United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-12
July, 1981

BETTER-BRITE PLATING INC.

EPA

Potential Hazardous Waste Site

Preliminary Assessment

EXECUTIVE SUMMARY SHEET

BETTER-BRITE PLATING, INC. WI/D006132088

Background: Better-Brite Plating, Inc. utilizes hexavalent chromium from chromic acid for metal plating in a variety of metal products.

Site Description: The plating facility has had numerous spills and incidents, causing discharges of hazardous waste into the groundwater, soil and surface water.

Site Priority: (Medium) Even though it might be considered high priority because of the situation concerning high contamination of groundwater into the environment, it is prioritized as medium. The private wells and city wells are not in the near vicinity. There is a collection trench which is successfully drawing in the contaminated groundwater. Due to the fact that Better-Brite and the DNR are still going to court over this issue, bears some light on remedial action, therefore prioritizing it as medium.

Comments: As stated before, Better-Brite Plating Inc. has had numerous spills. The DNR has investigated the site many times, taking samples, photos and trying to work with Better-Brite to remedy the situation. Soil Testing Services has also taken samples and came up with a "Remedial Action Plan" in April, 1980. Chromium concentrations in excess of 650 ppm have been found in the groundwater, while surface soil concentrations appraoch 1500 ppm. After the DNR reviewed and approved the plan, Better-Brite still, after all this time, has not completed the remedial action, and has repeatedly been late in sending the monitoring data. It has become evident, Better-Brite, has not been very cooperative with the DNR in taking care of their problem.

After further investigation, it was found that more contamination is in the groundwater under the building's foundation. How much contamination and the exact source is unknown. However, the trench appears to be drawing it into the collection pond. Also found were chromium deposits within the cyclone unit and duct works, the south wall of the building and within the building itself. Some employees of Better-Brite have agreed to testify or give depositions against the company, about illegal dumping on the site in the past. Many complaints have also come from the neighbors and City of DePere.

Because Better-Brite has not complied with remedial action after continuous reminders from the DNR, there is another court hearing scheduled for May 16 and 17, 1984.

Part 3 A.) Groundwater Contamination (clarification): It should be noted from sampling and field investigations done by Soil Testing Service and the DNR district personnel, that this site could be located on a perched groundwater table and is speculated the aquifer located beneath this level is not contaminated.

Site Inspection Contact Person: Doug Rossberg - DNR/LMD (414)497-4047

DNR District's Role On Site Inspection: Assigned staff will provide site briefing, access to files and accompany F.I.T. on inspection.

Prepared By: Mary Feenstra - DNR/LMD (414)497-3228

MF:cs

Preliminary Assessment

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION
01 STATE: WI | 02 SITE NUMBER: D006132088

II. SITE NAME AND LOCATION * Change of address

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
BETTER-BRITE PLATING, INC.	519 Lande St.

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
De Pere	WI	54115	Brown	009	08

09 COORDINATES: LATITUDE 44°26'20".0 | LONGITUDE 088°04'30".0
Sec. 28, NE¼, SW¼, T23N, R20E
De Pere Quad.

10 DIRECTIONS TO SITE (Starting from nearest public road)
Located between S. 6th St. and Fox River. South of Lande St. next to and west of C. & N.W. Railroad right-of-way.

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
Everett Hintz, Pres.	519 Lande St.

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
De Pere	WI	54115	(414) 336-9651

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
(same as above)	

09 CITY	10 STATE	11 ZIP CODE	12 TELEPHONE NUMBER
			( )

13 TYPE OF OWNERSHIP (Check one)
☒ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL
☐ F. OTHER: _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE (Check all that apply)
☒ A. RCRA 3001 DATE RECEIVED: 8/12/80 (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES DATE 12/19/78 (MONTH DAY YEAR)
☐ NO
Last date 4/19/83

BY (Check all that apply)
☐ A. EPA ☐ B. EPA CONTRACTOR ☒ C. STATE (DNR) ☒ D. OTHER CONTRACTOR
☒ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)
CONTRACTOR NAME(S): Soil Testing Service

02 SITE STATUS (Check one)
☒ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN

03 YEARS OF OPERATION
BEGINNING YEAR: _____ | ENDING YEAR: 1984 | ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
Inorganics (Toxic / Soluble)
Hexalevant Chromium

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
Groundwater
Surface Water (population / environment)

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION (Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents)
☐ A. HIGH (Inspection required promptly) ☒ B. MEDIUM (Inspection required) ☐ C. LOW (Inspect on time available basis) ☐ D. NONE (No further action needed, complete current disposition form)

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF (Agency/Organization)	03 TELEPHONE NUMBER
Doug Rossberg	DNR/LMD - Green Bay	(414) 497-4047

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
Mary B. Feenstra	DNR		(414) 497-3228	11/21/83 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

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POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WI	D006132088

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- ☐ A. SOLID
- ☐ B. POWDER, FINES
- ☐ C. SLUDGE
- ☐ D. OTHER _____ *(Specify)*
- ☐ E. SLURRY
- ☒ F. LIQUID
- ☐ G. GAS

