



Site
Investigation
Report
Review

SIRR Report
for
Unassigned Uncontrolled Sites

SIRR ID P82-0005
Site Name GATE CITY STEEL
City Location Davenport
Site Type Property Audit
County Scott

Screening Activity Extended Site Screening

If Extended Site Screening

Date ISS Completed 06/11/1998

SITE INFORMATION

Property Owner Gate City Steel Corporation

Mailing Address Bill Taylor
One Valmont Parkway
PO Box 358
Valley, NE 68064-0358

Location/Legal Description Midwest Metals, Inc.
2060 West River Drive
Davenport, Iowa 52808
SW 1/4 of Section 34, T78N, R3E

Size Of Property 10 acres

Report Prepared By Roberts/Schornick & Associates, Inc.

Date Report Submitted 07/16/1998

Report Submitted By Roberts/Schornick & Associates, Inc.

Current Usage Fabricate metal parts

REPORT INFORMATION SUMMARY

I. Summarize the data submitted (no., type, depth of soil borings, surface samples, ground water samples, other sampling conducted, analyses performed, contamination identified, etc.)

Phase I and Phase II site reports have been submitted. Three soil samples (SB-01 to SB-03) were collected along the western property boundary of the site. The samples were analyzed for RCRA metals. The sampling intervals were 0-6", 12-18", and 18-24". Most of the greatest contaminant levels were detected in SB-02 at 0-6". Mercury levels were negligible.

Arsenic - 4.3 ppm to 9.8 ppm
Barium - 52 ppm to 200 ppm
Cadmium 1.5 ppm to 7.6 ppm
Chromium - 14 ppm to 130 ppm
Lead - 120 ppm to 1800 ppm

Soil sample was also collected from MW-1. It contained motor oil (504 mg/kg) and low levels of toluene, 1,2,4-trimethylbenzene, xylenes, cadmium, chromium and lead.

Four monitoring wells (MW-1 to MW-4) have been installed at the site. Wells MW-1 to MW-3 range in depth from 16' to 20'. MW-4 was damaged and not re-installed. The remaining wells were temporary wells. MW-4 was installed in June 1984 during an investigation of an adjacent site. The well reportedly contained VOCs and heavy metals.

Well MW-3 contained benzene (90 ug/L), toluene (2,375 ug/L), ethylbenzene (1,380 ug/L), 1,1-dichloroethene (140 ug/L), cis-1,2-DCE (16,280 ug/L), methylene chloride (55.9 ug/L), styrene (185.3 ug/L), PCE (11,310 ug/L), 1,1,1-TCA (890.5 ug/L), TCE (2,434 ug/L), and vinyl chloride (835 ug/L) above IDNR action levels.

Well MW-1 misc. hydrocarbons (290 ug/L), 1,1-DCA (8.4 ug/L), cis-1,2-DCA (947.1 ug/L), TCE (31.8 ug/L), vinyl chloride (157 ug/L) and total metals such as cadmium, chromium, lead, and mercury above IDNR action levels. The dissolved concentrations were below detection limits.

EXTENDED SITE SCREENING

The consultant, RSA, for Gate City Steel conducted an additional investigation at the site in June 1998. Seven soil probe borings (SP-1 to SP-7) were drilled at the site with the use of a Geoprobe. The probes were advanced to the top of bedrock and ranged in depth from 4.0 feet to 12.6 feet below the surface. Soil samples were collected from the borings. PVC screens were installed in the borings before groundwater samples were collected.

Soil samples were analyzed for lead, and groundwater samples were samples were tested for volatiles. The lead levels in soil ranged from 59.5 mg/kg to 106 mg/kg at a depth of 0.0-1.8 feet, and 9.63 mg/kg to 10.8 mg/kg at depths of 2.0-4.0 feet.

The greatest contaminant concentrations in groundwater were:

vinyl chloride - 860 ug/L	cis-1,2-DCE - 7,900 ug/L
1,1-DCE - 35 ug/L	trans-1,2-DCE - 24 ug/L
1,1-DCA - 14 ug/L	naphthalene - 13 ug/L
1,1,1-TCA - 52 ug/L	TCE - 130 ug/L
toluene - 33 ug/L	PCE - 390 ug/L
ethylbenzene - 46 ug/L	

The vinyl chloride, 1,1-DCE, cis-1,2-DCE, TCE and PCE are above IDNR action levels. The highest concentrations were detected in samples collected near the eastern boundary of the property from soil probe borings SP-2, SP-5, and SP-7.

