Preliminary Assessment Narrative

Site Name: Debeck Refuse Hideaway Landfill

Site Location: SW¼, NW¼, Section 8, T7N, R8E, Town of Middleton, Dane County

Site Geology and Hydrogeology: Unconsolidated materials across the facility range from less than 5 feet northwest of the site to greater than 100 feet south of the fill area. In the southern areas of the property on site unconsolidated materials consist of up to 31 feet of layered silt and clay with some sand layers. These materials are likely lake deposits and are overlying a fine silty sand with gravel. This material is either glacial or alluvial in nature. Beneath this material is a fine silty sand with some gravel interpreted as a glacial till layer.

Bedrock is at the surface to the north of the site and drops steeply to the south. Boring logs north of the site show approximately 105 feet of dolomite overlying cambrian age sandstone. The dolomite on site is likely Prairie du Chien Formation while the sandstone consists of both Tunnel City and Wonewoc units. The contact between units is gradational and all units appear to be fractured. The dolomite unit pinches out quickly to the south.

Regional groundwater flow on site appears to be generally to the south. However, leachate levels built up on the site appear to have distorted local groundwater flow paths. Locally it appears now that groundwater moves somewhat radially away from the facility and only at some unknown distance from the site do natural flow conditions again prevail.

Physical Conditions of the Site - This site is a municipal refuse landfill that recently ceased operation on May 16, 1988. The site sits on a 40-acre parcel of which approximately 20 acres is filled. In some locations the fill is over 100 feet thick. The total fill volume is approximately 1.3 million cubic yards. Prior to closure the site was operated as a natural attenuation landfill. Because of serious groundwater contamination problems, the state ordered the facility closed on May 16, 1988. In response the operators have closed the site, and are in the process of capping the landfill. Further remedial actions by the operators are being investigated.

Groundwater around the facility is contaminated with heavy metals and volatile organic chemicals. This contamination is attributed to the facility. Also, three private water supply wells are contaminated with volatile organic chemicals. Concern exists over the potential for additional public and private wells in the area to become contaminated. The water supply contamination is suspected of coming from the facility. In addition, concern exists for contamination of Black Earth Creek. The creek is a state class I trout stream. Tributaries to the creek run adjacent to the landfill site and the facility is located in the headwaters area of the creek.

Preliminary results of samples taken from the sedimentation basin and a drainage ditch show contamination of surface water. These results are:

Sedimentation Basin		Drainage Ditch	
Acetone	220 ug/l	1,2-Dichloroethylene	9 ug/l (estimated)
2-Butanone	290 ug/l		
Methylene Chloride (estimated)	14 ug/l		
1,2-Dichloroethylene (estimated)	11 ug/l		
Bromoform (estimated)	12 ug/l		
Toluene (estimated)	9 ug/l		

Substances of Concern: Groundwater contamination by volatile organic chemicals are the substances of greatest concern at this time. Maximum concentrations of some of these materials in groundwater are:

		Well
1,1,1-Trichloroethane	5.8 parts per billion (ppb)	P-16S
Trichloroethylene	180 ppb	P-8S
Tetrachloroethylene	530 ppb	P-8S
Vinyl Chloride	200 ppb	P-9S
Trans and Cis 1,2-Dichloroethylene	600 ppb	P-9S
1,1-Dichloroethane	32	P-9S
Xylenes	480 ppb	P-8D
Ethyl Benzene	95 ppb	P-8D

In addition, there is heavy metal groundwater contamination present particularly from the substance manganese.

Site Status: The site was closed by state administrative order on May 16, 1988. Remedial actions have been initiated by the site owner. A site inspection will likely be done within the next twelve months.

Negotiation Status: The site operator has been required by the Department to investigate the extent of contamination. Future remedial actions may be required by the Department.

Date Prepared: June 17, 1988.

MS:ct

United States
Environmental Protection
Agency

Office of Emergency and
Remedial Response
Washington, DC 20460

EPA Form 2070-12
July, 1981

EPA

Potential Hazardous Waste Site

Preliminary Assessment

Preliminary Assessment

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

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WI	WID980610604

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER
DEBECK REFUSE HIDEAWAY LANDFILL	HWY 14

03 CITY	04 STATE	05 ZIP CODE	06 COUNTY	07 COUNTY CODE	08 CONG DIST
MIDDLETON	WI	53562	DANE	25	2

09 COORDINATES LATITUDE	LONGITUDE
43° 05' 53.0"	089 34 40.0

10 DIRECTIONS TO SITE (Starting from nearest public road)
Take US 14 west from Madison through Middleton, proceed west approximately 1.5 miles west of Middleton to the site on the north side of the highway

III. RESPONSIBLE PARTIES

01 OWNER (If known)	02 STREET (Business, mailing, residential)
John DeBeck	4808 HWY 12

03 CITY	04 STATE	05 ZIP CODE	06 TELEPHONE NUMBER
MIDDLETON	WI	53562	(608) 836-3281

07 OPERATOR (If known and different from owner)	08 STREET (Business, mailing, residential)
SAME AS OWNER	

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: ___/___/___ (MONTH DAY YEAR) ☒ B. UNCONTROLLED WASTE SITE (CERCLA 103 c) DATE RECEIVED: 6/11/81 (MONTH DAY YEAR) ☐ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION
☒ YES ☐ NO DATE 3/8/88 (MONTH DAY YEAR)

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

with many previous inspections CONTRACTOR NAME(S): _____

02 SITE STATUS (Check one)	03 YEARS OF OPERATION		
☐ A. ACTIVE ☒ B. INACTIVE ☐ C. UNKNOWN	1974 (BEGINNING YEAR)	1988 (ENDING YEAR)	☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED
groundwater contamination by organic chemicals, including 1,1,1-trichloroethane, 1,1-dichloroethane, trans and cis 1,2-dichloroethylene, trichloroethylene, tetrachloroethylene and vinyl chloride has been confirmed. It is suspected that organic contamination of surface water may exist. Nearby private water supplies are contaminated possibly from the landfill.