02 WASTE QUANTITY AT SITE
(Measures of waste quantities must be independent)

TONS _____
CUBIC YARDS _____
NO. OF DRUMS unKnown

03 WASTE CHARACTERISTICS *(Check all that apply)*

- ☒ A. TOXIC
- ☐ B. CORROSIVE
- ☐ C. RADIOACTIVE
- ☐ D. PERSISTENT
- ☒ E. SOLUBLE
- ☐ F. INFECTIOUS
- ☐ G. FLAMMABLE
- ☐ H. IGNITABLE
- ☐ I. HIGHLY VOLATILE
- ☐ J. EXPLOSIVE
- ☐ K. REACTIVE
- ☐ L. INCOMPATIBLE
- ☐ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE			
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS	UnKnown		
ACD	ACIDS			
BAS	BASES			
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
IOC	Chromic Acid (Hexavalent Chromium)	7738-94-5	spills on site		

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

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

Wisconsin Dept. of Natural Resources - Green Bay

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: WI | 02 SITE NUMBER: D006132088

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 [X] A. GROUNDWATER CONTAMINATION — 02 [X] OBSERVED (DATE: 6-22-79) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 46,400 — 04 NARRATIVE DESCRIPTION

Groundwater samples were taken on Better-Brite site and that of neighboring property. Six of eight samples showed chromium. Further sampling and monitoring has been done. Ground water is severly contaminated (See Comments for clarrification.)

01 [X] B. SURFACE WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: 6-22-79) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: none — 04 NARRATIVE DESCRIPTION

Soil Testing Services showed ground water and surface water contamination. There are no drinking water intakes.

01 [X] C. CONTAMINATION OF AIR — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 50,000 — 04 NARRATIVE DESCRIPTION

Air exhausted out of a cyclone unit. Chromium deposits have been found in duck work and in cyclone structure.

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

01 [X] E. DIRECT CONTACT — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 5,000 — 04 NARRATIVE DESCRIPTION

The only fenced area is the collection pond.
This is in an urban area.

01 [X] F. CONTAMINATION OF SOIL — 02 [X] OBSERVED (DATE: 6-19-79) [ ] POTENTIAL [ ] ALLEGED
03 AREA POTENTIALLY AFFECTED: 1/3 Ac. (Acres) — 04 NARRATIVE DESCRIPTION

Soil samples taken and analysis showed soil contamination from hexavalent chromium on Better-Brite and neighboring property. Even though an addition of chromium in soil can improve plant growth, there is a toxic threshold which has occurred here.

01 [X] G. DRINKING WATER CONTAMINATION — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 46,400 — 04 NARRATIVE DESCRIPTION

The communities of DePere, Allouez and Ashwaubenon, have a municipal ground water well system (600'-900'). Tight clay soils exist in this area making contamination unlikely. Several private wells exist within the three mile radius, but none extremely close to the site. (Again, see Comments.)

01 [X] H. WORKER EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) [X] POTENTIAL [ ] ALLEGED
03 WORKERS POTENTIALLY AFFECTED: unknown — 04 NARRATIVE DESCRIPTION

Chromium deposits found within building.

01 [ ] I. POPULATION EXPOSURE/INJURY — 02 [ ] OBSERVED (DATE: _____) [ ] POTENTIAL [ ] ALLEGED
03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION
01 STATE: WI | 02 SITE NUMBER: D006132088

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☒ OBSERVED (DATE: 6-5-79) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Flora damaged by hexavalant chromium. (See N.)

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

01 ☒ L. CONTAMINATION OF FOOD CHAIN — 02 ☒ OBSERVED (DATE: 6-5-79) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Dept. of Health and Social Services tested tomatoes in Mrs. Konraths garden. The vegetables were not contaminated, but suggested prudence in any consumption of vegetables. Some plants in her garden have died.

01 ☒ M. UNSTABLE CONTAINMENT OF WASTES (Spills/runoff/standing liquids/leaking drums) — 02 ☒ OBSERVED (DATE: 12-19-78) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 14 — 04 NARRATIVE DESCRIPTION
Several spills have occurred from 12-19-78 to 6-7-79 with potential of more spills happening. (14) Number of nearby neighbors.

01 ☒ N. DAMAGE TO OFFSITE PROPERTY — 02 ☒ OBSERVED (DATE: 6-5-79) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Neighbor, Mrs. Norbert Kaster; complained of dying trees, garden and grasses. The row of poplars are dead along with grass in that area. Also, dead vegetation on Mrs. Konraths property.

01 ☒ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPs — 02 ☒ OBSERVED (DATE: 4-6-81) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
Contaminated surface water entered the storm sewer. Storm sewer effluent enters the Fox River. WWTP Influent from pumping into sanitary sewer system (collection of contaminated Gndwater)

01 ☒ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☒ ALLEGED
04 NARRATIVE DESCRIPTION
Former employee of Better-Brite Plating Inc., has reported to DNR of illegal dumping he has done behind Better-Brite building. He also stated this was standard practice to avoid expenses.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
Remote, but potential, of ground water or surface water contamination reaching the Fox River.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 50,000

IV. COMMENTS
(See Preliminary Assessment Summary) Attached

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)
Wisconsin Dept. of Natural Resources - Green Bay

EPA FORM 2070-12 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT

General Information

The Potential Hazardous Waste Site, Preliminary Assessment form is used to record information necessary to make an initial evaluation of the potential risk posed by a site and to recommend further action.