On July 27, 1998, the IDNR conducted an ESS at the site. The IDNR collected a surface waste sample, BPS-1, from the burn pile location. The sample was ash residue. Gravel and fragments of metal nails were in the sample. The sample was tested for inorganics, volatiles and semivolatiles. The sample contained semivolatiles and high levels of total metals: aluminum (5,100 mg/kg), antimony (1.8 mg/kg), arsenic (110 mg/kg), barium (1,800 mg/kg), calcium (220,000 mg/kg), chromium (120 mg/kg), cobalt (8.2 mg/kg), copper (160 mg/kg), iron (41,000 mg/kg), lead (32,000 mg/kg), magnesium (8,700 mg/kg), manganese (890 mg/kg), nickel (60 mg/kg), potassium (1,40 mg/kg), sodium (1,100 mg/kg), vanadium (15 mg/kg), and zinc (6,300 mg/kg).

Tentatively identified compounds (TICs) were also detected in the sample. The total TIC concentration is about 16 ppm. The TICs appear to be related to petroleum compounds: 2-furfural, undecane, dodecane, tridecane, 3-methyloctane, 2,4-dimethylheptane, eicosane, heneicosane, and 2,2'-diethyl-1,1'-biphenyl.

No permanent monitoring wells were installed on the Midwest Metal, Inc. property except for MW-4. This well was installed in 1985 during the investigation of the RV Hopkins facility. The integrity of the well appears questionable. The concrete base for the well is about 8 inches above the surface. Therefore, groundwater samples were collected from the monitoring wells located at the Citgo service station. The wells range in depth from 18 to 20 feet. These wells are downgradient of the Midwest Metals site and Harcros based on the RSA report. The samples were collected from monitoring wells MW-7, MW-10, MW-13 and MW-14. They were designated by the IDNR as CMW-7, CMW-10, CMW-13, and CMW-14, respectively.

A duplicate sample, CMW-19, was collected from CMW-13. The samples were tested for volatiles and semivolatiles.

Chlorinated hydrocarbons were detected in all of the groundwater sampling points except for CMW-7. Sample concentrations were less than detection limits in CMW-7. The highest concentrations of chlorinated compounds detected in groundwater are 40 ug/L 1,1-DCA, 310 ug/L 1,2-DCE (total), 7 ug/L 1,1,1-TCA, 8 ug/L TCE, 20 ug/L vinyl chloride and 15 ug/L chloroethane. The groundwater concentrations exceeded IDNR action levels for 1,1-DCA and chloroethane. Semivolatile and volatile TICs were detected in the groundwater samples. Their levels ranged from 12 ug/L to 169 ug/L total TICs.

II. Summarize the site history (past usages, known or suspected contamination pathways such as tanks, S.W. burial, septic tank/tile field, lagoon, land application, etc.)

Before 1953, the site was used as a quarry.

In May 1953, the southern bay of the building was constructed south of the quarry. Midwest Steel were the owners. From 1953 to 1959, the quarry was filled in with construction debris.

Historical and current use of the property consisted of metal fabrication and cutting, shearing, pressing and sawing metal stock.

The property was originally owned by Midwest Steel who leased it to Gate City Steel. Gate City Steel purchased the property in the late 1960s. Gate City Steel operated until 1990. From 1990 to 1991 the property was leased to Livenson Steel. From 1991 to present, the property is leased to Midwest Metals, Inc.

Waste streams at the site include:

- 1) Wastewater from the Water Tables - Water tables are used for cooling metal plates. During cutting operations, they are filled with metal and slag. The slag is removed by Enviromark when it reaches a certain level.
- 2) Waste Oils - generated from the maintenance of shears and presses. Currently waste oil is stored in 55-gallon drums and sent to a recycler when there is a large enough volume.
- 3) Used Oil Dry - Historically oil dry was used to absorb oil that dripped from shears and presses. Currently they are using and recycling absorbent pads.
- 4) Safety Kleen 105 Solvent (Mineral Spirits) - used to degrease dies before they are repaired. Small parts washer is used to hold the solvent. Safety Kleen replaces the spent solvent with new solvent once per month. About 2 gallons of spent solvent is generated per month.
- 4) Midwest burns waste wooden pallets in a small burn pile on the north side of the building. The ignition source has not been provided.