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION
The site represents a current hazard to the surface and groundwater resources in the area including a class I trout stream. The represent a potential hazard to those water users in the area who rely on groundwater as their drinking water supply.

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 (Inspection 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
MIKE SCHMOLLER	WDNR	(608) 275-3303

04 PERSON RESPONSIBLE FOR ASSESSMENT	05 AGENCY	06 ORGANIZATION	07 TELEPHONE NUMBER	08 DATE
MIKE SCHMOLLER	WDNR	WDNR	(608) 275-3303	6/27/88 (MONTH DAY YEAR)

EPA FORM 2070-12 (7-81)

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

EPA

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WI	WID980610604

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES (Check all that apply)

- [X] A SOLID
- [ ] B POWDER, FINES
- [X] 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 1-3 million

NO OF DRUMS _____

03 WASTE CHARACTERISTICS (Check all that apply)

- [X] A TOXIC
- [ ] B CORROSIVE
- [ ] C RADIOACTIVE
- [X] D PERSISTENT
- [ ] E SOLUBLE
- [ ] F INFECTIOUS
- [ ] G FLAMMABLE
- [ ] H IGNITABLE
- [X] 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	Unknown		(see attachment)
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
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
SOL	1,1,1-Trichloroethane	25323-89-1	Landfill	5.8	ppb
SOL	1,1-dichloroethane		Landfill	32	ppb
SOL	1,2-dichloroethylene		Landfill	600	ppb
SOL	Trichloroethylene	79-01-6	Landfill	180	ppb
SOL	Tetrachloroethylene	127-18-4	Landfill	530	ppb
SOL	vinyl chloride		Landfill	200	ppb
SOL	ethyl benzene	100-41-4	Landfill	95	ppb
SOL	Xylenes	1330-20-7	Landfill	480	ppb
SOL	1,2-Dichloroethane		Landfill		ppb
SOL	Fluorotrichloromethane		Landfill		ppb
MES	Manganese		Landfill		
	The concentration listed are maximum				
	concentrations found in groundwater near the				
	facility				

V. FEEDSTOCKS (See Appendix for CAS Numbers)

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

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

1. DNR Water Supply Files
2. DNR Solid Waste Files
3. USGS 7.5 minute topographic maps

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WI	WID980610604

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION — 02 ☒ OBSERVED (DATE: 8/18/87) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,500
04 NARRATIVE DESCRIPTION
groundwater contamination has been confirmed on site for several dates. VOC and heavy metals are in the groundwater in and around the facility. There is potential for wider contamination as the contaminants migrate through the aquifer.

01 ☒ B. SURFACE WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 0
04 NARRATIVE DESCRIPTION
Tentative analytical results ~~for~~ for samples taken from the sedimentation pond and a drainage ditch show organic chemical contamination (see narrative for parameters and concentrations). The drainage ditch is in direct connection with Black Earth Creek.

01 ☐ C. CONTAMINATION OF AIR — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION
none detected to date

01 ☐ D. FIRE/EXPLOSIVE CONDITIONS — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION
none known on site

01 ☒ E. DIRECT CONTACT — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 120
04 NARRATIVE DESCRIPTION
site access is not strictly controlled through fencing; potentially individuals could walk on site

01 ☒ F. CONTAMINATION OF SOIL — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 AREA POTENTIALLY AFFECTED: 20 (Acres)
04 NARRATIVE DESCRIPTION
it is possible soil contamination exists below the fill area.

01 ☒ G. DRINKING WATER CONTAMINATION — 02 ☐ OBSERVED (DATE:) ☒ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED: 15,500
04 NARRATIVE DESCRIPTION
groundwater contamination has been detected in 3 private wells. The landfill is the suspected source of this contamination. It appears that there is potential for further further contamination of additional public and private wells around the facility

01 ☐ H. WORKER EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 WORKERS POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION
none known to date

01 ☐ I. POPULATION EXPOSURE/INJURY — 02 ☐ OBSERVED (DATE:) ☐ POTENTIAL ☐ ALLEGED
03 POPULATION POTENTIALLY AFFECTED:
04 NARRATIVE DESCRIPTION
none known to date

EPA

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

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
WI	WID980610604

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 [X] J. DAMAGE TO FLORA — 02 [X] OBSERVED (DATE: 5/88) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
there is dead grass on site from leachate seeps and possible gas stress

01 [X] K. DAMAGE TO FAUNA — 02 ☐ OBSERVED (DATE: _____) ☒ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION (Include name(s) of species)
the potential for discharge of hazardous substances to the creek leads to the potential for damage to the trout population in the creek.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
none expected