The Preliminary Assessment form contains three parts:

Part 1 – Site Information and Assessment

Part 2 – Waste Information

Part 3 – Description of Hazardous Conditions and Incidents

Part 1 – Site Information and Assessment contains all of the data elements also contained on the Site Identification form required to add a site to the automated Site Tracking System (STS). It is therefore possible to add a site to STS at the Preliminary Assessment stage. Instructions are given below.

Part 2 – Waste Information and Part 3 – Description of Hazardous Conditions and Incidents are used to record specific information about substances, amounts, hazards, and targets, e.g., population potentially affected, that are used in determining the priority for further action. Parts 2 and 3 are also contained in the Potential Hazardous Waste Site, Site Inspection Report form where they may be used to update, add, delete, or correct information supplied on the Preliminary Assessment.

An Appendix with feedstock names and CAS Numbers and the most frequently cited hazardous substances and CAS Numbers is located behind the instructions for the Preliminary Assessment.

General Instructions

1. Complete the Preliminary Assessment form as completely as possible.

2. Starred items (*) are required before assessment information can be added to STS. The system will not accept incomplete assessment information.

3. To add a site to STS at the Preliminary Assessment stage, write "New" across the top of the form and complete items II-01, 02, 03, 04, and 06, Site Name and Location, and item III-13, Type of Ownership.

4. Data items carried in STS, which are identical to those on the Site Identification form and which can be added, deleted, or changed using the Preliminary Assessment form, are indicated with a pound sign (#). To ensure that the proper action is taken, outline the item(s) to be added, deleted, or changed with a bright color and indicate the proper action with "A" (add), "D" (delete), or "C" (change).

5. There are two options available for adding, deleting, or changing information supplied on the Preliminary Assessment form. The first is to use a new Preliminary Assessment form, completing only those items to be added, deleted, or changed. Mark the form clearly, using "A", "D", or "C", to indicate the action to be taken. If only data carried in STS are to be altered, the Site Source Data Report may be used. Using the report, mark clearly the items to be changed and the action to be taken.

Detailed Instructions

Part 1 Site Information and Assessment

I. Identification: Identification (State and Site Number) is the site record key, or primary identifier, for the site. Site records in the STS are updated based on Identification. It is essential that State and Site Number are correctly entered on each form.

*I-01 State: Enter the two character alpha FIPS code for the state in which the site is located. It must be identical to State on the Site Identification form.

*I-02 Site Number: Enter the ten character alphanumeric code for sites which have a Dun and Bradstreet or EPA "user" Dun and Bradstreet number or the ten character numeric GSA identification code for federal sites. The Site Number must be identical to the Site Number on the Site Identification form.

II. Site Name and Location: If Site Name and Location information require no additions or changes, these items are not required on the Preliminary Assessment form. However, completing these items will facilitate use of the completed form and records management procedures.

#II-01 Site Name: Enter the legal, common, or descriptive name of the site.

#II-02 Site Street: Enter the street address and number (if appropriate) where the site is located. If the precise street address is unavailable for this site, enter brief direction identifier, e.g., NW intersection I-295 & US 99; Post Rd, 5 mi W of Rt. 5.

#II-03 Site City: Enter the city, town, village, or other municipality in which the site is located. If the site is not located in a municipality, enter the name of the municipality (or place) which is nearest the site or which most easily locates the site.

#II-04 Site State: Enter the two character alpha FIPS code for the state in which the site is located. The code must be the same as in item I-01.

#II-05 Site Zip Code: Enter the five character numeric zip code for the postal zone in which the site is located.

#II-06 Site County: Enter the name of the county, parish (Louisiana), or borough (Alaska) in which the site is located.

#II-07 County Code: Enter the three character numeric FIPS county code for the county, parish, or borough in which the site is located. (The regional data analyst will furnish this data item.)

#II-08 Site Congressional District: Enter the two character number for the congressional district in which the site is located.

II-09 Coordinates: Enter the Coordinates, Latitude and Longitude, of the site in degrees, minutes, seconds and tenths of seconds. If a tenth of a second is insignificant at this site, enter "0".

II-10 Directions to Site: Starting from the nearest public road, provide narrative directions to the site.

III. Responsible Parties

#III-01 Site Owner: Enter the name of the owner of the site. The site owner is the person, company, or federal, state, municipal or other public or private entity, who currently holds title to the property on which the site is located.

#III-02 -03 -04 -05 Site Owner Address: Enter the current complete business, residential, or mailing address at which the owner of the site can be reached.

III-06 Site Owner Telephone Number: Enter the area code and local telephone number at which the owner of the site can be reached.

