-off boxes. The IEPA personnel then drove down to the Converse Avenue facility to see if the same type of activity was taking place at that location. Upon arrival the team observed Lefton trucks at the end of Brady Street, near the rear of the Converse facility. Upon closer inspection they noted freshly dumped soil near the fence at the back of the Converse Avenue facility.

IEPA personnel returned later in the day to conduct the

complaint investigation at Lefton Iron & Metal. Upon arrival at the site, they immediately went to the area in which the dumping was observed earlier in the day. A total of four composite soil samples were taken from the piles. Samples X101 - X103 were taken from Brady Street, and X104 was taken from Lefton property. Analysis of the samples revealed the soil to be contaminated with PCBs at levels greater than 50 ppm. This ultimately resulted in the Illinois Environmental Protection Agency's sealing of the two acre site at the rear of the Converse Avenue facility with fencing. In 1989 the Illinois EPA contracted an environmental consulting firm to conduct a remedial investigation of the site. In 1990 a referral was made to U.S. EPA Region V Toxic Substances Control Act Unit concerning possible response action regarding the contaminated soils at Lefton Iron & Metal. No further action has resulted regarding removal of contaminated soils at Lefton Iron & Metal.

SECTION 3

SCREENING SITE INSPECTION ACTIVITIES

3.1 INTRODUCTION

This section outlines procedures utilized and observations made during the CERCLA Screening Site Inspection conducted at Lefton Iron & Metal. Specific portions of this section contain information pertaining to the reconnaissance inspection, soil sampling, decontamination procedures, and the associated analytical results. The CERCLA Screening Site Inspection of Lefton Iron & Metal was conducted in accordance with the site inspection work plan which was developed and submitted to U.S. EPA Region V prior to the initiation of field sampling activities. The "Potential Hazardous Waste Site Inspection Report" (U.S. EPA Form 2070-13) for Lefton Iron & Metal is located in Appendix D of this report.

3.2 RECONNAISSANCE INSPECTION

On April 6, 1993, Mark Weber and Pete Sorensen, of the Illinois Environmental Protection Agency, conducted a CERCLA Screening Site Inspection reconnaissance of Lefton Iron & Metal. Upon arrival at the main office located at the 205 South 17th Street facility, Mr. Sorensen and Mr. Weber met with Norman Lefton, Benjamin Lefton, and Charles Merrill, attorney for the Leftons.

The reconnaissance confirmed that Lefton Iron & Metal

currently conducts business at two separate facilities which are located at 205 South 17th Street and 1901 Converse Avenue in East St. Louis, Illinois. Current land use in close proximity to the site includes residential areas and other industries, some of which is currently under investigation by the Illinois Environmental Protection Agency. Potential sampling locations were chosen during the walk through of the facilities.

3.3 SITE REPRESENTATIVE INTERVIEW

During the interview between IEPA representatives, the Leftons, and their attorney, the participants discussed the various types of operations that take place at the facility. The CERCLA site investigation process was discussed in great detail as well. The Leftons had questions regarding the Contract Laboratory Program due to the fact that they were considering contracting an environmental consulting firm to split the soil samples with and conduct a laboratory analysis of the samples for PCBs.

3.4 SOIL SAMPLING

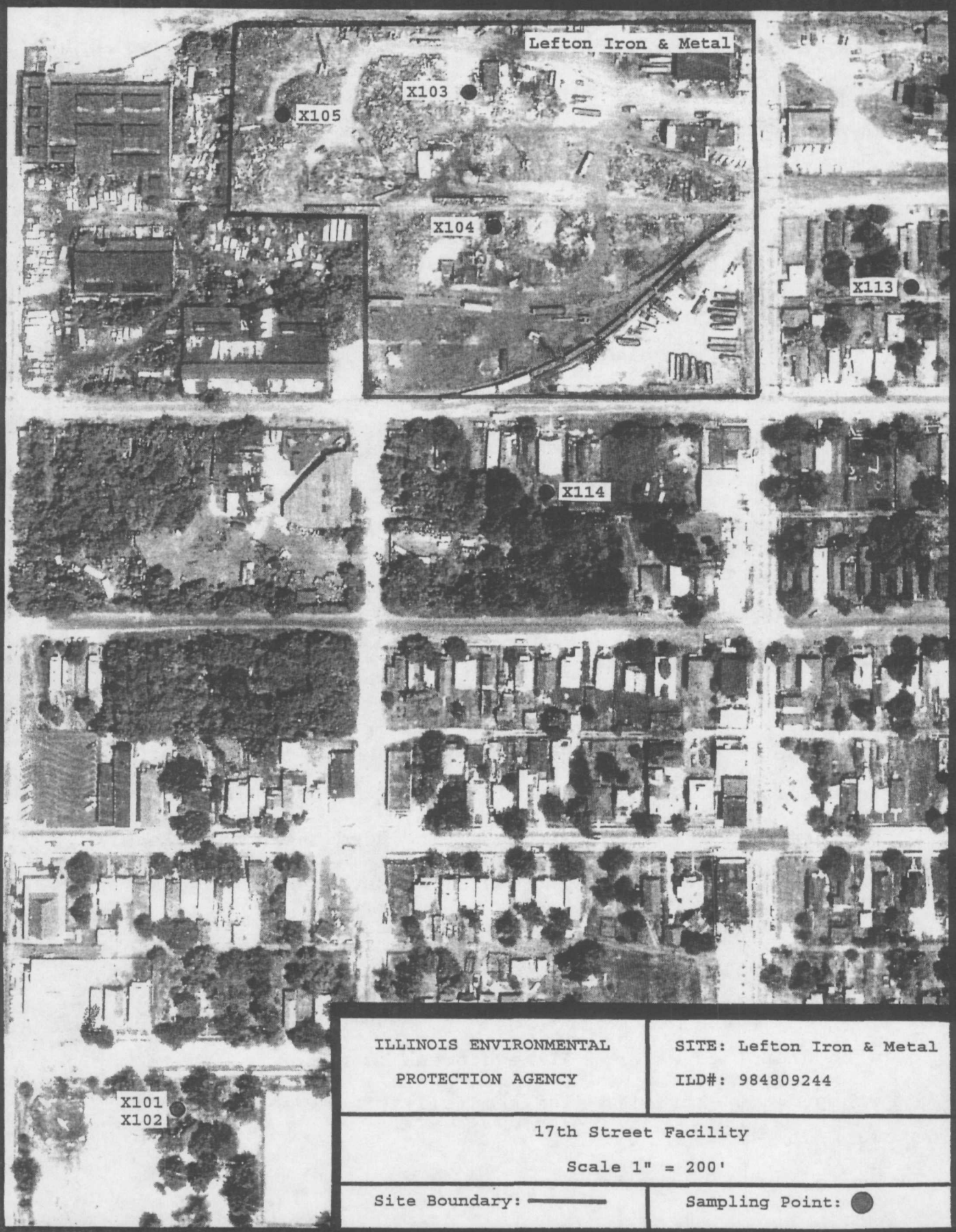
During the CERCLA Screening Site Inspection on April 13 and 14, 1993, the Illinois EPA collected 14 soil samples in order to determine if previously identified contaminants or other Target Compound List parameters were present at the Lefton Iron & Metal facility and the surrounding community. Figures 3-1 and 3-2 are maps identifying the location where each soil