EXTENDED SITE SCREENING

During the IDNR ESS on July 27, 1998, Midwest Metals' manager of the engineering department stated the ignition source for the wooden pallets was cardboard. Subsequent interviews by telephone have revealed the pallets were burned on open burn days designated by the city of Davenport. They were burning the pallets about twice per week. Since the investigation, it has been determined burning the wooden pallets in the back of the facility is a violation of the Open Burning rule 567 IAC 23.2. Midwest Metals has ceased the practice of burning pallets. In addition to pallets, Midwest has stated cardboard and paper were also burned in the piles. They have been cited for the violation by the IDNR.

Aboveground storage tanks (ASTs) located at the Harcros facility were used for the storage of compounds detected in the groundwater. More information is provided in Part III of the Report Information Summary.

III. Summarize the other relevant information (include what may have been learned or known from sources other than the report itself, such as DNR files)

DNR files contained RCRA information on the adjacent property, but it is all on film.

Spoke with Brian Mitchell, EPA Region VII/RESP Branch. He is overseeing RCRA enforcement activities at the RV Hopkins site. This site is located adjacent and to the west of the site. They had problems with lead and other compounds at the site. Brian believes the lead contamination extends no more than 20 yards from the building. Primarily the contamination is located near the bag house and stacks. He has sent me a copy of report associated with the activities at the site. They are preparing to perform enforcement activities because of lack of compliance by the facility.

There is a Credit Island 66 Citgo service station located south and adjacent to the site. LUST Files indicate there is groundwater contaminant plume consisting of BTEX compounds, methyl-t-butyl ether (MTBE), total petroleum hydrocarbons and total extractable hydrocarbons. The groundwater plume does not appear to impact the site. The levels decrease considerably near the Gate City property boundary. The LUST No. for the site is 7LTL23.

EXTENDED SITE SCREENING

Pat Murrow, EPA/RCRA, has provided me with information on the Harcros Chemicals facility in Davenport, EPA ID No. IAD022096028. The Harcros plant is also known as Thompson-Hayward Chemical Company. Its headquarters is located in Kansas City, Kansas. The information was limited, but it did indicate tanks were located onsite that contained chlorinated hydrocarbons.

The Harcros Chemical facility in Davenport is a wholesaler and distributor for caustic soda products, bleach, mineral and sulfuric acids, soap products and surfactants. They drum and repackage products.

RCRA Hazardous Waste inspections were conducted at Harcros by the Iowa Department of Water, Air and Waste Management (IDWAWM) in September 1983, July 1984 and May 1985. The IDWAWM is currently known as the IDNR and no longer enforces RCRA. The reports indicate there was no container storage of hazardous waste. The waste generated was negligible. They rinsed out empty carboys and vinyl 55-gallon drums that contained caustics and acids. The rinse water is discharged to a storm drain. The last period of container storage of hazardous waste was in October 1981. The last bulk loading of solvents was in November 1982. They stopped handling solvents for recycling in December 1982. The 1983 identified two areas of concern: 1) The gate valve on the storm drain line should be kept closed at all times except when discharging storm water or rinse water. 2) Underground tanks were exposed to the air and were corroding. It was recommended to repair the tanks or remove them.

After speaking with representatives with the Harcros facility and its headquarter in July 1998, it was determined the USTs identified in the 1983 RCRA inspection were actually aboveground storage tanks covered with soil to meet fire codes. The personnel also confirmed chlorinated hydrocarbons were used at the facility.

During the IDNR's inspection of the Gate City Steel site, eight storage tanks were identified in the back (north side) of the Harcros facility. Harcros representatives informed the IDNR the tanks were emptied. Four 12,000-gallon tanks were used for the storage of acetone, xylol, toluol and isopropyl alcohol. The current tank locations are not the location of the tanks when they were in use at the facility. The other tanks were brought from other locations in anticipation they would be used for storage. The origin of the tanks was not known because the tanks are not tracked until they are put into use. Some of the tanks were located where the new building exists on the south side of the property. The IDNR made a verbal request for a map identifying the location of the ASTs when they were in use. The IDNR has not received this information.

Tank cars containing sodium hydroxide solution were located on tracks at Harcros.