01 [X] M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE 3/18/88 and summer 1985) ☐ POTENTIAL ☐ ALLEGED
(Spills/runoff/standing liquids/leaking drums)
03 POPULATION POTENTIALLY AFFECTED: 15,500 (in three mile radius)
04 NARRATIVE DESCRIPTION
groundwater migration of wastes and leachate seeps have been documented on site

01 ☐ N. DAMAGE TO OFFSITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) ☐ POTENTIAL ☐ ALLEGED
04 NARRATIVE DESCRIPTION
none known

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

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

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS
—

III. TOTAL POPULATION POTENTIALLY AFFECTED: 15,500

IV. COMMENTS
The site appears to represent a serious threat to the surface water and groundwater resources in the area

V. SOURCES OF INFORMATION (Cite specific references, e. g., state files, sample analysis, reports)
1. DNR Solid Waste Files
2. DNR Water Supply Files

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 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. 67-74-9	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. 2944-87-4	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	Tetrechloroethane
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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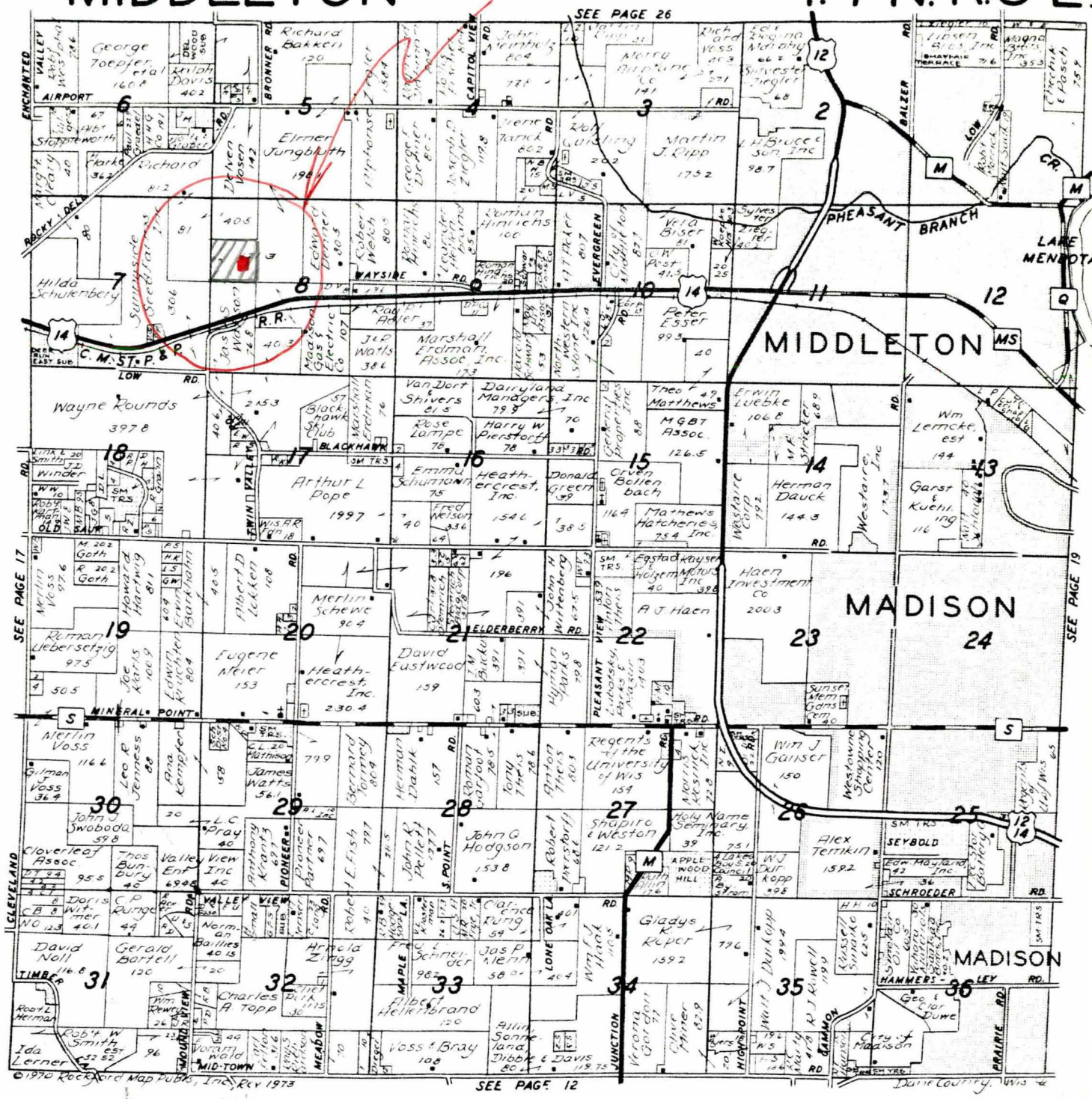
MIDDLETON T. 7 N.-R. 8 E.