sample was taken. The samples were collected with stainless steel trowels and stainless steel bucket or mud augers all of which had been decontaminated at the IEPA warehouse prior to sampling. The soil was transferred from the sampling device directly into IEPA sample containers supplied by the IEPA Bottling Center.

The IEPA soil samples were packaged and sealed in accordance with previously documented IEPA Site Assessment Units procedures. The IEPA samples were analyzed for Target Compound List compounds or analytes by IEPA Laboratories in Springfield and Champaign, Illinois. A copy of the analytical results and photographs of the CERCLA Screening Site Inspection field activities are provided in Appendices D and E of this report.

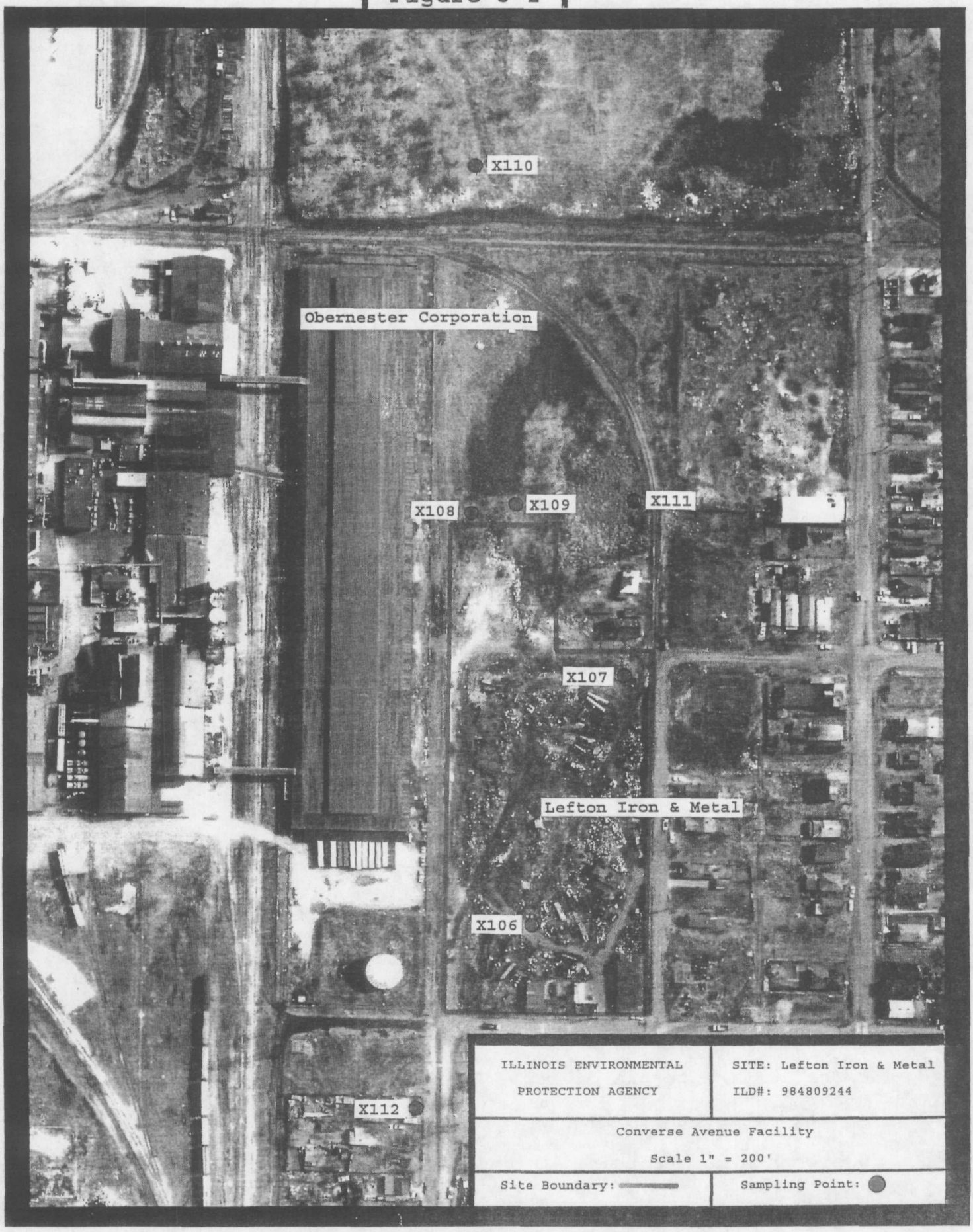
Standard IEPA decontamination procedures were followed prior to the collection of all soil samples. The procedures, performed at the IEPA warehouse, included the steam cleaning of all equipment (spoon, trowels, bucket and mud augers, extensions and handles, etc.), then scrubbing with a liquid Alcononx solution, rinsing with hot tap water, rinsing with acetone, rinsing with hot tap water again, and final rinsing with distilled water. All equipment is air dried, then wrapped and stored in aluminum foil for transport to the field.

Figure 3-1



ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	SITE: Lefton Iron & Metal ILD#: 984809244
17th Street Facility Scale 1" = 200'	
Site Boundary:	Sampling Point:

Figure 3-2



CERCLA SSI: Lefton Iron & Metal ILD 984809244

3.5 ANALYTICAL RESULTS

This section provides a summary of the analytical results of samples collected during the CERCLA Screening Site Inspection conducted at Lefton Iron & Metal in East St. Louis, Illinois.

Laboratory analysis of the 14 soil samples collected by IEPA personnel during the inspection revealed the following substances: volatile organic compounds (VOCs), semi-volatile organic compounds (base/neutral/acids), PCBs, inorganics, and suspected (organic) laboratory artifacts (see Table 3-1 for a summary of the soil analytical results). Appendix E (see Volume 2 of 2) contains the complete validated laboratory data package.