I spoke with Pat Murrow, EPA RCRA, about who has jurisdiction over the Harcros site. She informed me that Harcros is not under any enforcement order or corrective action so they would not have any jurisdiction. When she spoke to compliance officers, they had nothing on the facility.

Based on this information, the IDNR can require Harcros to conduct an investigation if needed.

I also spoke to Pat Murrow about the concentration of heavy metals detected in the ashes at the site. The ashes were disposed of as normal garbage, but this is a RCRA violation because the ashes are considered a hazardous waste based on the concentration of lead in the sample alone. She is not in the compliance branch, but she asked me to forward the information to EPA. They may want to conduct an inspection to determine what is taking place at the site.

REVIEW SUMMARY

Contaminant Type **Petroleum & Other**

I. Summarize your findings and conclusions regarding the contaminants found and their extent and concentrations. Relate those values known criteria such as water quality standards, MCLs, established cleanup levels, background or any other relevant or useful benchmarks used to determine the site's priority.

Chlorinated hydrocarbons and petroleum compounds have been detected in the groundwater above IDNR action levels. 1,2-DCE, 1,1,1-TCA, TCE, vinyl chloride, benzene, toluene and ethylbenzene.

High lead levels of 32,000 mg/kg were detected in a waste sample collected from ash residue in the burn area. Other heavy metals were also detected. No background soil sample was collected from the site. It will be difficult to collect a background sample because the facility is located in an industrial area and is surrounded by property with questionable environmental quality.

II. Summarize the potential or actual impacts of the contamination. What is known about the neighboring area, i.e., are there residences, businesses, public use areas, etc.? Are there wells in the area that could be potentially impacted? Are there identified contaminant pathways such as water or sewer lines, drain tiles, or fissures? Identify any other use/location issues that deserve consideration in any priority assignment.

The Mississippi River is about 800 feet south of the site. The surface water intake for the city of Davenport is located a little over 3 miles upstream from the site.

Active water supply well located at Credit Island Sport Shop, 2304 West River Drive. The shop is about two blocks west of the site. The water supply well was identified by Scott County Health Department. According to the Health Department, the well is used to supply water to the minnow tank.

Silurian-Devonian bedrock is shallow at the site and has been impacted by the contamination. It is a productive water resource. It is likely that groundwater contamination at the site is migrating to the Mississippi River.

The consultant believes the groundwater contaminants are migrating from the northeast to the south-southwest. This is based on the soil probes drilled at the site in June 1998 and other monitoring wells installed prior to June. He also believes some of the contaminant migration is following the slope of the bedrock surface at the site. This is apparent in borings SP-5 and MW-1 on the Gate City Steel property.

The bedrock is fractured in this area so it is also migrating vertically.

III. Summarize any other information, knowledge, or reasoning used in determining your recommendation regarding the priority assigned to this site.

There is groundwater contamination at the site with several chlorinated hydrocarbons and other compounds above IDNR action levels. Harcros facility may be a potential source of the groundwater contamination at the site because of its historical use of ASTs. Soil and groundwater samples are needed from the Harcros property to determine the extent of groundwater contamination and to determine if the facility is the source of the contamination. More information on the hydrogeology of the site would be beneficial also.

Chlorinated hydrocarbons were also detected in a groundwater sample collected from the northeast perimeter of the Gate City Steel site. The potential source of this contamination may not be Harsco although it is located to the east. Additional samples are needed in this area to determine the source. Railroad tracks are located in this vicinity along with a scrap metal yard.

Benzene, toluene and ethylbenzene were detected in a groundwater sample, collected in April 1998, from temporary well MW-3 on the Gate City Steel property. The concentrations were significantly higher than IDNR action levels. Based on recent sampling results, it does not appear the Citgo station is the source of the contamination although a petroleum plume is located on the property. The highest concentrations of petroleum compounds on the Citgo property are located near the gas station island or further west. Not in the vicinity of MW-3. Harsco has stored toluene and xylenes in 12,000-gallon ASTs in the past. Midwest Metals uses mineral spirits as a solvent which contains petroleum derivatives. It is difficult to determine the source of the BTEX compounds that were detected in MW-3 because the groundwater flow at the site is affected by the Mississippi River. Additional sampling is required.