REFUSE HIDEAWAY



1973

MIDDLETON TOWNSHIP OFFICERS

CHAIRMAN	EDWIN H. TALLARD	OLD SAUK RD. - MIDDLETON - R.1
SUPERVISORS.....	RUSSELL B. HODGSON	VERONA - R.1
	ERIC F. NELSON	OLD SAUK RD. - MIDDLETON - R.1
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TREASURER.....	ROLAND J. MEEKER	AIRPORT RD. - MIDDLETON - R.1
ASSESSOR.....	JAMES J. CLARK (Appointed)	WAUNAKEE - R.1

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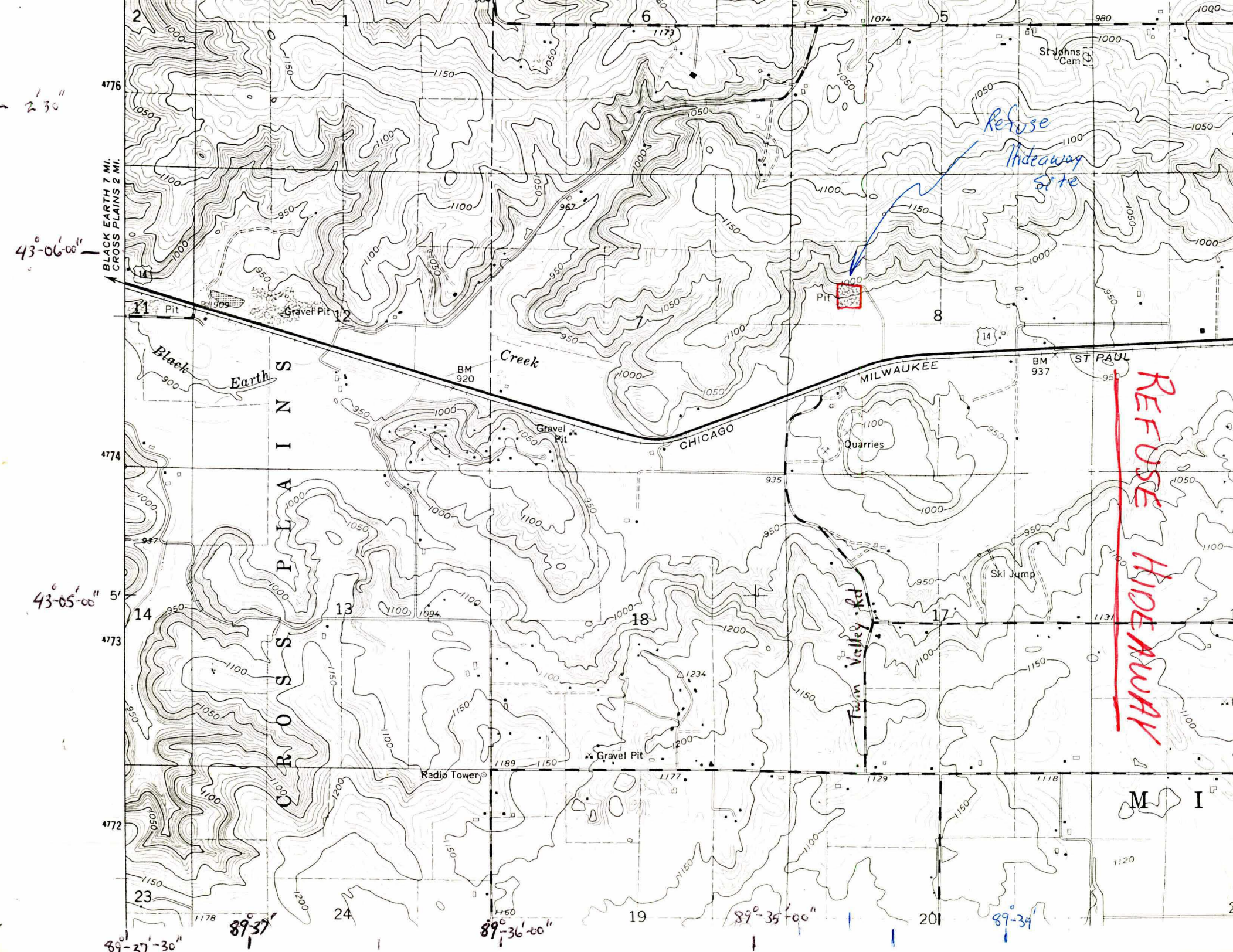
BLACK EARTH 7 MI.
CROSS PLAINS 2 MI.
Refuse Hideaway Site
REFUSE HIDEAWAY
Pit
Gravel Pit
Black Earth Creek
BM 920
BM 937
ST PAUL
MILWAUKEE
CHICAGO
Quarries
Gravel Pit
Ski Jump
Twin Valley Rd
Radio Tower
Gravel Pit
St Johns Cem
43°-06'-00"
43°-05'-00"
89°-37'-30"
89°-37'
89°-36'-00"
89°-35'-00"
89°-34'
2'30"
5'

Preliminary and Projected HRS PA

~~Preliminary Assessment~~ Guidance Document

This document will help you prepare the Preliminary Assessment and the Preliminary and Projected HRS scores, as required by EPA. As a brief summary, preliminary HRS scores are prepared to determine whether a site will qualify for the National Priority List (NPL) without additional information. The HRS score must be above a 28.5 for a site to be eligible for the NPL. If a site does not score above a 28.5 based on the existing information obtained during the preparation of the Preliminary Assessment, a projected HRS score is developed. A projected HRS score identifies what a site may score if additional information (typically as a result of sampling) is obtained. This is used as a guide to direct future activities and determine which sites, given limited access to sampling and analyses, would be the best to sample first. If the projected HRS score is greater than 28.5, this indicates that additional work should be done in the site inspection stage of the preremedial Superfund program.

When this document is completed, the Preliminary Assessment form must also be completed and sent to the Central Office for review and final submission to EPA as completion of activities identified in our Cooperative Agreement.