Soil Samples: A total of 14 soil samples were collected during the Screening Site Inspection of Lefton Iron & Metal. Refer to Tables 3-1, 3-2, and 3-3 for specific analytical and sampling information regarding each sample.

Soil samples X101 and X102 were obtained from a depth of approximately 1 to 5 inches with a stainless steel trowel from a nearby residential park as the background and duplicate. The samples were located 68 feet southwest of Market Street and 169 feet and 6 inches northwest of north corner of the tennis courts. Lincoln Park is located approximately three blocks south of Lefton Iron & Metal. It was chosen as the point to obtain the background because due

to the fact that it appeared to be an area in which the soil had been undisturbed. All samples were split with an employee of the environmental consulting firm of Shannon & Wilson, Incorporated. The consultant indicated that these samples were to be analyzed exclusively for PCBs.

Soil sample X103 was collected from a depth of approximately 3 to 5 inches with a stainless steel trowel, approximately 21 feet 5 inches north and 7 feet 2 inches west of the northwest corner of the small baler located on the 17th Street facility. This sampling point was chosen because of its proximity to the baler. Since much of the scrap that comes into the facility is processed through this baler it seemed a logical place from which to take the sample. Also, the soil in the area had recently been disturbed indicating activity in the area.

Soil sample X104 was collected from a depth of 1 to 3 inches with a stainless steel trowel, approximately 90 feet southeast and 51 feet 6 inches north of the northeast corner of the large baler located at the 17th Avenue facility. This sampling location was again selected because of its proximity to the baler, and the fact that any of the scrap that is to be reduced for resale is cut or compacted at one of these two balers.

Soil sample X105 was obtained from a depth of approximately

1 to 4 inches with a stainless steel trowel, approximately 140 feet 3 inches northeast of the western property boundary (a fence) and 104 feet 9 inches south of the northwestern corner of the 17th Street facility. This sample was taken in an area where much of the larger scrap items such as transformers and automobile engines had been stored by Lefton Iron & Metal, and dismantled with a blow torch. These items are made of hardened steel or iron and are too large and dense to be shredded or compacted by the balers at the facility.

Soil sample X106 was taken at a depth of approximately 1 to 4 inches with a stainless steel trowel, approximately 32 feet east and 97 feet south of the southeast corner of the office located at the Converse Avenue facility. This sample was collected at this point because it appeared that there had been recent activities in the area. The soil appeared to have been disturbed and was stained almost black on the surface.

Sample X107 was obtained at a depth of approximately 1 to 3 inches with a stainless steel trowel, approximately 85 feet 8 inches west and 7 feet 7 inches east of the gate along Converse Avenue. The sampling point was chosen because there were a few empty 55-gallon drums in the immediate area and some of the soils appeared to have been stained.

Sample X108 was collected at a depth of 1 to 4 inches with a stainless steel trowel approximately 9 feet 3 inches south of southern boundary (the fence) and 65 feet 2 inches southwest of the southeast corner of the Converse Avenue facility. This sampling point was chosen due to the fact that it was located in an area identified by the United States Department of the Interior as a wetland (refer to Figure 3-3). Recent facility operations suggest that this wetland area has been slowly filled in by the Lefton Iron & Metal Company as they have slowly bought up pieces of property zoned as residential by the City of East St. Louis. It appears that this was done in order to expand the size of operations at the Converse Avenue facility.

Sample X109 was taken with a stainless steel trowel at a depth of 1 to 4 inches, approximately 34 feet 8 inches south of the fence and 53 feet 4 inches southwest of the corner of the same fence at the rear of the Converse Avenue facility. This sampling point was chosen because appeared to be the area in which soil had been reportedly dumped at the rear of the Converse Avenue facility. During a prior sampling event conducted by the IEPA this soil had previously been identified as contaminated with PCBs during a prior sampling event conducted by the IEPA. This sample was taken from the same wetland area as X108 as identified by the U.S. Dept. of the Interior (refer to Figure 3-3).

Figure 3-3

ILLINOIS ENVIRONMENTAL PROTECTION AGENCY	SITE: Lefton Iron & Metal ILD#: 984809244
CONTAMINATED WETLAND AREA	

Sample X110 was obtained at a depth of approximately 1 to 4 inches with a stainless steel trowel, approximately 79 feet 6 inches south and 2 feet west of the first telephone pole west of the Obernester warehouse along the railroad tracks south of the Converse Avenue facility. The area from which this sample was obtained was heavily vegetated although the ground in the area appeared to be composed of fill material. This area has also been identified by the U.S. Dept. of the Interior as a wetland (refer to Figure 3-3). Some of the fill material appeared to have been in the area for quite some time but other areas seemed to have been filled in the past few years. It also appeared to be an open dump given the type of items that were laying about the area. The sample was composed primarily of organic matter with small pieces of rock and brick interspersed throughout.

Sample X111 was collected with a stainless steel trowel at a depth of 1 to 3 inches in the same wetland area identified by the U.S. Dept of the Interior as X108 and X109 (refer to Figure 3-3). The sampling point is located approximately 89 feet 4 inches south and 16 feet 3 inches west of the southwest corner of the fence surrounding Lefton's Converse Avenue facility. This sample was taken in order to determine whether or not hazardous compounds had migrated from the facility to the surrounding area identified as a wetland.

Sample X112 was collected with a stainless steel trowel at a depth of approximately 1 to 4 inches from the front yard of the residence at non responsive -personal privacy information. The sampling point was located approximately 19 feet west and 1 foot south of the southwest corner of the residence. This sample was taken in order to determine if any of the hazardous constituents revealed in the lab analysis had migrated to the surrounding community.

Sample X113 was taken at a depth of 1 to 4 inches with a stainless steel trowel from the front yard of the residence at non responsive -personal privacy information. The sampling point was located approximately 31 feet 6 inches west and 4 feet 8 inches south of the northwest corner of the residence. This sample was also taken in order to determine if activities at Lefton Iron & Metal could potentially be affecting the resident population in the surrounding community.

Sample X114 was collected at a depth of approximately 1 to 4 inches with a stainless steel trowel from the backyard of the residence at non responsive -personal privacy information. The sampling point was located approximately 14 feet 2 inches and 2 feet south of the northwest corner of the residence. This point was chosen due to the fact that it was the nearest residence to the 17th Street facility in which someone was actually residing.

3.6 KEY SAMPLES

The following table (Table 3-2) identifies the key samples that were taken during the Lefton Iron & Metal Screening Site Inspection. These samples revealed contaminants at concentrations significantly higher than the background concentrations. For a review of all contaminants detected in all samples refer to Table 3-1. Table 3-1 can also be found at the front of Volume 2 of 2 of this report.

