EXPLANATION OF SIGNIFICANT DIFFERENCES #2

REFUSE HIDEAWAY LANDFILL SUPERFUND SITE
MIDDLETON, WISCONSIN

Town of Middleton,
Dane County, Wisconsin

June 2012

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* Table 1 is included in the text body of the Report. Other Tables are included at the end of this document.

Acronyms

Agencies	The Wisconsin Department of Natural Resources (WDNR) and the United States Environmental Protection Agency (EPA)
ARARs	Applicable or Relevant and Appropriate Requirements
CFR	Code of Federal Regulations
ESD	Explanation of Significant Differences
EPA	The United States Environmental Protection Agency
ES	Enforcement Standard, as provided for by Wisconsin Administrative Code NR 140, (Groundwater Quality Standards)
FS	Feasibility Study
gpm	gallons per minute
IC	Institutional Control
MCL	Maximum Contaminant Level
mg/kg	milligrams per kilogram
MMSD	Madison (WI) Metropolitan Sewerage District
NCP	National Contingency Plan
NPL	National Priorities List
O&M	Operation and Maintenance
PAL	Preventive Action Limit, as provided for by Wisconsin Administrative Code NR 140, (Groundwater Quality Standards)
PCOR	Preliminary Closeout Report
POE	Point-of-Entry water treatment units (installed in nearby residences)
ppb	parts per billion
ppm	parts per million
PRP	Potentially Responsible Party
RA	Remedial Action
RAO	Remedial Action Objective
RD	Remedial Design
RHL	Refuse Hideaway Landfill
RI	Remedial Investigation
RI/FS	Remedial Investigation/ Feasibility Study
ROD	Record of Decision
Site	Refuse Hideaway Landfill Superfund Site
The State	The State of Wisconsin
UU/UE	Unrestricted Use/ Unlimited Exposure
µg/L	micrograms per Liter, or parts per billion
VOCs	Volatile Organic Compounds
WDNR	Wisconsin Department of Natural Resources

1.0 INTRODUCTION TO THE SITE

The Refuse Hideaway Landfill (RHL) Superfund Site (the "Site") is a 23 acre landfill which accepted approximately 1.2 million cubic yards of municipal, commercial and industrial wastes. The RHL Site is located on U.S. Highway 14 in the SW 1/4, NW 1/4, Section 8, T7N, R8E portion of the Town of Middleton in Dane County, Wisconsin, approximately at 7562 U.S. Highway 14. The Site property is in a rural portion of the Town of Middleton, 2 miles west of the City of Middleton and 4 miles east of the Village of Cross Plains. (See Figures 1 and 2)

This Explanation of Significant Difference (ESD) describes a change in the cleanup goals for the remedy at the Site. This proposed action is taken pursuant to the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) as amended, 42 U.S.C. §§ 9604, 9607 and 9622, and the National Contingency Plan. CERCLA Section 117(c) and CFR § 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when the United States Environmental Protection Agency determines that a remedial action differs significantly in scope, performance or cost from the remedy originally selected for a Superfund site, but the change to the remedial action does not fundamentally alter the selected remedy.

EPA is the lead agency for CERCLA enforcement at the Site and the Wisconsin Department of Natural Resources (WDNR) is the lead agency for the remedial action at the Site. The State of Wisconsin is the sole Settling Performing Party, as defined by the August 31, 2001 Consent Decree (CD) for remedial action, entered in U.S. District Court (Western District of Wisconsin) between EPA and the State of Wisconsin. U.S. v. State of Wisconsin, et.al., No. 01-C-0394-S).

1.1 STATEMENT OF PURPOSE

The purpose of this ESD is to revise the Remedial Action Objective (RAO) previously noted in the 1995 ROD to correspond with the basis on which hazardous substance release sites are currently closed by WDNR. This change does not fundamentally alter the RAOs of the June 28, 1995 ROD, but only revises them to reflect WDNR's current site closure requirements. This ESD will become part of the Administrative Record for the Site, as required by the National Contingency Plan at 40 CFR §300.825(a)(2).