SITE NAME DEBECK REFUSE HIDEAWAY LANDFILLOCATION SW 1/4, NW 1/4, SEC 8, T 7 N, R 8E COUNTY DANE
STREET HWY 14 CITY MIDDLETON ZIP 53562 COUNTY CODE 25 CONG DIST 2

There are three contamination "routes" or pathways that are evaluated using the Hazard Ranking System scoring method. These are the groundwater route, surface water route, and air route. Each route is evaluated seperately and scored seperately.

PA MANUAL	A. GROUNDWATER ROUTE	Pre/Projected HRS Score
Part 3, II	Monitoring Wells Yes X No___ Unknown_____	
	Monitoring Wells Contaminated Yes X No___ Unk___	
	(Private,) Public &/or Commercial Wells contaminated Yes X No___ Unk___	
Part I, IV	Contaminants detected 1,1,1-trichloroethane, 1,1-dichloroethane, manganese, trans and cis 1,2-dichloroethylene, trichloroethylene, tetrachloroethylene, vinyl chloride. (partial list)	
	Background Well available Yes X No___ Unk___	
	Groundwater used for drinking water Yes X No___	
***	OBSERVED RELEASE	
	An "observed release" is a documented release of hazardous substances to any of the three routes - groundwater, surface water, air. An observed release occurs when there is documentation of contamination at levels that are significantly greater than background levels. In most cases, EPA considers an observed release to occur when the contaminant of concern is found at a concentration greater than three times background or 10 times the detection limit for that particular contaminant. In order to have a true observed release, there must be background groundwater quality information within three miles of	

the site and good quality sampling and analyses that identify releases to the environment. Typically, there is not enough information from the Preliminary Assessment to determine at this time whether there is an observed release. Additional sampling may be needed to actually document an observed release.

If an observed release, score 45, and continue with the WASTE CHARACTERISTICS Section. If not, continue with ROUTE CHARACTERISTICS

45, 45*

If no known contamination, is there a potential Yes____ No_____

*** ROUTE CHARACTERISTICS

Type of Aquifers — Aquifer of Concern?

(Note: Aquifer of concern is defined as the aquifer that is used by a population for drinking water. If there are interconnected aquifers, consider them as one unit. If there are seperate aquifers, i.e., a continuous layer of confining material between two aquifers within three miles of the site, than consider the aquifers as seperate units. In that case, and more than one aquifer is used as a source of drinking water, complete the information below using the aquifer that will produce the highest score, i.e., the one that is used by the most people.)

Deposit 1_____Depth_____ft _____
Deposit 2_____Depth_____ft _____
Deposit 3_____Depth_____ft _____
Deposit 4_____Depth_____ft _____

Are the aquifers interconneted Yes____ No____ Unknown ____

*** Depth to Aquifer of Concern

Depth to aquifer of concern is defined as the vertical distance from the lowest point of the hazardous substance to the highest seasonal level of the saturated zone of the aquifer of concern. See Attachment 5-1 of the Site Inspection Manual for more information.

>150' = 0 x 2 = 21' - 75' = 2 x 2 =
76' - 150' = 1 x 2 = 0' - 20' = 3 x 2 = ___/___

*** Net Precipitation

-10 in = 0 +5 in - +15 in = 2
-10 in - +5 in = 1 +15 in = 3 ___/___

(See Attachment 5-3 of the Site Inspection Manual for maps for Normal Annual Total Precipitation and Mean Annual Lake Evaporation. Net Precipitation = Total Precip - Mean Evaporation.)

*** Permeability of the Unsaturated Zone

$<10^{-7}$ cm/sec = 0 10^{-3} cm/sec - 10^{-5} cm/sec = 2
10^{-5} cm/sec - 10^{-7} cm/sec = 1 $>10^{-3}$ cm/sec = 3 ___/___

(See Attachment 3-2 of the Site Inspection Manual for a desription of rock types that fall into these categories.)

*** Physical State

Part 2, II This refers to the state of the hazardous substance at the time of disposal, and includes gases generated in the disposal area.

Solid, consolidated or stabilized = 0 Liquid, sludge or gas = 3
Solid unconsolidated or unstabilized = (1) Powder or fine material = 4 ___/___

SUM ROUTE CHARACTERISTICS (If no observed release) ___/___*

Does site geology prevent migration of contaminants to underlying deposits Yes____ No_____ Unknown_____

(Note: This is very important in preparing the HRS score, and often the most controversial between us and EPA. In most cases in Wisconsin, there are no confining layers that prevent migration of contaminants to underlying deposits. However, EPA does not always support our assertions without proof that the "confining bed" is leaky. Thus, this section should usually be completed as a "no" or "unknown".)