SITE NAME: LEFTON IRON & METAL

ILD NUMBER: 045698263

TABLE 3-1
SUMMARY
Facility Soil Samples

SAMPLING POINT / PARAMETER	X101 Background Soil	X102 Duplicate Soil	X103 Soil	X104 Soil	X105 Soil	X106 Soil	X107 Soil
VOLATILES							
Acetone	6.0 J	12.0 U	--	--	8.0 J	3.0 J	--
Toluene	12.0 U	12.0 U	--	--	--	--	8.0 J
Xylene(total)	12.0 U	12.0 U	--	--	--	--	5.0 J
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SEMIVOLATILES							
Acenapthene	400.0 U	390.0 U	--	--	--	--	620.0 J
Dibenzofuran	400.0 U	390.0 U	--	--	--	--	510.0 J
Flourene	400.0 U	390.0 U	--	--	--	--	440.0 J
Phenol	400.0 U	390.0 U	--	18000.0 J	--	--	--
Phenanthrene	120.0 J	98.0 J	--	6600.0 J	--	--	1100.0 J
Fluoranthene	250.0 J	190.0 J	5400.0 J	12000.0 J	--	--	3200.0
Pyrene	180.0 J	160.0 J	5300.0 J	10000.0 J	--	--	4600.0
Benzo(a)anthracene	150.0 J	110.0 J	--	6200.0 J	--	--	--
bis(2-Ethylhexyl)phthalate	400.0 U	390.0 U	15000.0 J	12000.0 J	--	--	15000.0 E
Benzo(b)fluoranthene	240.0 J	160.0 J	--	14000.0 J	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PESTICIDES & PCB's							
beta-BHC	21.0 U	20.0 U	--	--	200.0 JPD	--	--
Aldrin	3.2 JPD	2.2 JPD	1700.0 PD	2200.0 PD	1300.0 PD	2000.0 PD	100.0 PD
4,4'-DDE	26.0 JPD	61.0 PD	--	920.0 PD	--	--	--
Endrin	12.0 JPD	10.0 JPD	1700.0 PDJ	180.0 JPD	--	--	130.0 D
Endosulfan II	40.0 U	39.0 UJ	1100.0 PD	290.0 JPD	1100.0 PD	--	130.0 PD
Endosulfan sulfate	40.0 U	39.0 U	--	31.0 JPD	130.0 JPD	--	--
4,4'-DDT	24.0 JPD	200.0 UJ	--	120.0 JPD	350.0 JPD	--	14.0 JPD
Endrin aldehyde	40.0 U	39.0 UJ	970.0 PD	--	--	--	--
gamma-Chlordane	21.0 U	20.0 U	200.0 JPD	160.0 JPD	190.0 JPD	290.0 PD	16.0 JPD
Aroclor-1248	400.0 U	390.0 U	25000.0 PD	44000.0 PD	--	--	--
Aroclor-1254	400.0 U	390.0 U	29000.0 PD	21000.0 PD	40000.0 PD	44000.0 PD	2200.0 PD
Aroclor-1260	400.0 U	390.0 U	44000.0 PD	13000.0 PD	32000.0 PD	18000.0 PD	2800.0 PD
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
INORGANICS							
Aluminum	9320.0	9200.0	67700.0	12400.0	7800.0	9000.0	8290.0
Antimony	13.6 U	12.3 U	35.6	89.2	66.7	13.8	22.9
Arsenic	7.2	6.5	223.0	45.3	110.0	36.5	30.4
Barium	117.0	116.0	2170.0	1200.0	1350.0	1070.0	625.0
Beryllium	0.7 B	0.7 B	2.5	2.5	1.2 B	1.6 B	1.8
Cadmium	4.4 U	4.9	256.0	289.0	119.0	56.9	40.5
Calcium	14400.0	15000.0	45100.0	33500.0	21000.0	38500.0	68700.0
Chromium	15.6	15.2	513.0	570.0	191.0	320.0	402.0
Cobalt	7.8 B	6.2 B	54.2	40.2	121.0	22.4	23.1
Copper	36.2	39.6	4820.0	2060.0	2600.0	1690.0	1230.0
Iron	15900.0	15700.0	130000.0	229000.0	130000.0	173000.0	143000.0
Lead	115.0	102.0	2270.0	12500.0	4200.0	3180.0	1910.0
Magnesium	9030.0	9230.0	13500.0	7580.0	5370.0	9070.0	7370.0
Manganese	394.0	403.0	2020.0	2010.0	1470.0	1870.0	1620.0
Mercury	0.1 B	0.1 B	32.4	6.1	3.0	7.0	3.6
Nickel	18.3	16.0	263.0	553.0	225.0	422.0	723.0
Potassium	1630.0	1590.0	778.0 B	800.0 B	651.0 B	958.0 B	1010.0 B
Selenium	0.3 U	0.2 B	3.6	1.5 B	1.3 B	3.6	3.0
Silver	1.0 B	0.9 B	3.6	3.2	10.0	13.8	1.7 B
Sodium	205.0 B	89.2 B	481.0 B	1100.0 B	1180.0 B	400.0 B	517.0 B
Vanadium	29.8	29.1	90.4	34.0	32.0	34.6	58.9
Zinc	345.0	383.0	6330.0	8330.0	5560.0	6560.0	3020.0
Cyanide	1.0 U	1.0 U	1.4	1.5	4.4	--	--
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