#III-07 Site Operator: If different from Site Owner, enter the name of the operator at the site. The site operator is the person, company, or federal, state, municipal or other public or private entity, who currently, or most recently, is, or was, responsible for operations at the site.

#III-08 -09 -10 -11 Site Operator Address: Enter the current complete business, residential, or mailing address at which the operator of the site can be reached.

III-12 Site Operator Telephone Number: Enter the area code and local telephone number at which the operator of the site can be reached.

#III-13 Type of Ownership: Check the appropriate box to indicate the type of site ownership. If the site is under the jurisdiction of an activity of the federal government, enter the name of the department, agency, or activity. If Other is indicated, specify the type of ownership and name.

III-14 Owner/Operator Notification On File: Check the appropriate box(es) to indicate that the notification required by RCRA (3001) and/or CERCLA (103c, Superfund) have been received. If received, enter the date(s) received. Check none if not received.

IV Characterization of Potential Hazard

IV-01 On Site Inspection: Check the appropriate box to indicate that the site has been inspected or visited by EPA, a state or local official, or a contractor representative of EPA or a state or local government. Enter the date of the inspection. Check the appropriate box(es) to indicate who visited the site or performed the inspection. If the site visit was performed by a contractor, enter the name of the company.

*IV-02 Site Status: Check the appropriate box(es) to indicate the current status of the site. Active sites are those which treat, store, or dispose of wastes. Check Active for those active sites with an inactive storage or disposal area. Inactive sites are those at which treatment, storage, or disposal activities no longer occur.

IV-03 Years of Operation: Enter the beginning and ending years (or beginning only if operations at the site are on-going), e.g., 1878/1932, of waste treatment, storage, and/or disposal activities at the site. Check Unknown if the years of operation are not known.

IV-04 Description of Substances Possibly Present, Known, or Alleged: Provide a narrative description of hazardous, potentially hazardous, or other substances present, or claimed to be present, at the site.

IV-05 Description of Potential Hazard to Environment and/or Population: Provide a narrative description of the potential hazard the site poses to the environment and to exposed population or wildlife. If no hazard, or potential hazard, exists, provide the basis for that determination.

V. Priority Assessment

*V-01 Priority for Inspection: Check the appropriate box to indicate the priority for further action or inspection. If no further action is required, complete the Potential Hazardous Waste Site, Current Disposition form. The Priority for Inspection assessed must be supported by appropriate data in Part 2 – Waste Information and Part 3 – Description of Hazardous Conditions and Incidents of this form. If no hazardous conditions exist, Part 3 is not required.

VI. Information Available From

VI-01 Contact: Enter the name of the individual who can provide information about the site.

VI-02 Of: If appropriate, enter the name of the Public or private agency, firm, or company and the organization within the agency, firm, or company of the individual named as Contact.

VI-03 Telephone Number: Enter the area code and local telephone number of the individual named as contact.

VI-04 Person Responsible for Assessment: Enter the name of the individual who made the site assessment and assigned the priority rating to the site. The person responsible for the assessment may be different from the individual who prepared the form.

VI-05 Agency: Enter the name of the Agency where the individual who made the assessment is employed.

VI-06 Organization: Enter the name of the organization within the Agency.

VI-07 Telephone Number: Enter the area code and local telephone number of the individual who made the assessment.

VI-08 Date: Enter the date the assessment was made.

Part 2 Waste Information

***I. Identification**: Refer to Part 1–I.

II. Waste States, Quantities, and Characteristics: Waste States, Quantities, and Characteristics provide information about the physical structure and form of the waste, measures of gross amounts at the site, and the hazards posed by the waste, considering acute and chronic health effects and mobility along a pathway.

*II-01 Physical States: Check the appropriate box(es) to indicate the state(s) of waste present, or thought to be present, at the site. If Other is indicated, specify the physical state of the waste.

*II-02 Waste Quantity at Site: Enter estimates of amounts of waste at the site. Estimates may be in weight (Tons) or volume (Cubic Yards or Number of Drums). Use as many entries as are appropriate; however, measurements must be independent. For

example, do not measure the same amounts of waste as both tons and cubic yards.

*II-03 Waste Characteristics: Check all appropriate entries to indicate the hazards posed by waste at the site. If waste at the site poses no hazard, check Not Applicable.

III. **Waste Category**: General categories of waste typically found are listed here. Enter the estimated gross amount of the category of waste next to the appropriate substance name and enter the unit of measure used with the estimate.

*III-01 Gross Amount: Gross Amount is the estimate of the amount of the waste category found at the site. Estimates should be furnished in metric tons (MT), tons (TN), cubic meters (CM), cubic yards (CY), drums (DR), acres (AC), acre feet (AF), liters (LT), or gallons (GA). Enter the estimated amount next to the appropriate waste category.

*III-02 Unit of Measure: Enter the appropriate unit of measure: MT (metric tons),TN (tons), CM (cubic meters), CY (cubic yards), DR (number of drums), AC (acres), AF (acre feet), LT (liters), or GA (gallons), next to the estimate of gross amount.

III-03 Comments: Comments may be used to further explain, or provide additional information, about particular waste categories.