Does the containment procedures used at the facility prevent the migration of contaminants to underlying aquifers Yes____ No____ Unknown____

If yes, why_____

_____

*** CONTAINMENT VALUE

a. Surface Impoundments:
- Sound run-on diversion structure, nonpermeable liner compatible with waste, adequate leachate collection system = 0
- Nonpermeable compatible liner with no leachate collection system or inadequate freeboard = 1
- Potentially unsound run-in diversion structure or moderately permeable compatible liner = 2
- Unsound run-on diversion structure, no liner, or incompatible liner = 3

b. Containers
- Containers sealed and in sound condition, adequate liner, and adequate leachate collection system = 0
- Containers sealed and in sound condition, no liner or mederately permeable liner = 1
- Containers leaking, moderately permeable liner = 2
- Containers leaking and no liner or incompatible liner = 3

c. Piles
- Piles uncovered and waste stabilized, or piles covered, waste unstabilized, and essentially nonpermeable liner = 0
- Piles uncovered, waste unstabilized, moderately permeable liner, and leachate collection system = 1
- Piles uncovered, waste unstabilized, moderately permeable liner, and no leachate collection system = 2
- Piles uncovered, waste unstabilized, and no liner = 3

d. Landfill

Essentaily nonpermeable liner, liner compatible with waste and adequate leachate collection system = 0

Essentially nonpermeable compatible liner, no leachate collection system, landfill surface precludes ponding = 1

Moderately permeable, compatible liner, and landfill surface precludes ponding = 2

No liner or incompatible liner, moderately permeable compatible liner, landfill surface encourages ponding, no run-on control. ___/___*

WASTE CHARACTERISTICS

*** Toxicity and Persistance

Part 2, II, III, IV, V

Use the following matrix for the hazardous substances found at the facility. Substances evaluated: Manganese. Use the substance which scores the highest value in this matrix for the substance of concern.

The following matrix must be used.

Value for Toxicity	Value for Persistence 0	1	2	3
0	0	0	0	0
1	3	6	9	12
2	6	9	12	15
3	9	12	15	18

18/18

See Attachment 2-1 of the Site Inspection Manual for some contaminant specific values and for general tables for toxicity and persistence

*** Hazardous Waste Quantity*

Part 2, II

This includes all hazardous substances at a facility (as received) except that with a containment value of 0. Don't include amounts of contaminated soil or water. Conversion values are 1 ton = 1 cubic yd = 4 drums. See Attachment 4-3 of the Site Inspection Manual for more conversion values.

Tons/cubic yards	HRS Value	Tons/cubic yards	HRS Value
0	0	251 - 625	5
1 - 10	1	626 - 1250	6
11 - 62	2	1251 - 2500	7
63 - 125	3	>2500	8
126 - 250	4		

*(see Attachment A)

1/6

SUM WASTE CHARACTERISTICS

19/24*

GROUNDWATER TARGETS

*** Groundwater Use

Unusable (eg extremely saline aquifer) = 0

Commercial, industrial, irrigation; not used but usable = 1

Drinking water with municipal water from alternate unthreatened sources presently available = 2

Drinking water; no municipal water from alternate source presently available = 3

9/9

X 3

*** Distance to Nearest Well/Population served

This distance is measured from the hazardous substance to the nearest well that draws water from the aquifer of concern. Population served is an estimate of the number of persons at risk - including residents as well as others who use the water regularly such as workers in factories that live beyond three miles from the site. If aerial photography is used and residents are known to use groundwater, assume 3.8 persons per residence. If groundwater is used for irrigation, convert to population by assuming 1.5 persons per acre of irrigated land. The wells of concern must be within three miles of the hazardous substances, but the population served need not be.

Distance to Nearest Well 1200 Feet (Roberts well)

Estimate of people on groundwater within three miles of the site 15,500

Distance to nearest Well	Population Served	Pop Val	Well Value 0	1	2	3	4
> 3 mi = 0	0 = 0	0	0	0	0	0	0
2 - 3 mi = 1	1 - 100 = 1	1	0	4	6	8	10
1 - 2 mi = 2	101 - 1000 = 2	2	0	8	12	16	20
2000 ft - 1 mi = 3	1001 - 3000 = 3	3	0	12	18	24	30
<2000 ft = 4	3001 - 10,000 = 4	4	0	16	24	32	35
	>10,000 = 5	5	0	20	30	35	40

40/40

49/49*

SUM GROUNDWATER TARGETS

A. If observed release, multiply 45 by WASTE CHARACTERISTICS Sum by GROUNDWATER TARGETS Sum — 41895/52920**

B. If no observed release, multiply ROUTE CHARACTERISTICS sum by CONTAINMENT by WASTE CHARACTERISTICS sum by GROUNDWATER TARGETS Sum — ___/___**

Divide A. or B. by 57,330 and multiply by 100 — 73.08/92.31
(If this number divided by 1.73 is greater than 28.5, the site will score greater than 28.5 on the HRS system.)

On the last page is a table for identifying all of the references used to prepare this document. Assign each reference a number. Please indicate what the reference number of the sources used for the above information is here:

Sources 1, 2, 3, ____, ____, ____, ____, ____, ____, ____, ____.

Part 3 B. SURFACE WATER ROUTE

Have any surface water samples been taken for this site? Yes X No ___ Unk ___

Is the surface water contaminated? Yes___ No___ Unknown X

Types of contamination documented none

*** OBSERVED RELEASE

Quantitative evidence of release to surface water must be available that shows the facility is releasing contminants to the surface water. This would include measuring showing elevated contaminant levels downstream from a facility and lower levels of contaminants upstream from a facility.

Is there an observed release of hazardous substances to the surface water? NO

If yes, score 45 and continue with the WASTE CHARACTERISTICS section
If no, continue with the ROUTE CHARACTERISTICS section

— / 45*

If no recorded contamination, is there a potential? Yes X No___ Unknown___

Contaminants Detected Tentative results show acetone (220 ug/l) 2-Butanone (290 ug/l) Methylene Chloride (estimated at 14 ug/l) 1,2-Dichloroethylene (estimated 11 ug/l) Bromoform (estimated 12 ug/l) and toluene (estimated 9 ug/l) in a sedimentation pond on site.