High lead levels (1,800 ppm) have been detected in the soil onsite (Gate City Steel property) in the past. RV Hopkins is believed to be a potential source of the contamination because of its location. Recent samples collected from the perimeter of the site have not yielded high lead levels. Also, Gate City Steel has constructed a earthen dike along the western boundary of the site to prevent surface water runoff from the RV Hopkins facility. Waste samples collected from the burn area indicate the burn area may also be a potential source of heavy metal problems at the site.

This site should receive a Level 2 priority because of the concentration of heavy metals detected in the surficial waste at the site and the detection of groundwater contaminants above IDNR action levels. The groundwater investigation should be conducted under the authority of 567 IAC 133.

I am recommending Harsco Chemical conduct a soil and groundwater investigation at their facility. Samples are needed to determine if Harsco is the source of the groundwater contamination at the Gate City Steel and Citgo properties, and to define the extent of groundwater contamination. The groundwater plume extends beyond Gate City Steel's property; therefore, sample collection is required from Harsco's property. The contamination has also been detected in the bedrock. Also, more information is needed regarding the former location of the ASTs on Harsco property.

On August 27, 1998, a Notice of Violation was issued to Midwest Metals, Inc., by me. They were verbally notified on August 21, 1998. Samples, collected from the area used to burn the pallets, indicate the ashes are a hazardous waste because they contained 32,000 mg/kg lead. The analytical results, along with other information related to this site, has been provided to the EPA/RCRA Branch. Midwest ceased open burning of the pallets on August 21, 1998.

In the Notice of Violation, I informed Midwest Metals that the burn area was a RCRA issue, and the Department will not require any actions regarding the burn area unless the EPA relinquish jurisdiction to the state.

I spoke to Brent Parker about the condition of monitoring well MW-4 on the Gate City Steel property. Since RCRA wants the well to remain at its current location, I am recommending that Gate City Steel repair the well or RV Hopkins.

PRIORITY LEVEL

Priority Level 2

PROGRAM AUTHORITY REFERRAL

Program Authority Referral Chapter 133

Other Referral

Form Completed Alesia Whitney-Knight

Date Completed 08/27/1998

Form Reviewed

Date Reviewed 8/28/98

Friday, August 28, 1998

JOHN VEDDER
Larry Hage
Joseph Z Elder 9/1/98

8/31/98
Page 6 of 7

IOWA DEPARTMENT OF NATURAL RESOURCES
Solid Waste Section

DATE: July 30, 1998

TO: IDNR File: Con 12-15 Gate City Steel (Midwest Steel) -
Davenport - Scott Co.

FROM: Alesia Whitney-Knight *AWK*

RE: Log/Summary of Extended Site Screening: Gate City
Steel
Date: July 27-28, 1998
Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

IDNR Personnel:

Alesia Whitney-Knight, IDNR Project Manager
Environmental Specialist
Iowa DNR
Wallace State Office Building
502 E. 9th Street
Des Moines, IA 50319
(515)242-5084

Lambert Nnadi
Environmental Specialist
Address Same As Previous
(515)281-4117

Midwest Metals Representatives:

Gene Pierce, President/Owner
Midwest Metals, Inc.
2060 West River Drive
PO Box 4050
Davenport, IA 52808
(319)324-5244
1-800-747-5244

Lyle Barngrover
Engineering Dept. Manager
Address & Telephone No. Same As Previous

Gate City Steel Representative:

Bruce Lacky
Gate City Steel Corporation
One Valmont Parkway
PO Box 358
Valley, NE 68064-0358
1-800-345-6825

Log/Summary of Extended Site Screening: Gate City Steel

Date: July 27-28, 1998

Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

Roberts/Schornick & Associates Rep.:

Bill Pickens
Manager/Hydrogeology
RSA, Inc. Environmental Consultants
3700 West Robinson, Suite 200
Norman, OK 73072
(405)321-3895

SITE OBJECTIVES

The purpose of the Extended Site Screening (ESS) inspection at the Gate City Steel site in Davenport, Scott County, Iowa, was to identify potential sources of contamination at the site. This included interviewing site employees, conducting a walkover survey of the site, collecting soil and groundwater samples, taking photographs and speaking to employees at adjacent facilities.

The Gate City Steel Corporation owns the site property, but it is being leased by Midwest Metals, Inc. (Midwest).

