Site Investigation Report Review

SIRR Report for Unassigned Uncontrolled Sites

SIRR ID O17-0002

Site Name CURTIS 1000 FACILITY

Screening Activity Initial Site Screening

City Location Mason City

Site Type Other

County Cerro Gordo

SITE INFORMATION

Property Owner Curtis 1000, Inc.

Mailing Address 1318 18th Street
Mason City, Iowa 50401

Location/Legal Description 1318 18th Street,
Mason City, Iowa

T96N, R20W, Section 17 SE ¼, NE ¼
Latitude 43.1352
Longitude 93.2231

Size Of Property 28,000 square feet

Report Prepared By Keith Knoke, Delta Environmental Consultants, Inc **Date Report Submitted** 06/17/2002

Report Submitted By Keith Knoke, Delta Environmental Consultants, Inc **Current Usage** Printing Operations

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.)

ISS INFORMATION
Environmental Site Assessment-Phase II, June 2002
Eight soil borings (GP1 through GP8) were advanced on January 21, 2002. Each boring was advanced until refusal was reached at the upper bedrock surface, which ranged in depth from 3' bgs (GP7) to 7' bgs (GP2, GP5, and GP8). Soil samples were collected continuously from the ground surface to the depth of each boring. Soil samples were analyzed for VOCs, TEH (OA2), and RCRA metals. Collection of soil samples depended on PID screening results.

Three groundwater samples were collected at GP1, GP5, and GP7a on January 22, 2002. The samples were analyzed for VOCs, TEH (OA2), and RCRA metals.

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.)

ISS INFORMATION

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Environmental Site Assessment-Phase II, June 2002
Curtis 1000 currently occupies the subject property and uses the facility for printing operations. The facility has been in operation since 1972. The building on-site was constructed in 1969 and was previously occupied by Dual Roll Corporation, a conveyor manufacturer. The site is located in a mixed commercial, industrial, and residential area.

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)

Geology varies little over the subject property. Field observations indicated that unconsolidated deposits at the site generally consist of silty clay with a trace of sand overlying limestone bedrock. An isolated zone of sand and gravel overlying bedrock was observed in GP7.

REVIEW SUMMARY

Contaminant Type 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.

ISS INFORMATION
Environmental Site Assessment-Phase II, June 2002
RCRA metals-arsenic, barium, chromium, lead, and selenium-were detected in several soil samples. Arsenic was detected only in GP4 (5') above the statewide standard of 1.4 mg/kg with a concentration of 19.1 mg/kg. Trace amounts of barium, chromium, lead and selenium were discovered at the site; however, concentrations were not above statewide standards.

Arsenic, barium, cadmium, chromium, lead, selenium, and mercury were found to exist above statewide standards in the groundwater samples collected. Specifically, arsenic found at GP1 was 405 ug/L, GP5 was 2130 ug/L, and GP7a was 124 ug/L. The statewide standard for arsenic is 50 ug/L protected groundwater source. Barium concentrations above statewide standards exist at GP5 with a concentration at 2,720 ug/L. The statewide standard protected groundwater source for barium is 2,000 ug/L. Cadmium concentrations above statewide standards exist at GP1 and GP5, with a concentration of 12.5 ug/L and 43.4, respectively. The statewide standard protected groundwater source for cadmium is 5 ug/L. Chromium concentrations above statewide standards of 100 ug/L exist at GP1 and GP5 with a concentration of 327 ug/L and 513 ug/L, respectively. Lead exists in all three groundwater samples above the statewide standard of 15 ug/L. Lead concentrations at GP1 is 485 ug/L, GP5 is 898 ug/L, and GP7a 96.8 ug/L. Selenium exists in all three groundwater samples above the statewide standard of 50 ug/L as well. Selenium concentrations at GP1 is 303 ug/L, GP5 178 ug/L, and GP7a at 139 ug/L. Mercury was found to exist above the statewide standard of 2 ug/L at GP5 with the concentration of 9.62 ug/L.

(ug/L)	Arsenic	Barium	Cadmium	Chromium	Lead	Selenium	Silver	Mercury
Standard	50	2,000	5	100	15	50	100	2
GP1	405	1,510	12.5	327	485	303	12.9	0.564
GP5	2,130	2,720	43.4	513	898	178	9.08	9.62
GP7a	124	556	<5	78.4	96.8	139	<7	<0.2

The statewide standard applied follows Chapter 137 for groundwater samples. The groundwater statewide samples employed the protected groundwater standards. A protected groundwater source is defined as a saturated bed which has a hydraulic conductivity of at least 0.44 meters per day (m/d) and a total dissolved solids concentration of less than 2,500 milligrams per liter (mg/l). Because it is unknown whether the site is a protected groundwater source, its standards were applied.