ROUTE CHARACTERISTICS

*** Facility Slope and Intervening Terrain

This indicates the ease with which contaminated runoff could enter nearby surface waters.

	Terrain average slope is < 3% or site is seperated from water body by areas of higher elevation.	Terrain average slope is 3% - 5%	Terrain average slope is 5% - 8%	Terrain average slope is > 8%	Site is in surface water
Facility is a closed basin	0	0	0	0	3
Facility average slope <3%	0	1	1	2	3
Facility average slope 3% - 5%	0	1	(2)	2	3
Facility average slope is 5% - 8%	0	2	2	3	3
Facility average slope is >8%	0	2	3	3	3

2 / —

*** 1 Year/24 Hour Rainfall

Attachment 5-4 contains a map used to determine this factor. Use the following chart for scoring.

Amount of Rainfall <1" = 0
Amount of Rainfall 1.0" - 2.0" = 1
Amount of Rainfall 2.1" - 3.0" = (3)
Amount of Rainfall >3.0" = 4

3 / 0

Type of nearby surface water(s)

creek X stream_____, and/or river_____(contuously flowing)

pond_____, lake_____, and/or swamp/marsh_____

*** Distance to nearest surface water adjacent to site feet, Name Headwaters of Black Earth Creek

>2 miles = 0 x 2 =
1 - 2 miles = 1 x 2 =
1000 feet - 1 mile = 2 x 2 =
< 1000 feet = 3 x 2 = 6 | 6/—

*** Physical State | 1/—

See the procedure and values as assigned for Groundwater Route | 12/—*

SUM ROUTE CHARACTERISTICS

*** CONTAINMENT

Containment is a measure of the means that have been taken to minimize the likelihood of a contaminant entering surface waters at the site or beyond the facility boundary.

a. Surface Impoundments
- Sound diking or diversion structure, adequate freeboard, and no erosion evident = 0
- Sound diking or diversion structure, but inadequate freeboard = 1
- Diking not leaking, but potentially unsound = 2
- Diking unsound, leaking or in danger of collapse = 3

b. Containers
- Containers sealed, in sound condition, and surrounded by sound diversion or containment system = 0
- Containers sealed and in sound condition, but not surrounded by sound diversion or containment system = 1
- Containers leaking and diversion or containment structures potentially unsound = 2
- Containers leaking, and no diversion or containment structures or diversion structures leaking or in danger of collapse

c. Waste Piles
- Piles are covered and surrounded by sound diversion or containment system = 0
- Piles covered, wastes unconsolidated, diversion or containment system not adequate = 1
- Piles not covered, wastes unconsolidated, and diversion or containment system potentially unsound = 2
- Piles not covered, wastes unconsolidated and no diversion or containment of diversion system leaking or in danger of collapse = 3

d. Landfill
- Landfill slope precludes runoff, landfill surrounded byu sound diversion system, or landfill has adequate cover material = 0
- Landfill not adequately covered and diversion system not sound = (1)
- Landfill not covered and diversion system potentially unsound = 2
- Landfill not covered and no diversion system present or diversion system unsound = 3 | 1/—*

WASTE CHARACTERISTICS

*** See GROUNDWATER ROUTE for Toxicity and Persistence values | 18 / 18

*** See GROUNDWATER ROUTE for Waste Quantity values | 1 / 6

SUM WASTE CHARACTERISTICS scores | 19 / 24*

TARGETS

*** Surface Water Use

This determines the use of the surface water within three miles of the facility.

Not currently used = 0 x 3
Commercial and Industrial = 1 x 3
Irrigation, economically important reosurces, commercial food preparation or recreation (fishing, swimming, boating) = 2
Drinking Water = 3 x 3 = (6)

| 6 / 6

*** Distance to a Sensitive Environment

This refers to the distance from the hazardous substance (not the facility boundary) to an area containing an important biological resource or to a fragile natural setting. See Section 3-5 of the Site Inspection Manual for more information.

Assigned Value =	0 x 2	1 x 2	2 x 2	3 x 2
Distance to Wetlands (5 acre minimum)				
Coastal	>2 mi.	1 - 2 mi.	1/2 - 1 mi.	<1/2 mile
Fresh Water	>1 mi.	1/4 - 1 mi.	100 ft - 1/4 mi.	<100 ft.
Distance to Critical Habitat (of endangered species or National Wildlife Refuge)	>1 mi.	1/2 - 1 mi.	1/4 - 1/2 mi.	<1/4 mi.

| 6 / 6

*** Population Served/Distance to Water Intake Downstream

This is used only when there is a population using surface water as drinking water with intakes within three miles of the site or facility. The values are determined by measuring the distance from the probable point of entry to surface water following the surface flow (stream miles). Population includes residents as well as those who regularly use the water. The distance is measured from the hazardous substance including observations in stream or sediment samples regardless of facility boundaries. Use the following table to determine the value for this category. See Section 3-3 of the Site Inspection Manual for more information.