Wisconsin Administrative Code NR 140 establishes two groundwater quality standards that are to be followed. One standard is the Preventive Action Limits (PALs) for contaminants in groundwater and the other is the Enforcement Standards (ESs). Wisconsin NR 140 provides that PALs are to be used as an indicator of potential groundwater contamination problems. NR 140 provides that an ES is the concentration level of a contaminant in groundwater at which human health is protected. Wisconsin ESs were identified in the ROD as alternative groundwater cleanup goals if achievement of PALs was technically impracticable for a reasonable timeframe. The ES is the relevant and appropriate groundwater cleanup level for contaminated groundwater at the Refuse Hideaway Landfill Site.

Since the mid-1990s, WDNR has used Chapter NR 140, Wisconsin Administrative Code Enforcement Standards (ESs) as the basis of closure for Superfund sites and other contaminated properties. In Section VII.A. of the 1995 ROD, one of the three Groundwater Remedial Action Objectives (RAO) is: "Attain the NR 140 PALs for all groundwater impacted by the RHL at and beyond the landfill boundary." Although in 1995 PALs were selected as an RAO for the RHL site as an added measure of protectiveness, ESs have since become the accepted cleanup standard. WDNR tracks approximately 900 contaminated or formerly contaminated properties in their Bureau for Remediation and Redevelopment Tracking System (BRRTS) database; these properties have ESs as cleanup standards. In addition, ESs are the cleanup standards at the Eau Claire Municipal Well Field, National Presto Industries and Onalaska Municipal Landfill Superfund sites. For the remedy selected for the Site, the standard used for selecting contaminants of concern for groundwater is the NR 140 Enforcement Standard.

This ESD documents EPA's decision to make the Wisconsin Groundwater Quality ESs the cleanup goals for the RHL Site. NR 140 provides that the ES is the groundwater quality cleanup level for protection of human health. For this reason, a Technical Impracticability ARAR waiver under CERCLA is not necessary to make this change to the cleanup goal.

1.2 SITE ADMINISTRATIVE RECORD AND SITE REPOSITORY

The Site Administrative Record and Site repositories may be found at:

U.S.EPA Region 5
Superfund Division, 7th Floor
77 West Jackson Boulevard
Chicago, IL 60604

WDNR
South Central Region
3911 Fish Hatchery Road
Fitchburg, WI 53711

Middleton Public Library
7425 Hubbard Avenue
Middleton, WI 53562

2.0 SITE CHRONOLOGY

Table 1 - RHL Site Chronology

Date	Event
1974 to 1988	The RHL Site operated as a landfill, accepting a variety of commercial and industrial wastes, including barrels of glue and paint, barrels of ink and ink washes, spray paint booth by-products and paint stripper sludge and spill residues containing VOCs.
December 6, 1985	A Notice of Violation is issued by WDNR to John DeBeck for recurring violations of solid waste disposal regulations.
May 2, 1988	WDNR issues Special Consent Order SOD-88-02A to John DeBeck relating to the closure and monitoring of the Refuse Hideaway Landfill (Lic. # 01953). The Special Consent Order specified the minimum requirements for closure of the landfill.
December 30, 1988	Special Consent Order SOD-88-02A is entered in court.
January 1989	John DeBeck declares bankruptcy.
March 17, 1989	Dane County Circuit Court issues a Contempt Order to John DeBeck for failure to comply with the Special Consent Order.
September 1989	Using the State of Wisconsin Environmental Fund, WDNR hires a contractor to undertake investigation work at the Site with the eventual goal of controlling Site contamination.
November 1989	WDNR begins a series of public meetings to notify the community and discuss its investigation and cleanup work.
July 1990	Emergency landfill cap erosion control measures are implemented.
November 1990	Installation of wells for gas and leachate extraction begins.
March/April 1991	The State of Wisconsin issues Special Notice and Information Request Letters to Potentially Responsible Parties (PRPs).
August 1, 1991	Installation of the landfill gas/leachate collection and landfill gas flare systems is complete and each begins operating.
September 3, 1991	After attempting to secure an agreement with the group of PRPs to undertake a RI/FS at RHL, WDNR nominates the Site for EPA's Superfund National Priorities List (NPL) of hazardous waste sites.
October 14, 1992	RHL Site is declared "final" on EPA's NPL.