IV. **Hazardous Substances**: Specific hazardous, or potentially hazardous, chemicals, mixtures, and substances found at the site are listed here. This information may not be available at the Preliminary Assessment stage. Substances for which information is available are to be listed here. For each substance listed those data items marked with an "at" sign (@) must be included.

@IV-01 Category: Enter in front of the substance name the three character waste category from Section III which best describes the substance, e.g., OLW (Oily Waste).

@IV-02 Substance Name: Enter one of the following: the name of the substance registered with the Chemical Abstract Service, the common or accepted abbreviation of the substance, the generic name of the substance, or commercial name of the substance.

@IV-03 CAS Number: Enter the number assigned to the substance when it was registered with the Chemical Abstract Service. Refer to the Appendix for most frequently cited CAS Numbers. CAS Numbers must be furnished for each substance listed. If a CAS Number for this substance has not been assigned, enter "999".

@IV-04 Storage/Disposal Method: Enter the type of storage or disposal facility in which the substance was found: SI (surface impoundment, including pits, ponds, and lagoons), PL (pile), DR (drum), TK (tank), LF (landfill), LM (landfarm), OD (open dump).

IV-05 Concentration: Enter the concentration of the substance found in samples taken at the site.

IV-06 Measure of Concentration: Enter the appropriate unit of measure for the measured concentration of the substance found in the sample, e.g., MG/L, UG/L.

V. **Feedstocks**

V-01 Feedstock Name: If feedstocks, or substances derived from one or more feedstocks, are present at the site, enter the name of each feedstock found. See the Appendix for the feedstock list.

V-02 CAS Number: Enter the CAS Number for each feedstock named. See the Appendix for feedstock CAS Numbers.

VI. **Sources of Information**: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

Part 3 Description of Hazardous Conditions and Incidents

*I. **Identification**: Refer to Part 1—I.

II. **Hazardous Conditions and Incidents**:

II-01 Hazards: Indicate each hazardous, or potentially hazardous, condition known, or claimed, to exist at the site.

II-02 Observed, Potential, or Alleged: Check Observed and enter the date, or approximate date, of occurrence if a release of contaminants to the environment, or some other hazardous incident, is known to have occurred. In cases of a continuing release, e.g., groundwater contamination, enter the date, or approximate date, the condition first became apparent. If conditions exist for a potential release, check potential. Check Alleged for hazardous, or potentially hazardous, conditions claimed to exist at the site.

II-03 Population Potentially Affected: For each hazardous condition at the site, enter the number of people potentially affected. For Soil enter the number of acres potentially affected.

II-04 Narrative Description: Provide a narrative description, or explanation, of each condition. Include any additional information which further explains the condition.

II-05 Description of Any Other Known, Potential, or Alleged Hazards: Provide a narrative description of any other hazardous, or potentially hazardous, conditions at the site not covered above.

III. **Total Population Potentially Affected**: Enter the total number of people potentially affected by the existence of hazardous, or potentially hazardous, conditions at the site. Do not sum the numbers shown for each condition.

IV. **Comments**: Other information relevant to observed, potential, or alleged hazards may be entered here.

V. **Sources of Information**: List the sources used to obtain information for this form. Sources cited may include: sample analysis, reports, inspections, official records, or other documentation. Sources cited provide the basis for information entered on the form and may be used to obtain further information about the site.

APPENDIX

I. FEEDSTOCKS

CAS Number	Chemical Name
1. 7664-41-7	Ammonia
2. 7440-36-0	Antimony
3. 1309-64-4	Antimony Trioxide
4. 7440-38-2	Arsenic
5. 1327-53-3	Arsenic Trioxide
6. 21109-95-5	Barium Sulfide
7. 7726-95-6	Bromine
8. 106-99-0	Butadiene
9. 7440-43-9	Cadmium
10. 7782-50-5	Chlorine
11. 12737-27-8	Chromite
12. 7440-47-3	Chromium
13. 7440-48-4	Cobalt
14. 1317-38-0	Cupric Oxide
15. 7758-98-7	Cupric Sulfate
16. 1317-39-1	Cuprous Oxide
17. 74-85-1	Ethylene
18. 7647-01-0	Hydrochloric Acid
19. 7664-39-3	Hydrogen Fluoride
20. 1335-25-7	Lead Oxide
21. 7439-97-6	Mercury
22. 74-82-8	Methane
23. 91-20-3	Napthalene
24. 7440-02-0	Nickel
25. 7697-37-2	Nitric Acid
26. 7723-14-0	Phosphorus
27. 7778-50-9	Potassium Dichromate
28. 1310-58-3	Potassium Hydroxide
29. 115-07-1	Propylene
30. 10588-01-9	Sodium Dichromate
31. 1310-73-2	Sodium Hydroxide
32. 7646-78-8	Stannic Chloride
33. 7772-99-8	Stannous Chloride
34. 7664-93-9	Sulfuric Acid
35. 108-88-3	Toluene
36. 1330-20-7	Xylene
37. 7646-85-7	Zinc Chloride
38. 7733-02-0	Zinc Sulfate