SITE ACTIVITIES

JULY 27, 1998

10:45AM - IDNR personnel arrived at Midwest and briefly met with Bill Pickens and Bruce Lacky. Informed them that we wanted to locate wells on the Credit Island 66 Citgo (Citgo) property so Lambert can begin bailing them while I toured the facility.

I spoke to Doyle Rinehart, owner of the Citgo station. I informed him that I had spoken to Mr. Terry Buller about sampling the monitoring wells at the site. Mr. Rinehart gave me the okay to sample the wells.

Lambert and I had problems locating the wells (MW-7, MW-10, MW-13 and MW-14) because they were covered by compacted gravel. We were able to locate Well MW-2 because it was located on an asphalt surface.

11:10AM - I asked Mr. Rinehart if any of the monitoring wells installed had been removed because we were having problems locating them. They are probably covered by the gravel. He stated no wells have been removed to his knowledge since they were installed.

11:20AM - It was decided to return to the site at a later date with a metal detector to locate the wells. We then met with personnel at the Midwest Metals site. IDNR personnel met with Bill Pickens, Bruce Lacky, Gene Pierce and Lyle Barngrover. Bill Pickens summarized the recent investigation conducted at the site. Seven soil probes were installed using a Geoprobe®, and soil and groundwater samples were collected from the probes. He identified areas of significant contamination on the site map. These areas were located along the eastern property boundary adjacent to the Harcros Chemicals facility.

Bill Pickens described the layout of a framed, color, aerial photo of the RV Hopkins, Midwest Metals and Harcros facilities. Mr. Pierce stated the photo had been taken sometime ago because an earthen berm has been constructed along the western property boundary to prevent surface water runoff from the RV Hopkins facility.

Gene Pierce informed us about the operations at the facility. I asked about the use of mineral spirits as a degreaser. He was not familiar with the term but any solvents used at the facility were used in small quantities. *(Review of reports indicates Safety Kleen 105 solvent (mineral spirits) is used to degrease dies*

Log/Summary of Extended Site Screening: Gate City Steel

Date: July 27-28, 1998

Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

before they are repaired. About 2 gallons of spent solvent is generated per month. Safety Kleen replaces the spent solvent with new solvent once per month).

Mr. Pierce informed us that a spill occurred at the Harcros facility about 5-7 years ago. In response to the spill, Harcros has built up the area and changed the slope. He believes aboveground storage tanks were located between the Harcros buildings on the site map. The tanks are no longer in that location.

Midwest has not had rail delivery since 1989. They currently have truck deliveries.

Most members wanted to know if there was any way they could help expedite the investigation. I stated that additional work is needed at the Harcros facility. I will also have to speak to the EPA to determine who has jurisdiction at the Harcros facility. Later it was suggested that Midwest could request access to the Harcros property to determine the source of the contamination at the site. They were willing to collect additional samples from Harcros if they were given access. They wanted to know if getting sampling results from the Citgo site will help expedite the investigation. I stated yes. Midwest personnel recommended renting a metal detector and pick ax to aid the IDNR in locating the monitoring wells.

Mr. Pierce stated that his goal was to purchase the property from Gate City Steel. The bank needs a "no further action" letter from the IDNR in order for him to accomplish this goal. It was estimated that it may take approximately a six-month minimum before a decision is made on whether they qualify for a no further action letter.

Walkover Survey of Midwest Metals Building Interior

Lyle Barngrover provided us, IDNR personnel, with a tour of the building. We first toured the First Bay where metal parts are delivered. The Second Bay is used for processing-cutting, shearing, etc. The cooling tables were also located in this area. The Third Bay is also used for processing. In a western section of the building, metal sheets/parts are stored on tall shelves. The floor surface in the building appears to be cement. No floor drains were observed. Additional information on the operations at the facility is provided in the HDR Engineering Phase I report.

Walkover Survey of Midwest Metals Building Exterior

The survey of the exterior of the building began on the east side of the facility where Harcros and Midwest are separated by a fence.

12:13PM - I took photographs of sodium hydroxide tank cars on Harcros property. There appears to be a concrete containment around the cars. The containment area is filled with gravel.

12:16PM - I took a photograph of the storage shed for carboys on Harcros property.

During the tour, Bill Pickens identified sample locations for soil probes and monitoring wells at the site. Former monitoring well locations were marked by red flags.