CERCLA SSI: Lefton Iron & Metal ILD 984809244

SITE NAME: LEFTON IRON & METAL

ILD NUMBER: 984809244

TABLE 3-1 (cont.)
SUMMARY
Residential & Wetlands

SAMPLING POINT / PARAMETER	X101 Background Soil	X102 Duplicate Soil	X108 Soil	X109 Soil	X110 Soil	X111 Soil	X112 Soil	X113 Soil	X114 Soil
VOLATILES									
Toluene	12.0 U	12.0 U	4.0 J	--	--	--	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
SEMIVOLATILES									
Naphthalene	400.0 U	390.0 U	620.0 J	--	--	--	--	--	--
2-Methylnaphthalene	400.0 U	390.0 U	620.0 J	--	--	--	--	--	940.0 J
Dibenzofuran	400.0 U	390.0 U	--	--	8600.0 J	--	--	--	--
Fluorene	400.0 U	390.0 U	--	--	7900.0 J	--	--	--	--
Phenanthrene	120.0 J	98.0 J	2700.0	--	81000.0	270.0 J	390.0 J	--	1700.0 J
Anthracene	400.0 U	390.0 U	--	--	10000.0 J	--	--	--	--
Carbazole	400.0 U	390.0 U	--	--	13000.0 J	--	--	--	--
Fluoranthene	250.0 J	190.0 J	--	--	74000.0	540.0 J	980.0	--	1600.0 J
Pyrene	160.0 J	160.0 J	--	--	65000.0	320.0 J	890.0	--	1200.0 J
Benzo(a)anthracene	150.0 J	110.0 J	--	--	27000.0	--	450.0 J	--	880.0 J
Chrysene	150.0 J	150.0 J	--	--	--	300.0 J	920.0	--	1200.0 J
bis(2-Ethylhexyl)phthalate	400.0 U	390.0 U	--	6400.0 J	--	--	--	--	--
Benzo(b)fluoranthene	240.0 J	160.0 J	--	--	87000.0	480.0 J	810.0	2900.0 J	--
Benzo(k)fluoranthene	160.0 J	110.0 J	--	--	--	--	420.0 J	--	1300.0 J
Benzo(a)pyrene	400.0 U	130.0 J	--	--	22000.0 J	--	470.0	--	--
Indeno(1,2,3-cd)pyrene	400.0 U	390.0 U	--	--	15000.0 J	--	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PESTICIDES & PCB's									
alpha-BHC	21.0 U	20.0 UJ	--	--	1.2 JPD	--	--	--	1.5 JPD
gamma-BHC (Lindane)	21.0 U	20.0 UJ	--	--	5.7 JPD	--	160.0 PDJ	1.0 JPD	4.7 JPD
Aldrin	3.2 BJ	2.2 JPD	1900.0 BPD	--	35.0 D	--	33.0 BPD	11.0 JPD	--
Heptachlor epoxide	21.0 U	20.0 U	--	--	--	--	22.0 JPD	--	--
Endosulfan I	21.0 U	20.0 U	--	--	--	5.5 JPD	--	--	--
Dieldrin	32.0 JP	39.0 JPD	--	670.0 PD	130.0 PD	180.0 PD	3000.0 PD	130.0 PD	160.0 PD
4,4'-DDE	26.0 JP	61.0 PD	--	--	210.0 PD	--	--	68.0 PD	270.0 PD
Endrin	12.0 JP	10.0 JPD	--	3200.0 PD	290.0 PDJ	87.0 PD	63.0 PDJ	--	90.0 PD
Endosulfan II	40.0 U	39.0 UJ	--	1100.0 PD	99.0 PD	41.0 JPD	--	--	--
Endosulfan sulfate	40.0 U	39.0 U	45.0 JPD	--	340.0 PD	47.0 JPD	37.0 JPD	22.0 JPD	95.0 PD
4,4'-DDT	24.0 JP	200.0 UJ	--	--	850.0 PDJ	34.0 JPD	140.0 PDJ	290.0 PDJ	550.0 PD
Methoxyclor	210.0 U	200.0 UJ	--	--	--	--	--	36.0 JPD	--
Endrin ketone	40.0 U	39.0 UJ	--	1100.0 PDJ	--	--	36.0 JPD	78.0 PDJ	--
Endrin aldehyde	40.0 U	39.0 UJ	650.0 PD	--	--	--	--	--	--
alpha-Chlordane	21.0 U	20.0 U	--	1100.0 PD	98.0 PD	15.0 JPD	120.0 D	8.9 JPD	7.5 JPD
gamma-Chlordane	21.0 U	20.0 U	210.0 PD	210.0 PD	32.0 PD	6.3 JPD	47.0 PD	8.5 JPD	21.0 JD
Aroclor-1248	400.0 U	390.0 U	31000.0 PD	--	--	--	--	--	--
Aroclor-1254	400.0 U	390.0 U	58000.0 PD	51000.0 PD	1100.0 PD	690.0 PD	510.0 PD	270.0 JPD	--
Aroclor-1260	400.0 U	390.0 U	49000.0 PD	--	--	--	--	400.0 JPD	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
INORGANICS									
Aluminum	9320.0	9200.0	11900.0	11000.0	12000.0	14700.0	9830.0	8270.0	10400.0
Antimony	13.6 U	12.3 U	35.8	32.6	19.8	--	--	10.6 B	--
Arsenic	7.2	6.5	46.1	59.5	17.8	6.7	7.4	6.2	7.4
Barium	117.0	116.0	1100.0	840.0	632.0	284.0	163.0	111.0	411.0
Beryllium	0.7 B	0.7 B	2.8	2.0	2.0	1.2 B	0.7 B	0.7 B	1.2 B
Cadmium	4.4	4.9	95.8	106.0	14.5	6.0	4.6	2.5	8.2
Calcium	14400.0	15000.0	42800.0	45000.0	18800.0	7990.0	27300.0	23300.0	11700.0
Chromium	15.6	15.2	536.0	329.0	67.7	58.6	23.5	22.7	30.8
Cobalt	7.8 B	6.2 B	36.7	28.1	12.7 B	110.0	6.5	5.3 B	7.3 B
Copper	38.2	39.6	1310.0	1290.0	241.0	178.0	75.7	51.9	180.0
Iron	15900.0	15700.0	189000.0	141000.0	85900.0	49200.0	20400.0	28900.0	22000.0
Lead	115.0	102.0	3630.0	3890.0	1320.0	212.0	207.0	212.0	887.0
Magnesium	9030.0	9230.0	5320.0	5240.0	1910.0	3740.0	12500.0	10900.0	2290.0
Manganese	394.0	403.0	1920.0	1660.0	634.0	624.0	599.0	877.0	378.0
Mercury	0.1 B	0.1 B	13.9	11.2	0.5	0.8	0.4	0.2	0.2
Nickel	18.3	18.0	599.0	257.0	47.5	27.0	22.4	18.6	25.9
Potassium	1630.0	1590.0	712.0 B	1060.0 B	1850.0	2200.0	2120.0	996.0	2120.0
Selenium	0.3 U	0.2 B	2.6	2.6	2.5	0.8 B	0.3 B	--	--
Silver	1.0 B	0.9 B	3.9	3.8	2.5 B	--	--	--	2.5 B
Sodium	205.0 B	89.2 B	285.0	501.0 B	488.0 B	104.0 B	101.0 B	150.0 B	305.0 B
Thallium	0.5 B	0.4	--	--	1.7 B	0.9 B	0.4 B	0.3 B	0.9 B
Vanadium	29.8	29.1	41.7	60.8	32.0	40.9	28.1	26.1	25.8
Zinc	345.0	383.0	8300.0	6270.0	1850.0	8320.0	567.0	299.0	1260.0
Cyanide	1.0 U	1.0 U	2.8	1.4	--	--	--	--	--
	mg/kg		mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