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
1. 75-07-0	Acetaldehyde
2. 64-19-7	Acetic Acid
3. 108-24-7	Acetic Anhydride
4. 75-86-5	Acetone Cyanohydrin
5. 506-96-7	Acetyl Bromide
6. 75-36-5	Acetyl Chloride
7. 107-02-8	Acrolein
8. 107-13-1	Acrylonitrile
9. 124-04-9	Adipic Acid
10. 309-00-2	Aldrin
11. 10043-01-3	Aluminum Sulfate
12. 107-18-6	Allyl Alcohol
13. 107-05-1	Allyl Chloride
14. 7664-41-7	Ammonia
15. 631-61-8	Ammonium Acetate
16. 1863-63-4	Ammonium Benzoate
17. 1066-33-7	Ammonium Bicarbonate
18. 7789-09-5	Ammonium Bichromate
19. 1341-49-7	Ammonium Bifluoride
20. 10192-30-0	Ammonium Bisulfite
21. 1111-78-0	Ammonium Carbamate
22. 12125-02-9	Ammonium Chloride
23. 7788-98-9	Ammonium Chromate
24. 3012-65-5	Ammonium Citrate, Dibasic
25. 13826-83-0	Ammonium Fluoborate
26. 12125-01-8	Ammonium Fluoride
27. 1336-21-6	Ammonium Hydroxide
28. 6009-70-7	Ammonium Oxalate
29. 16919-19-0	Ammonium Silicofluoride
30. 7773-06-0	Ammonium Sulfamate
31. 12135-76-1	Ammonium Sulfide
32. 10196-04-0	Ammonium Sulfite
33. 14307-43-8	Ammonium Tartrate
34. 1762-95-4	Ammonium Thiocyanate
35. 7783-18-8	Ammonium Thiosulfate
36. 628-63-7	Amyl Acetate
37. 62-53-3	Aniline
38. 7647-18-9	Antimony Pentachloride
39. 7789-61-9	Antimony Tribromide
40. 10025-91-9	Antimony Trichloride
41. 7783-56-4	Antimony Trifluoride
42. 1309-64-4	Antimony Trioxide
43. 1303-32-8	Arsenic Disulfide
44. 1303-28-2	Arsenic Pentoxide
45. 7784-34-1	Arsenic Trichloride
46. 1327-53-3	Arsenic Trioxide
47. 1303-33-9	Arsenic Trisulfide
48. 542-62-1	Barium Cyanide
49. 71-43-2	Benzene
50. 65-85-0	Benzoic Acid
51. 100-47-0	Benzonitrile
52. 98-88-4	Benzoyl Chloride
53. 100-44-7	Benzyl Chloride
54. 7440-41-7	Beryllium
55. 7787-47-5	Beryllium Chloride
56. 7787-49-7	Beryllium Fluoride
57. 13597-99-4	Beryllium Nitrate
58. 123-86-4	Butyl Acetate
59. 84-74-2	n-Butyl Phthalate
60. 109-73-9	Butylamine
61. 107-92-6	Butyric Acid
62. 543-90-8	Cadimium Acetate
63. 7789-42-6	Cadmium Bromide
64. 10108-64-2	Cadmium Chloride
65. 7778-44-1	Calcium Arsenate
66. 52740-16-6	Calcium Arsenite
67. 75-20-7	Calcium Carbide
68. 13765-19-0	Calcium Chromate
69. 592-01-8	Calcium Cyanide
70. 26264-06-2	Calcium Dodecylbenzene Sulfonate
71. 7778-54-3	Calcium Hypochlorite
72. 133-06-2	Captan
73. 63-25-2	Carbaryl
74. 1563-66-2	Carbofuran
75. 75-15-0	Carbon Disulfide
76. 56-23-5	Carbon Tetrachloride
77. 57-74-9	Chlordane
78. 7782-50-5	Chlorine
79. 108-90-7	Chlorobenzene
80. 67-66-3	Chloroform
81. 7790-94-5	Chlorosulfonic Acid
82. 2921-88-2	Chlorpyrifos
83. 1066-30-4	Chromic Acetate
84. 7738-94-5	Chromic Acid
85. 10101-53-8	Chromic Sulfate
86. 10049-05-5	Chromous Chloride
87. 544-18-3	Cobaltous Formate
88. 14017-41-5	Cobaltous Sulfamate
89. 56-72-4	Coumaphos
90. 1319-77-3	Cresol
91. 4170-30-3	Crotonaldehyde
92. 142-71-2	Cupric Acetate
93. 12002-03-8	Cupric Acetoarsenite
94. 7447-39-4	Cupric Chloride
95. 3251-23-8	Cupric Nitrate
96. 5893-66-3	Cupric Oxalate
97. 7758-98-7	Cupric Sulfate
98. 10380-29-7	Cupric Sulfate Ammoniated
99. 815-82-7	Cupric Tartrate
100. 506-77-4	Cyanogen Chloride
101. 110-82-7	Cyclohexane
102. 94-75-7	2,4-D Acid
103. 94-11-1	2,4-D Esters
104. 50-29-3	DDT
105. 333-41-5	Diazinon
106. 1918-00-9	Dicamba
107. 1194-65-6	Dichlobenil
108. 117-80-6	Dichlone
109. 25321-22-6	Dichlorobenzene (all isomers)
110. 266-38-19-7	Dichloropropane (all isomers)
111. 26952-23-8	Dichloropropene (all isomers)
112. 8003-19-8	Dichloropropene-Dichloropropane Mixture
113. 75-99-0	2-2-Dichloropropionic Acid
114. 62-73-7	Dichlorvos
115. 60-57-1	Dieldrin
116. 109-89-7	Diethylamine
117. 124-40-3	Dimethylamine
118. 25154-54-5	Dinitrobenzene (all isomers)
119. 51-28-5	Dinitrophenol
120. 25321-14-6	Dinitrotoluene (all isomers)
121. 85-00-7	Diquat
122. 298-04-4	Disulfoton
123. 330-54-1	Diuron
124. 27176-87-0	Dodecylbenzenesulfonic Acid
125. 115-29-7	Endosulfan (all isomers)
126. 72-20-8	Endrin and Metabolites
127. 106-89-8	Epichlorohydrin
128. 563-12-2	Ethion
129. 100-41-4	Ethyl Benzene
130. 107-15-3	Ethylenediamine
131. 106-93-4	Ethylene Dibromide
132. 107-06-2	Ethylene Dichloride
133. 60-00-4	EDTA
134. 1185-57-5	Ferric Ammonium Citrate
135. 2944-67-4	Ferric Ammonium Oxalate
136. 7705-08-0	Ferric Chloride