1:35PM - After a lunch break, we conducted a walkover survey on the west side of the property. Bill Pickens and Bruce Lacky accompanied us during the walkover. I stood on the earthen berm to view the RV Hopkins (Hopkins) property. The property boundary between Midwest and Hopkins is heavily vegetated on both sides. It was difficult to observe the Hopkins facility without standing on the berm. The animal shelter was located south of Hopkins, and it is adjacent to Midwest Metals also.

Several barrels were stored on their sides in pyramids throughout the Hopkins facility. Drums were also stored in truck trailers. Rusted barrels were located on the north end of the facility. They were also stacked in pyramids. There appeared to be hundreds of barrels on the property. Noticed strong solvent smells from the facility. A worker was also observed at the site with no shirt.

Log/Summary of Extended Site Screening: Gate City Steel

Date: July 27-28, 1998

Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

I took photographs of barrels stacked on the east side of the Hopkins facility.

Surveyed the south side of the Midwest facility. It is an open field with heavy vegetation that has been mowed or graded. There was a slight manure odor, but was not sure of the source because we were downwind of the Ralston Purina plant.

The area used to burn wooden pallets was identified west of MW-4 between stacks of metal parts. Ashes were observed in the area. The burn area covered approximately 10 ft². A driveway extends from the parking lot, on the south side of the building, to the west side of the facility. The burn area is on the east side of the driveway. Lyle stated that he uses cardboard to ignite the burn pile.

There is also an indentation in the driveway where stagnant water was observed from a recent rainfall.

Later in the day, photographs were taken of the burn area and the indentation.

1:47PM - I took a photograph of monitoring well MW-4. This monitoring well is located on the south side of the Midwest building. The monitoring well is heaved above the surface. The concrete pad for the well is about 8-12 inches above the surface. The well was also unstable. It is a 2-inch diameter well surrounded by a 4-inch diameter, aboveground, metal casing. Bill Pickens stated that he had to replace the lock because the old lock had rusted and broken.

The well was installed during an investigation of the Hopkins facility. Bill Taylor, Gate City Steel Corporation, had asked RCRA if they could remove the well. The request was denied. Once the film is developed, I will send a photograph to the EPA Region VII RCRA Branch and request closure of the well.

There is also an access road near the northern boundary of the Midwest site. The road runs along the back of the Hopkins facility, through Midwest and to the through the Harcros facility. The road is within the property boundaries. There is an access gate between Midwest and Harcros property. Harcros uses the access road when River Drive is flooded.

Soil probe, SP-7, was collected in the vicinity of the gate. Chlorinated hydrocarbons were detected in the groundwater sample taken from this location.

Railroads run through and in back of Midwest's property. The railroad services the metal recycling facility and Harcros.

1:50PM - I took a photograph of the location of metal recycling facility. It is located northeast of Midway. Metal scrap piles were observed behind heavy vegetation. A Ralston Purina facility is in the background.

1:54PM - Observed 8 aboveground storage tanks (ASTs) on the north side of Harcros property. There were 4 large vertical and 4 lateral tanks. The ASTs appeared to be abandoned and were surrounded by heavy vegetation. No labels were observed on the tanks. Some of the tanks appear to be deteriorating.

1:58PM - I took photographs of the tanks.

2:05PM - I took a photograph of a pipe and valve that runs parallel to the railroad on Harcros property. The piping is located on the west side of the tracks. A different pipe runs along the west side of the Harcros building. It is wrapped in metal covering which appears to serve as insulation. A hazard placard was also posted near a dock door on the same side of the building. Photographs were taken of the piping and the placard.

Log/Summary of Extended Site Screening: Gate City Steel

Date: July 27-28, 1998

Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

Once Midwest had attained a metal detector and pick ax, everyone (Lambert, Bruce, Bill, and Lyle) assisted in locating the monitoring wells on the Citgo property. Two of the wells were located under compact gravel and two were located near the southwest corner of Citgo's property.

Burn Area Sampling

3:10PM - Bill Pickens and I collected split samples from the ashes in the burn area. The sample was identified as BPS-1. Bill labeled his sample as BPS-12. The samples were taken from the surface because the ground was hard. The ashes were scraped into a mound and samples were collected. The ashes contained nail fragments and gravel. Samples were collected for volatile, semivolatile and metal (inorganic) analyses. After sample collection, the samples were stored in a cooler on ice.