SITE NAME: Lefton Iron & Metal

ILD NUMBER: 984809244

TABLE 3-2
KEY SAMPLES
Facility Soil Samples

SAMPLING POINT PARAMETER	X101 Background Soil	X103 Soil	X104 Soil	X105 Soil	X106 Soil	X107 Soil
SEMIVOLATILES						
Phenol	400.0 U	--	18000.0 J	--	--	--
Phenanthrene	120.0 J	--	6600.0 J	--	--	1100.0 J
Fluoranthene	250.0 J	5400.0 J	12000.0 J	--	--	3200.0
Pyrene	180.0 J	5300.0 J	10000.0 J	--	--	4600.0
Benzo(a)anthracene	150.0 J	--	6200.0 J	--	--	--
bis(2-Ethylhexyl)phthalate	400.0 U	1500.0 J	12000.0 J	--	--	15000.0 E
Benzo(b)flourar thene	240.0 J	--	14000.0 J	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PESTICIDES & PCBs						
beta-BHC	21.0 U	--	--	200.0 JPD	--	--
Aldrin	3.2 BJ	1700.0 PD	2200.0 PD	1300.0 PD	2000.0 PD	100.0 PD
4,4'-DDE	26.0 JPD	--	920.0 PD	--	--	--
Endrin	12.0 JPD	1700.0	180.0 JPD	--	--	130.0 D
Endosulfan II	40.0 U	1100.0	290.0 JPD	1100.0 PD	--	130.0 PD
Endosulfan sulfate	40.0 U	--	--	130.0 JPD	--	--
4,4'-DDT	24.0 JPD	--	120.0 PD	350.0 JPD	--	--
Endrin aldehyde	40.0 U	970.0	--	--	--	--
gamma-Chlordane	21.0 U	200.0	160.0 JPD	190.0 JPD	290.0 PD	--
Aroclor-1248	400.0 U	25000.0	44000.0 PD	--	--	--
Aroclor-1254	400.0 U	29000.0	21000.0 PD	40000.0 PD	44000.0 PD	2200.0 PD
Aroclor-1260	400.0 U	44000.0	13000.0 PD	32000.0 PD	18000.0 PD	2800.0 PD
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
INORGANICS						
Antimony	13.6 U	--	89.2	66.7	13.8	22.9
Arsenic	7.2	223.0	45.3	110.0	36.5	30.4
Barium	117.0	2170.0	1200.0	1350.0	1070.0	625.0
Beryllium	0.7 B	2.5	2.5	--	--	--
Cadmium	4.4	256.0	289.0	119.0	56.9	40.5
Calcium	14400.0	45100.0	--	--	--	68700.0
Chromium	15.6	513.0	570.0	191.0	320.0	402.0
Cobalt	7.8 B	54.2	40.2	121.0	22.4	23.1
Copper	36.2	4820.0	2060.0	2600.0	1690.0	1230.0
Iron	15900.0	130000.0	229000.0	130000.0	173000.0	143000.0
Lead	115.0	2270.0	12500.0	4200.0	3180.0	1910.0
Manganese	394.0	2020.0	2010.0	1470.0	1870.0	1620.0
Mercury	0.1 B	32.4	6.1	3.0	7.0	3.6
Nickel	18.3	263.0	553.0	225.0	422.0	723.0
Selenium	0.3 U	3.6	1.5 B	1.3 B	3.6	3.0
Silver	1.0 B	3.6	3.2	10.0	13.8	--
Sodium	205.0 B	--	1100.0 B	1180.0 B	--	--
Vanadium	29.8	90.4	--	--	--	--
Zinc	345.0	6330.0	8330.0	5560.0	6560.0	3020.0
Cyanide	1.0 U	1.4	1.5	4.4	--	--
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

SITE NAME: LEFTON IRON & METAL

ILD NUMBER: 984609244

TABLE 3 – 2 (cont.)
KEY SAMPLES
Residential & Wetlands

SAMPLING POINT	X101	X108	X109	X110	X111	X112	X113	X114
PARAMETER	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil
SEMIVOLATILES								
Dibenzofuran	400.0 U	--	--	6300.0 J	--	--	--	--
Fluorene	400.0 U	--	--	7900.0 J	--	--	--	--
Phenanthrene	120.0 J	2700.0	--	81000.0	--	380.0 J	--	1700.0 J
Anthracene	400.0 U	--	--	10000.0 J	--	--	--	--
Carbazole	400.0 U	--	--	13000.0 J	--	--	--	--
Fluoranthene	250.0 J	--	--	74000.0	--	980.0	--	1600.0 J
Pyrene	180.0 J	--	--	55000.0	--	660.0	--	1200.0 J
Benzo(a)anthracene	150.0 J	--	--	27000.0	--	450.0 J	--	880.0 J
Chrysene	150.0 J	--	--	--	--	520.0	--	1200.0 J
bis(2-Ethylhexyl)phthalate	400.0 U	--	6400.0 J	--	--	--	--	--
Benzo(b)fluoranthene	240.0 J	--	--	37000.0	--	610.0	2600.0 J	--
Benzo(k)fluoranthene	180.0 J	--	--	--	--	420.0 J	--	1300.0 J
Benzo(a)pyrene	400.0 U	--	--	22000.0 J	--	470.0	--	--
Indeno(1,2,3-cd)pyrene	400.0 U	--	--	15000.0 J	--	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
PESTICIDES & PCB's								
gamma-BHC (Lindane)	21.0 U	--	--	--	--	180.0 J	--	--
Aldrin	3.2 BJ	1900.0 BPD	--	53.0 D	--	--	--	--
Dieldrin	32.0 JP	--	670.0 PD	130.0 PD	180.0 PD	3000.0 PD	130.0 PD	160.0 PD
4,4'-DDE	26.0 JP	--	--	210.0 PD	--	--	89.0 PD	270.0 PD
Endrin	12.0 JP	--	3200.0 PD	260.0 PDJ	57.0 PD	--	--	90.0 PD
Endosulfan II	40.0 U	--	1100.0 PD	--	--	--	--	--
Endosulfan sulfate	40.0 U	--	--	340.0 PD	--	--	--	--
4,4'-DDT	24.0 JP	--	--	650.0 PDJ	--	140.0 PDJ	280.0 PDJ	590.0 PD
Endrin ketone	40.0 U	--	1100.0 PDJ	--	--	--	--	--
Endrin aldehyde	40.0 U	650.0 PD	--	--	--	--	--	--
alpha-Chlordane	21.0 U	--	1100.0 PD	--	--	120.0 D	--	--
gamma-Chlordane	21.0 U	210.0 PD	210.0 PD	--	--	--	--	--
Aroclor-1248	400.0 U	31000.0 PD	--	--	--	--	--	--
Aroclor-1254	400.0 U	58000.0 PD	51000.0 PD	1100.0 PD	--	--	--	--
Aroclor-1260	400.0 U	49000.0 PD	--	--	--	--	--	--
	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg	ug/kg
INORGANICS								
Antimony	13.6 U	35.8	32.6	19.8	--	--	--	--
Arsenic	7.2	45.1	59.5	--	--	--	--	--
Barium	117.0	1100.0	840.0	832.0	--	--	--	411.0
Beryllium	0.7 B	2.6	--	--	--	--	--	--
Cadmium	4.4	95.8	106.0	14.5	--	--	--	--
Calcium	14400.0	42800.0	45000.0	--	--	--	--	--
Chromium	15.6	536.0	329.0	67.7	55.6	--	--	--
Cobalt	7.8 B	36.7	29.1	--	110.0	--	--	--
Copper	36.2	1310.0	1250.0	241.0	178.0	--	--	180.0
Iron	15900.0	169000.0	141000.0	85900.0	49200.0	--	--	--
Lead	115.0	3630.0	3890.0	1320.0	--	--	--	887.0
Manganese	394.0	1920.0	1660.0	--	--	--	--	--
Mercury	0.1 B	13.9	11.3	0.5	0.5	0.4	--	--
Nickel	18.3	599.0	257.0	--	--	--	--	--
Selenium	0.3 U	2.6	2.6	2.5	0.8 B	0.3 B	--	--
Silver	1.0 B	3.9	3.8	--	--	--	--	--
Thallium	0.5 B	--	--	1.7 B	--	--	--	--
Zinc	345.0	8300.0	6270.0	1650.0	6320.0	--	--	1260.0
Cyanide	1.0 U	2.8	1.4	--	--	--	--	--
	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg

TABLE 3-3

SAMPLE DESCRIPTIONS

Sample	Depth	Appearance	Location
X101 X102	1" – 5"	Brown loam.	68' southwest of Market Street and 169'6" northwest of the north corner of the tennis court.
X103	3" – 5"	Brown and stained with a large amount of rock and metal shavings.	21'5" north and 7'2" west of the northwest corner of the small bailer at the 17th Street facility.
X104	1" – 3"	Soil was light brown and loose with water.	90' southeast and 51'6" north of the northeast corner of the large bailer at the 17th Street facility.
X105	1" – 4"	Brown fill material with gravel and pieces of scrap.	140'3" northeast of the fence and 109'9" south of the northwestern corner of the 17th Street facility.
X106	1" – 4"	Brown fill material with rocks and glass.	32' east and 97' south of the southeast corner of the office at the Converse Avenue facility.
X107	1" – 3"	Brown fill material with rocks and scrap metal.	85'8" west and 7'7" south of the gate along Converse Avenue.
X108	1" – 4"	Black loam with gravel and scrap metals interspersed.	9'3" south of the fence and 65'2" southwest of the corner of the fence at the rear of the Converse Avenue facility.
X109	1" – 4"	Black soil with gravel, bricks, and scrap metals.	34'8" south of the fence and 53'4" southwest of the corner of the fence at the rear of the Converse Avenue facility.
X110	1" – 4"	Black fill material with organic matter, rock, and brick.	79'6" south and 2' west of the first telephone pole west of the Obernester fence line.
X111	1" – 3"	Black loam and gray clay.	89'4" south and 16'3" west of the southwest corner of the fence on Lefton's Converse Avenue facility.
X112	1" – 4"	Soil was light to dark brown silty clay.	19' west and 1' south of the southwest corner of the residence at [redacted] Avenue.
X113	1" – 4"	Light brown to brown silty clay with fill material.	31'6" west and 4'8" south of the northwest corner of the [redacted] Avenue residence.
X114	1" – 4"	Black to brown loam with a small amount of fill material.	14'2" southwest and 2' south of the northwest corner of the residence at [redacted] Avenue.

SECTION 4

IDENTIFICATION OF SOURCES

4.1 INTRODUCTION

This section describes the various hazardous waste sources which have been identified in the initial stages of the CERCLA site investigation.

Information concerning the size, volume, and waste composition of each source has been collected during the Preliminary Assessment and this Screening Site Inspection. The quantitative values associated with the soil exposure pathway are subject to change upon further investigation where more contaminants may be found. The values presented are based on documented visual observations, preliminary investigative reports, aerial photographs, and analytical data.

4.2 WASTE PILE I - (17th Street)

Part of the property at the 17th Street facility has been identified as a waste pile. It was noted by the sampling team that part of the 17th Avenue facility was composed of fill material during the field screening used to obtain good sampling points. This was especially true in the northern section of the 17th Street facility where most of the scrap is stacked in large piles. Material from the scrap piles settles out onto the ground. When the scrap is finally

moved to be cut, compacted, or sold, the area where the pile was located is then leveled out. The area between and surrounding sampling points X103, X104, and X105 (refer to Figure 3-1) at the 17th Avenue facility has been identified as a waste pile. This area was measured using aerial photography and the Planix 5 Planimeter.

Analytic results from the samples taken from this waste pile revealed elevated concentrations of semi-volatiles, PCBs, and inorganics. These contaminants could potentially affect the employees of Lefton Iron & Metal, especially the ones working in the scrap yard. Given that the soil is often disturbed and open burning reportedly takes place at the facility, there is the potential for contaminants to migrate through the air pathway and affect the surrounding community. Some of the same contaminants were found in the samples taken from nearby residences.

4.3 WASTE PILE II - (Converse Avenue)

A portion of Lefton's property at Converse Avenue has been identified as a waste pile. During conversations with Mr. Norman and Benjamin Lefton it was revealed that they have slowly filled in the property on Converse Avenue in order to level out the ground. Lefton employees take some of the soils that have settled out of scrap piles at the 17th Street facility and use that to fill in areas at the Converse Avenue facility. The sampling discovered that the property at

Converse Avenue was composed almost exclusively of fill material during the field screening used to determine a good sampling point. This fill material was composed of various soils, metal shavings, and other items such as saw dust and gravel. The United States Department of the Interior has also identified the majority of this property as a wetland. This waste pile also includes the area in which the PCB contaminated soil was dumped outside the fence the forms the southeast border of the facility, but is still Lefton property.

The area between sampling points X106, X107, X108, X109, and X111 (refer to Figure 3-2) has been identified as a waste pile. This area was measured using aerial photography and the Planix 5 Planimeter.