II. HAZARDOUS SUBSTANCES

CAS Number	Chemical Name
137. 7783-50-8	Ferric Fluoride
138. 10421-48-4	Ferric Nitrate
139. 10028-22-5	Ferric Sulfate
140. 10045-89-3	Ferrous Ammonium Sulfate
141. 7758-94-3	Ferrous Chloride
142. 7720-78-7	Ferrous Sulfate
143. 206-44-0	Fluoranthene
144. 50-00-0	Formaldehyde
145. 64-18-6	Formic Acid
146. 110-17-8	Fumaric Acid
147. 98-01-1	Furfural
148. 86-50-0	Guthion
149. 76-44-8	Heptachlor
150. 118-74-1	Hexachlorobenzene
151. 87-68-3	Hexachlorobutadiene
152. 67-72-1	Hexachloroethane
153. 70-30-4	Hexachlorophene
154. 77-47-4	Hexachlorocyclopentadiene
155. 7647-01-0	Hydrochloric Acid (Hydrogen Chloride)
156. 7664-39-3	Hydrofluoric Acid (Hydrogen Fluoride)
157. 74-90-8	Hydrogen Cyanide
158. 7783-06-4	Hydrogen Sulfide
159. 78-79-5	Isoprene
160. 42504-46-1	Isopropanolamine Dodecylbenzenesulfonate
161. 115-32-2	Kelthane
162. 143-50-0	Kepone
163. 301-04-2	Lead Acetate
164. 3687-31-8	Lead Arsenate
165. 7758-95-4	Lead Chloride
166. 13814-96-5	Lead Fluoborate
167. 7783-46-2	Lead Fluoride
168. 10101-63-0	Lead Iodide
169. 18256-98-9	Lead Nitrate
170. 7428-48-0	Lead Stearate
171. 15739-80-7	Lead Sulfate
172. 1314-87-0	Lead Sulfide
173. 592-87-0	Lead Thiocyanate
174. 58-89-9	Lindane
175. 14307-35-8	Lithium Chromate
176. 121-75-5	Malthion
177. 110-16-7	Maleic Acid
178. 108-31-6	Maleic Anhydride
179. 2032-65-7	Mercaptodimethur
180. 592-04-1	Mercuric Cyanide
181. 10045-94-0	Mercuric Nitrate
182. 7783-35-9	Mercuric Sulfate
183. 592-85-8	Mercuric Thiocyanate
184. 10415-75-5	Mercurous Nitrate
185. 72-43-5	Methoxychlor
186. 74-93-1	Methyl Mercaptan
187. 80-62-6	Methyl Methacrylate
188. 298-00-0	Methyl Parathion
189. 7786-34-7	Mevinphos
190. 315-18-4	Mexacarbate
191. 75-04-7	Monoethylamine
192. 74-89-5	Monomethylamine
193. 300-76-5	Naled
194. 91-20-3	Naphthalene
195. 1338-24-5	Naphthenic Acid
196. 7440-02-0	Nickel
197. 15699-18-0	Nickel Ammonium Sulfate
198. 37211-05-5	Nickel Chloride
199. 12054-48-7	Nickel Hydroxide
200. 14216-75-2	Nickel Nitrate
201. 7786-81-4	Nickel Sulfate
202. 7697-37-2	Nitric Acid
203. 98-95-3	Nitrobenzene
204. 10102-44-0	Nitrogen Dioxide
205. 25154-55-6	Nitrophenol (all isomers)
206. 1321-12-6	Nitrotoluene
207. 30525-89-4	Paraformaldehyde
208. 56-38-2	Parathion
209. 608-93-5	Pentachlorobenzene
210. 87-86-5	Pentachlorophenol
211. 85-01-8	Phenanthrene
212. 108-95-2	Phenol
213. 75-44-5	Phosgene
214. 7664-38-2	Phosphoric Acid
215. 7723-14-0	Phosphorus
216. 10025-87-3	Phosphorus Oxychloride
217. 1314-80-3	Phosphorus Pentasulfide
218. 7719-12-2	Phosphorus Trichloride
219. 7784-41-0	Potassium Arsenate
220. 10124-50-2	Potassium Arsenite
221. 7778-50-9	Potassium Bichromate
222. 7789-00-6	Potassium Chromate
223. 7722-64-7	Potassium Permanganate