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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.

ISS INFORMATION
Environmental Site Assessment-Phase II, June 2002
The site is surrounded by 18th Street and Wellborn Industries to the North, Pierce Avenue and Butler & Curtis Oil to the East, 19th Street and railroad tracks to the South and Petroblend property to the West.

According to the Phase I conducted in January 2002, there are several sites surrounding Curtis 1000 with an environmental history. For example, Wellborn is located upgradient and adjacent to Curtis 1000 Facility. The groundwater beneath Wellborn Industries was found to contain heavy metals and hazardous chemicals above action levels. The site was given a no further action by the LUST Section of the IDNR in February 1999. Also, AG Processing is located southwest of the site. It is classified as a LUST site. Cleanup began in 1991, with a recommendation by the environmental consultant as no further action. Butler & Curtis Company is located East of the site. Though four active USTs exist at the site, the site was issued a no further action in 1999.

Well information and/or other potential receptors are not known based on the Phase II submitted to the Department.

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

ISS INFORMATION
Because of the elevated levels of arsenic, barium, cadmium, chromium, lead and selenium detected in the groundwater samples, further investigation is warranted. This site warrants an ESS and recommend that the site remain in Pre-CERCLA.

PRIORITY LEVEL

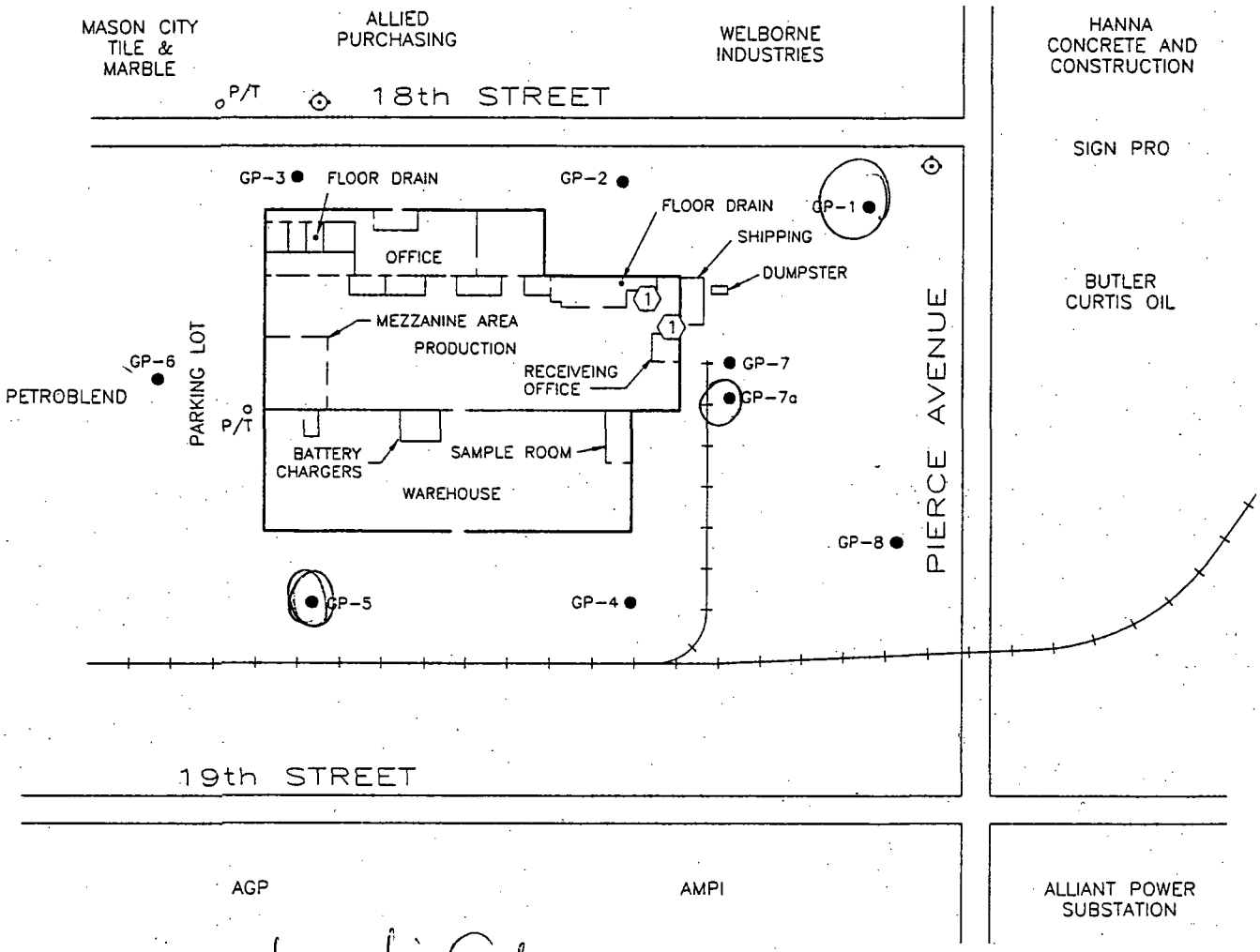
Priority Level 2

PROGRAM AUTHORITY REFERRAL

Program Authority Referral LRP

Other Referral

ISS/Form Completed By	Jessica Montana	**Date ISS Completed**	10/18/2002
ESS Completed By		**Date ESS Completed**	
		Date Completed	
Form Reviewed	Lambert Nnadi	**Date Reviewed**	10/18/2002
	Cal Lundberg 10/22/02		



(1) - contamination found.

North

LEGEND:

- ● BORING LOCATIONS
- RAILROAD TRACKS
- ⊙ FIRE HYDRANT
- P/T POLE MOUNTED TRANSFORMER
- (1) CHEMICAL STORAGE AREA

NOTE:
NOT TO SCALE; BORING LOCATIONS ARE APPROXIMATE

FIGURE 2
SITE MAP AND SAMPLE LOCATIONS
CURTIS 1000
1319 18th STREET SW
MASON CITY, IOWA

PROJECT NO.	PREPARED BY	DRAWN BY
W001-015	KEK	SJR/DD
DATE	REVIEWED BY	FILE NAME
2/5/02		W001-015

Delta Environmental Consultants, Inc.

PRE-CERCLIS SCREENING ASSESSMENT CHECKLIST/DECISION FORM

This checklist can assist the site investigator during the Pre-CERCLIS screening. It will be used to determine whether further steps in the site investigation process are required under CERCLA. Use additional sheets, if necessary.