Analytic results from the samples obtained at the Converse Avenue facility revealed elevated concentrations of PCBs and inorganics. These contaminants could potentially affect the workers employed at Lefton Iron & Metal. There are very few residents in the vicinity which would be affected by activities at this particular facility. A soil sample obtained from a nearby residence revealed the presence of elevated concentrations of semi-volatiles. These results do not correlate with the analytic results from the on-site samples.

4.4 CONTAMINATED SOILS

It is important to point out that contaminated soils at concentrations above background have been identified in samples taken from residences in the surrounding community. While it would be difficult to attribute these contaminants solely to Lefton Iron & Metal given the number of past and present industrial operations in the area, it is probable that operations at the site have been a contributing factor.

Two of the soil samples taken from neighboring residential yards during the SSI revealed PCBs, pesticides, and inorganics which may be attributable to the site given the proximity of the residences to the facilities and past reported business practices. Contaminants revealed in the laboratory analysis of residential samples were also present in samples taken from the facility although at lower concentrations. Further sampling of other residences in the area would reveal the extent of the contamination and help to determine whether or not Lefton Iron & Metal is contributing to the contamination.

SECTION 5

MIGRATION PATHWAYS

5.1 INTRODUCTION

The CERCLA Site Assessment Program identifies three migration pathways and one exposure pathway by which hazardous substances may pose a threat to human health and/or the environment. Consequently, site are evaluated on their known or potential impact to these four pathways. The pathways evaluated are groundwater migration, surface water migration, soil exposure, and air migration.

This section presents and discusses information collected during the CERCLA Screening Site Inspection of Lefton Iron & Metal. This information, together with information documented in other sources, will be utilized in analyzing the site's impact on the four pathways and the various human and environmental targets within the established target distance limits.

Discussions of the pathways will include pathway descriptions, containment sources, and targets, such as human populations, fisheries, endangered species, wetlands, and other sensitive environments.

5.2 GROUNDWATER PATHWAY

No groundwater samples were collected during the Screening Site Inspection conducted at Lefton Iron & Metal. The vast majority of residents of the City of East St. Louis and the outlying communities receive their drinking water from a surface water intake located on the Mississippi River. There are no public drinking water wells located within a four mile radius of the site. The nearest private well is located at the Obernester Corportation building northeast of the Converse Avenue facility.

According to the American Bottoms Groundwater Study and the St. Clair County Soul survey, this particular area is primarily composed of two types of soils. The upper section consists of clayey silt with fine sand which is a recent alluvium. The lower section consists of medium to coarse sand and gravel and is glacial outwash. This outwash is five to 200 feet thick and contains the aquifer of concern in this area. Recharge of this aquifer is from precipitation and surface water infiltration caused by well pumping in the area. Groundwater flow in the area is believed to be towards the Mississippi River.

5.3 SURFACE WATER PATHWAY

No surface water samples were taken during the Screening Site Inspection conducted at Lefton Iron & Metal. Surface water from this site runs off directly into storm sewers at the

17th Street facility and into a holding ditch along the railroad tracks at the rear of the Converse Avenue facility.

Off-site samples taken from the wetlands underlying the Converse Avenue facility revealed the presence of inorganics, PCBs, and volatile organic compounds although at lesser concentrations. Compounds found in these soil samples are compared to background soil sample X101 and summarized in Table 3-1. Compounds detected in these samples that may be attributable to Lefton Iron & Metal and over three times the background concentration are compared to background soil sample X101 and summarized in Table 3-2.

5.4 AIR PATHWAY

No air sampling was conducted at the Screening Site Inspection of Lefton Iron & Metal. However, the sampling team observed that a pile of soil at the Converse Avenue facility was smoldering during the sampling. Mr. Merrill, the attorney representing Lefton Iron & Metal, indicated that there has never been an incinerator in operation at these properties. A release to the air is suspected due to the fact that a number of the neighboring residents have reported open burning at the site. During the site reconnaissance on April 6, 1993, the inspection team noticed an employee of Lefton Iron & Metal burning something off of a piece of scrap metal with a blow torch. When questioned about the burning, Mr. Lefton assured the inspection team that it was nothing

more than paper and was normal practice to do so.

The potential for contaminants to migrate off-site through the air pathway is highly probable given all the indications that open burning takes place at Lefton Iron & Metal. Also, the scrap is constantly being moved around and the ground in the those areas is constantly being disturbed. Contaminants which could be associated with past facility operations were found in residential samples taken from the top six inches of soil.

According to U.S. Dept. of the Interior "National Wetland Inventory Maps" the Converse Avenue facility is located on a designated wetland area. There are also approximately 20 acres of designated wetland areas within 1/2 mile of the site. As stated earlier in this report the Leftons revealed that they have slowly been filling in the area identified as a wetland which is on their Converse Avenue property. Samples taken from the wetland area revealed elevated concentrations of inorganics and PCBs.

Table 5-1
Estimated Air Target Populations

On a source	30
0 to 1/4 mile	1,639
1/4 to 1/2 mile	3,329
1/2 to 1 mile	9,936
1 to 2 miles	21,801
2 to 3 miles	27,597
3 to 4 miles	24,081
Total	88,383

5.5 SOIL EXPOSURE PATHWAY

Soil samples taken during the Screening Site Inspection indicate a release of contaminants to nearby residences that may be attributable to Lefton Iron & Metal. Several inorganic compounds, PCBs, and volatile organic compounds were found at elevated concentrations in soil samples obtained from both the 17th Street and Converse Avenue facilities.

Although none of the inorganic compounds found in residential soil samples X112 - X114 were in excess of any established health standards, they do meet the criteria for observed contamination. The resident population at each sampling point is one resident at X112, at least two residents at X113, and one resident at X114. All residential samples were collected within 50 feet of the houses and within the top foot of soil. The residential population was figured using a 2.76 person per household average for St. Clair County. The population within one mile of the site is provided in Table 5-2.

Table 5-2
Estimated Soil Target Populations

On a source	30
0 to 1/4 mile	1,639
1/4 to 1/2 mile	3,329
1/2 to 1 mile	9,936
Total	**14,934**

No designated terrestrial sensitive environments are located

nearby. Site access to both facilities is restricted by an eight foot high chain link fence topped by barbed wire. Both facilities are kept locked when workers are not present, this includes anytime during normal operating hours when a worker is not around. A security guard patrols the premises after close of business. The area where the contaminated soil was found southeast of the Converse Avenue facility has essentially unrestricted access. It is surrounded by a snow fence that has been breached or removed in several spots. According to Benjamin Lefton that particular spot is used as a gathering place for local residents.