224. 2312-35-8	Propargite
225. 79-09-4	Propionic Acid
226. 123-62-6	Propionic Anhydride
227. 1336-36-3	Polychlorinated Biphenyls
228. 151-50-8	Potassium Cyanide
229. 1310-58-3	Potassium Hydroxide
230. 75-56-9	Propylene Oxide
231. 121-29-9	Pyrethrins
232. 91-22-5	Quinoline
233. 108-46-3	Resorcinol
234. 7446-08-4	Selenium Oxide
235. 7761-88-8	Silver Nitrate
236. 7631-89-2	Sodium Arsenate
237. 7784-46-5	Sodium Arsenite
238. 10588-01-9	Sodium Bichromate
239. 1333-83-1	Sodium Bifluoride
240. 7631-90-5	Sodium Bisulfite
241. 7775-11-3	Sodium Chromate
242. 143-33-9	Sodium Cyanide
243. 25155-30-0	Sodium Dodecylbenzene Sulfonate
244. 7681-49-4	Sodium Fluoride
245. 16721-80-5	Sodium Hydrosulfide
246. 1310-73-2	Sodium Hydroxide
247. 7681-52-9	Sodium Hypochlorite
248. 124-41-4	Sodium Methylate
249. 7632-00-0	Sodium Nitrate
250. 7558-79-4	Sodium Phosphate, Dibasic
251. 7601-54-9	Sodium Phosphate, Tribasic
252. 10102-18-8	Sodium Selenite
253. 7789-06-2	Strontium Chromate
254. 57-24-9	Strychnine and Salts
255. 100-420-5	Styrene
256. 12771-08-3	Sulfur Monochloride
257. 7664-93-9	Sulfuric Acid
258. 93-76-5	2,4,5-T Acid
259. 2008-46-0	2,4,5-T Amines
260. 93-79-8	2,4,5-T Esters
261. 13560-99-1	2,4,5-T Salts
262. 93-72-1	2,4,5-TP Acid
263. 32534-95-5	2,4,5-TP Acid Esters
264. 72-54-8	TDE
265. 95-94-3	Tetrachlorobenzene
266. 127-18-4	Tetrachloroethane
267. 78-00-2	Tetraethyl Lead
268. 107-49-3	Tetraethyl Pyrophosphate
269. 7446-18-6	Thallium (I) Sulfate
270. 108-88-3	Toluene
271. 8001-35-2	Toxaphene
272. 12002-48-1	Trichlorobenzene (all isomers)
273. 52-68-6	Trichlorfon
274. 25323-89-1	Trichloroethane (all isomers)
275. 79-01-6	Trichloroethylene
276. 25167-82-2	Trichlorophenol (all isomers)
277. 27323-41-7	Triethanolamine Dodecylbenzenesulfonate
278. 121-44-8	Triethylamine
279. 75-50-3	Trimethylamine
280. 541-09-3	Uranyl Acetate
281. 10102-06-4	Uranyl Nitrate
282. 1314-62-1	Vanadium Pentoxide
283. 27774-13-6	Vanadyl Sulfate
284. 108-05-4	Vinyl Acetate
285. 75-35-4	Vinylidene Chloride
286. 1300-71-6	Xylenol
287. 557-34-6	Zinc Acetate
288. 52628-25-8	Zinc Ammonium Chloride
289. 1332-07-6	Zinc Borate
290. 7699-45-8	Zinc Bromide
291. 3486-35-9	Zinc Carbonate
292. 7646-85-7	Zinc Chloride
293. 557-21-1	Zinc Cyanide
294. 7783-49-3	Zinc Fluoride
295. 557-41-5	Zinc Formate
296. 7779-86-4	Zinc Hydrosulfite
297. 7779-88-6	Zinc Nitrate
298. 127-82-2	Zinc Phenolsulfonate
299. 1314-84-7	Zinc Phosphide
300. 16871-71-9	Zinc Silicofluoride
301. 7733-02-0	Zinc Sulfate
302. 13746-89-9	Zirconium Nitrate
303. 16923-95-8	Zirconium Potassium Fluoride
304. 14644-61-2	Zirconium Sulfate
305. 10026-11-6	Zirconium Tetrachloride

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