Population	1 - 4 mile	1/2 - 1 mile	1/4 - 1/2 mile	0 - 1/4 mile
0	0	0	0	0
1 - 100	9	12	15	18
101 - 1000	12	15	18	21
1001 - 3000	15	18	21	24
3001 - 10,000	18	21	24	27
>10,000	21	24	27	30

| 0 / 0

SUM TARGETS | 12/12*

A. If observed release, multiply 45 by WASTE CHARACTERISTICS Sum by SURFACE WATER TARGETS Sum | —/12960

B. If no observed release, multiply ROUTE CHARACTERISTICS sum by CONTAINMENT by WASTE CHARACTERISTICS sum by SURFACE WATER TARGETS Sum | 8736—**

Divide A. or B. by ~~57,330~~ 64350 and multiply by 100 | 4.25/20.14

On the last page is a table for identifying all of the references used to prepare this document. Assign each reference a number. Please indicate what the reference number of the sources used for the above information is here:

Sources 1, 2, 3, ____, ____, ____, ____, ____, ____, ____, ____.

C. AIR ROUTE

*** Observed Release - The only acceptable evidence of release for the air route is data that show levels of a contaminant at or in the vicinity of the facility that significantly exeed background levels, regardless of the frequencey of occurrence.

Part IV

Is there data that show releases of hazardous substances to the environment? Yes____ No X Unknown ____

If yes, score 45
If no, score 0 and assign a 0 to the entire AIR ROUTE score | 0/0

When and where was the release observed? _____ | ___/___

What was the sampling protocol? _____

WASTE CHARACTERISTICS

*** Reactivity and Incompatibility

This measures the potential for sudden release of concentrated air pollutants independently, with the highest value used for this worksheet. See Section 2-1 in the PA Manual for additional information.

Reactivity measures the fir/explosion threat at a facility. The following values should be used:

NFPA Level

Materials which are normally stable even under fire exposure conditions and which are not reactive with water = 0

Materials which in themselves are normally stable but which may become unstable at elevated temperatures and pressures or which may reack with water with some release of energy but not violently = 1

Materials which in themselves are normally unstable and readily undergo violent chemical change but do not detonate. This includes materials which can undergo chemical change with rapid release of energy at normal temperatures and pressures or which can undergo violent chemical changes at elevated temperature and pressures. Also includes those materials which may reach violently with water or which may form potentially explosive mixtures with water. = 2

Materials which in themselves are capable of detonation or of explosive decomposition or of explosive reaction but which require a strong initiating source or which must be heated under confinement before initiaion. Includes materials which are sensitive to thermal or mechanical shock at elevated temperatures and pressures or which react explosively with water without requiring heat or confinement = 3

Materials which in themselves are readily capable of detonation or of explosive decomposition or explosive reaction at normal temperatures and pressures. Includes materials which are sensitive to mechanical or localized thermal shock = 3 ___/___

*** Incompatibility is a measure of the increased hazard when substances are mised under uncontrolled conditions. See Attachment 2-1 of the PA Manual for tables of incompabitle wastes. ___/___

*** Toxicity

This information should be evaluated for the hazardous substances found in the air. The value used for the scoring should be based on the most toxic compound. The tables in Attachment 2-1 of the PA Manual should be used to determine the toxicity value.

Sax Level 0 or NFPA Level 0 = 0
Sax Level 1 or NFPA Level 1 = 1
Sax Level 2 or NFPA Level 2 = 2
Sax Level 3 or NFPA Level 3 or 4 = 3

___/___

*** Hazardous Waste Quantity

See GROUNDWATER ROUTE for Waste Quantity values

___/___

SUM WASTE CHARACTERISTICS

___/___*

TARGETS

*** Population within four mile radius

This distance is measured from the hazardous substance, not the facility boundary. The population to be counted includes persons residing within the four mile radius as well as transients such as workers in factories, offices, restaurants, motels or students. If aerial photography is used to determine population, assume 3.8 persons per household.

Population	1 - 4 miles	1/2 - 1 mile	1/4 - 1/2 mile	0 - 1/4 mile
0	0	0	0	0
1 - 100	9	12	15	18
101 - 1000	12	15	18	21
1001 - 3000	15	18	21	24
3001 - 10,000	18	21	24	27
>10,000	21	24	27	30

___/___

Who is the Maximally Exposed Individual?_____

Address _____

PRELIMINARY AND PROJECTED HRS SCORE SHEET

	S		S^2	
	Pre	Proj	Pre	Proj
GROUNDWATER ROUTE Score	73.08	92.31	5340.69	8521.14
SURFACE WATER ROUTE Score	4.25	20.14	18.06	405.62
AIR ROUTE Score	0	0	0	0

pre

$S_{gw}^2 + S_{sw}^2 + S_a^2 =$ 5358.75

proj.

8926.76

$(S_{gw}^2 + S_{sw}^2 + S_a^2)^{1/2} =$ 73.20

94.48

$(S_{gw}^2 + S_{sw}^2 + S_a^2)^{1/2} / 1.73 = S_m =$ HRS Score

Preliminary HRS Score 42.3

Projected HRS Score 54.6

Debeck Refuse Hideaway References

1. WDNR Solid Waste Files

2. WDNR Water Supply Files

3. USGS 7.5 Minute Topographic Maps; Black Earth, Cross Plains, Middleton and Springfield Corners Quadrangles.

MS:ps

Attachment A

This site accepted approximately 1.3 million cubic yards of municipal solid waste. The vast majority of this material was non-hazardous waste such as household refuse. The hazardous substances detected in the environment around the facility were likely inter-mixed with these non-hazardous materials. Consequently it is not possible to accurately define the amount of waste types, hazardous substances, or feedstocks disposed of on-site. Although it is likely that approximately 1,000 cubic yards of asbestos were disposed of on-site.