3:23PM - I took photographs of the north side of the Midwest site panning from Harcros to RV Hopkins.

Groundwater Sampling

Between 3:45 PM and 4:30 PM all of the monitoring wells had been located on the Citgo property.

Well measurements were taken from each well with a water level indicator. The water level indicator was decontaminated with an Alconox® solution and distilled water prior to use on each well. Measurements were taken from the top of the well. Once the well volume was determined, approximately 3 well volumes were collected from each well or until the well was purged dry. Well CMW-7 is the only well that purged dry. Well measurements are provided in Table 1.

TABLE 1 MONITORING WELL MEASUREMENTS CREDIT ISLAND 66 CITGO DAVENPORT, SCOTT COUNTY, IOWA				
SAMPLE LOCATION	DEPTH TO BOTTOM OF WELL (feet)	DEPTH TO TOP OF WATER COLUMN (feet)	DEPTH OF WELL WATER COLUMN (feet)	WELL VOLUME (gallons)
CMW-7	19.4	4.8	14.60	2.38
CMW-10	17.8	4.48	13.32	2.17
CMW-13	18.4	4.24	14.16	2.31
CMW-14	18.0	4.22	13.78	2.25

Equation used to calculate the well volume:

$$WV = T\pi r^2 (0.0519 \text{ gal})$$
$$= Tr^2 (0.163 \text{ gal})$$

WV = Well Volume
T = Well water column
 $\pi = 3.14159$
r = Radius of the well

5:15PM-5:30PM - Bill Pickens and Bruce Lacky departed from the site. Bill requested copies of the chain of custody sheets. He also requested that I provide him with copies of any correspondence to the EPA or Harcros.

5:40PM-7:30PM - Samples were collected from the monitoring wells at the Citgo station.

Log/Summary of Extended Site Screening: Gate City Steel

Date: July 27-28, 1998

Time: 10:45AM - 8:11PM/9:17AM - 9:40AM

After the samples were collected from the monitoring wells, they were placed on ice in the cooler. A 1:1 HCl preservative solution was added to the 40-ml vials prior to collecting samples from CMW-10 and CMW-13. All samples collected from the wells were submitted for volatile and semivolatile analyses. A duplicate sample, CMW-19, was collected from well CMW-13. The sample was collected for volatile analysis.

After the sample collection was completed, the well caps and flush-mounted covers were placed on the wells.

7:40PM - I took photographs of the south side of the Midwest site. The photos pan from Harcros to Midwest. It was difficult to get a photo to the west because of the setting sun.

8:11PM - Departed from the site.

JULY 28, 1998

9:17AM - Lambert and I visited the Harcros facility to speak to Plant Manager or owner. No one was available when we arrived. We spoke with Bill Rider and Craig Bevard. Craig has been with Harcros for two years.

I informed them that I was conducting an investigation at the Midwest Metals site. I inquired about the aboveground storage tanks in the back (north side of the facility). Mr. Rider stated the tanks were abandoned and he is uncertain about the former contents of the tanks. He does not recall when the tanks were taken out of service. I asked if chlorinated hydrocarbons such as tetrachloroethylene or cis-1,2-dichloroethylene had been used.

He believes they have. He wanted to know what brought this on. I stated chlorinated hydrocarbons had been detected in the groundwater at Midwest. He wanted to know about the location and level of the hydrocarbons. I stated 10 ppm, and the sample was taken from the southeast corner of Midwest property which is adjacent to Harcros.

I inquired about the former location of the tanks. They were located where the new building exists. An investigation was conducted about 2-3 years ago before the new building was constructed. They do not have the report. This is only a branch office. I will have to contact the headquarters in Kansas City to get more information. The contact in Kansas City is Rick Hesketh, (913)621-7712.

I asked if they would give Midwest access to their facility for further investigation. Mr. Rider stated I will have to speak to the headquarters.

I stated I had observed a pipe with a valve running parallel to the tracks. Mr. Rider stated the valve has been abandoned. The piping was used for an EPL Surfactant.

The facility has had an acid spill of 100 gallons or less in the 1980s.

9:40AM - Approximate time of departure from the Harcros facility.

10:47AM - Relinquished the samples collected from Midwest and Citgo to the University of Iowa Hygienic Laboratory on the Oakdale Campus.