February 17, 1993	EPA issues a General Notice Of Liability; CERCLA Section 122(a) Determination Letter to Site PRPs.
April 1993	A Cooperative Agreement is signed between the Agencies defining WDNR as lead agency for the RI/FS.
October 1993	WDNR secures a consultant and the RI/FS begins.
September 12, 1994	The RI is completed.
February 6, 1995	The FS is completed and WDNR requests public comment on potential remedy alternatives.
June 28, 1995	A ROD is issued that selects a remedy requiring: deed restrictions; perimeter signs; maintenance of the existing landfill cap; O&M of the existing gas/leachate collection system with flare; monitoring of groundwater wells and private homes; groundwater extraction with treatment and reinjection; maintenance of point-of-entry (POE) treatment units at two homes downgradient of the landfill and installation of new POE units as needed.
April 8, 1997	An Administrative Order on Consent (AOC) is signed with PRPs for performance of the Remedial Design and O&M activities at the Site.
July 1, 1998	The Remedial Design is completed which demonstrated that groundwater contamination had decreased below 1995 ROD action levels. This permits the discontinuation of the groundwater extraction and treatment component of the selected remedy.
September 30, 1998	EPA completes an Explanation of Significant Difference (ESD) to document that (based on the 1998 groundwater data) it is not necessary to implement groundwater extraction and treatment.
September 30, 1998	EPA issues a Preliminary Closeout Report that documents the completion of construction activities consisting of soil cap upgrade, repair/maintenance of the existing gas/leachate collection system, and the installation and maintenance of POE treatment units at two homes.
May 25, 2000	EPA issues a Special Notice letter to Site PRPs to undertake the remaining Remedial Action work at the Site.
August 31, 2001	The Consent Decree (CD) for Remedial Action is entered in U.S. District Court (Western District of Wisconsin) between EPA and the State of Wisconsin. The State, defined as the Settling Performing Party, has certain obligations under the CD that will be implemented under WDNR's management. Other PRPs' monetary settlements will be used by WDNR for the continued remediation at the Site and EPA retains some settlement monies as contingency.
September 1, 2001	As required by the CD, WDNR starts to develop documents specifying the manner in which the Settling Performing Party will perform the Remedial Action. These effectively serve as the RD.
September 19, 2002	EPA approves sampling and analysis documents, a health and safety plan, and an operation and maintenance plan, making this the effective date of the Remedial Action start.
September 18, 2007	EPA signs the first Five Year Review Report for the Site, certifying WDNR's completion of the first five-year review.
January 3, 2012	The second five-year review process for the Site begins.

2.1 SITE HISTORY

The RHL Site is located on U.S. Highway 14 in the SW 1/4, NW 1/4, Section 8, T7N, R8E portion of the Town of Middleton in Dane County, Wisconsin (See Figure 1). The Site property is in a rural portion of the Town of Middleton, 2 miles west of the City of Middleton and 4 miles east of the Village of Cross Plains (See Figures 2 and 3). Bluffs are present along the north and west sides and a portion of the east side of the landfill, and ground elevation at the Site property drops as much as approximately 200 feet toward the south and east sides of the landfill. Surface drainage flows generally to the south and east.

Municipal, commercial and industrial wastes were placed in the 1.2 million cubic yard landfill, which is 23 acres in area. The area surrounding RHL is predominantly agricultural with a wetland area located southeast of the landfill. The two residences nearest the landfill are approximately 2,400 feet to the southwest, adjacent to and north of USH 14, with additional residences located at least 4,800 feet in the Deer Run Heights Subdivision to the southwest of the landfill.

The Site property outside the fill boundary is occupied by a street improvements construction company as a storage area for trucks and construction equipment. A Christmas tree farm is located adjacent to the north and west sides of the landfill property. Over the past 5 years, residential development has increased in the area, being currently as close as 1/2 mile to the northeast of the Site. A six-unit retail/commercial condominium building was completed 1/4 mile to the south of the Site. A large residential subdivision has been proposed for the property southeast, east, and northeast of the Site, but has not yet been developed. A 300 acre former seed farm southwest and west of the Site has been purchased by Dane County for use as a park for recreational purposes only.