Checklist Preparer: Jessica Montana, Environmental Specialist (Name/Title) — October 4, 2002 (Date)
900 E. Grand Avenue, Des Moines, Iowa 50319 (Address) — 515-281-8934 (Phone)
jessica.montana@dnr.state.ia.us (E-mail Address)

Site Name: Curtis 1000 Facility

Previous Names (if any): n/a

Site Location: 1318 18th Street (Street)
Mason City (City) — Iowa (ST) — 50401 (Zip)

Latitude: 43.1352 **Longitude:** 93.2231

Compare the following checklist. If "yes" is marked, please explain below.	YES	NO
1. Does the site already appear in CERCLIS?	☐	☒
2. Is the release from products that are part of the structure of, and result in exposure within, residential buildings or businesses or community structures?	☐	☒
3. Does the site consist of a release of a naturally occurring substance in its unaltered form, or altered solely through naturally occurring processes or phenomena, from a location where it is naturally found?	☐	☒
4. Is the release into a public or private drinking water supply due to deterioration of the system through ordinary use?	☐	☒
5. Is some other program actively involved with the site (i.e., another Federal, State, or Tribal program)?	☐	☒
6. Are the hazardous substances potentially released at the site regulated under a statutory exclusion (i.e., petroleum, natural gas, natural gas liquids, synthetic gas usable for fuel, normal application of fertilizer, release located in a workplace, naturally occurring, or regulated by the NRC, UMTRCA, or OSHA)?	☐	☒
7. Are the hazardous substances potentially released at the site excluded by policy considerations (e.g., deferral to RCRA Corrective Action)?	☐	☒
8. Is there sufficient documentation that clearly demonstrates that there is no potential for a release that could cause adverse environmental or human health impacts (e.g., comprehensive remedial investigation equivalent data showing no release above ARARs, completed removal action, documentation showing that no hazardous substance release have occurred, EPA approved risk assessment completed)?	☐	☒

Please explain all "yes" answer(s), attach additional sheets if necessary:

Site Determination: ☐ Enter the site into CERCLIS. Further assessment is recommended (Explain below).

☒ The site is not recommended for placement into CERCLIS (Explain below).

DECISION/DISCUSSION/RATIONALE:
At this time, the site is not recommended to be placed in CERCLIS. Because of the elevated levels of arsenic, barium, cadmium, chromium, lead and selenium detected in the groundwater samples, further investigation is warranted. The Department recommends that the site remain in Pre-CERCLA and is subject to an ESS.

Regional EPA Reviewer: _____
Print Name/Signature Date

State Agency/Tribe: CAL LUNDBERG 10/22/02
Print Name/Signature Date