2.2 SITE CONTAMINATION

The landfill operated for 14 years between 1974 and 1988. Approximately 1.2 million cubic yards of waste were disposed during its operational history. The landfill owner reported receiving a variety of commercial and industrial wastes, including: barrels of glue and paint, barrels of ink and ink washes, spray paint booth by-products and paint stripper sludge, and spill residues that may have contained Volatile Organic Compounds (VOCs). The landfill was designed with no liner in the belief that the existing sandy soils and sandstone bedrock beneath and at the edge of the waste would attenuate any contaminants leaching from the Site. Instead, the landfill leachate migrated through the soil and bedrock to contaminate the groundwater beneath the Site.

In 1986, as the landfill neared its capacity, preparatory work was initiated to terminate the operation of the Site. The presence of leachate seeps in 1986 and operational problems at the Site prompted the WDNR to begin regulatory actions against the owner. The Site was closed under court order in 1988 when VOCs were discovered in three private wells southwest of the Site. VOCs significantly higher than associated ESs and elevated inorganic chemicals were detected in groundwater surrounding the Site and the VOC plume still extends approximately 4,000 feet southwest of the landfill. Since implementation of the current remedy, groundwater contaminant levels have been stable or steadily decreasing near the landfill and slowly decreasing or stable in the plume away from the landfill. The 1998 ESD noted the decrease of total VOC concentrations in groundwater is likely the result of several processes. Source control measures (consisting of leachate extraction and gas extraction from the landfill) are removing a significant mass of VOC contamination from the landfill and thus reducing the mass of VOCs entering groundwater. To a lesser degree, natural degradation, dilution and dispersion of VOC contamination is occurring in groundwater. To confirm this, a 1997 review of natural attenuation parameters by EPA indicated that conditions appropriate for degradation of contaminants are present within and beneath the landfill and in groundwater around and downgradient of the landfill. Currently, ES exceedances occur primarily near the limits of fill of the landfill, with the exception of monitoring wells P-31IA and P-31IB

(approximately 3,600 feet from the Site) and a private water supply well (approximately 2,400 feet from the Site) in which tetrachloroethene is generally either slightly below or above the ES. No private drinking water wells are located near these two monitoring wells and the private water supply is treated by a point-of-entry system. These three wells are located southwest of the Site.

Methane gas was also shown to be migrating from the waste mass, but has been limited to gas monitoring wells adjacent to the waste as a result of ongoing operation of the constructed Site remedy.

2.3 INITIAL RESPONSE

In early 1989 after the owner of the landfill declared bankruptcy, the State of Wisconsin assumed responsibility for the initiation of the contaminant release investigation and developing remedial action options. Costs for this work were paid by the State of Wisconsin's Environmental Fund.

Beginning in September 1989, the State began implementing a number of actions designed to remediate the immediate problems of methane gas and leachate migration from the landfill, of private water supply contamination at three wells and of groundwater contamination attributable to the Site. Between 1989 and 1991, WDNR installed and began operating landfill gas and leachate extraction systems, repaired the landfill cap, monitored for methane gas migration (particularly at private homes), provided bottled water to affected residences in addition to having installed point-of-entry (POE) water treatment systems for two private water supply wells, tested private water supplies within one mile of the landfill (including tests for metals, semi-volatile compounds, pesticides and PCBs), performed groundwater studies (including model simulations and characterization of contaminant plume migration) and started long-term groundwater monitoring at the Site.

In 1991, the WDNR tried to enter into an agreement with a group of PRPs to undertake the Remedial Investigation (RI) and Feasibility Study (FS). After reviewing data from the Site, the WDNR recommended to EPA that the Site be included on the NPL. The Site was listed on the NPL in October 1992. A Cooperative Agreement was signed between EPA and WDNR in April 1993 that allowed the WDNR to act as lead agency in performing an RI/FS pursuant to s. 144.442, Wisconsin Statutes (now renumbered as s. 292.31 Wisconsin Statutes) and CERCLA. The RI/FS for this Site was financed by EPA. The WDNR secured a consultant, Hydro-Search, Inc., and the RI/FS began in October 1993.

The RI was completed in 1994 and confirmed that groundwater in the area of the Site generally flows to the southwest. Therefore, contaminated groundwater has the potential to flow to the wells in the Deer Run Heights neighborhood, located approximately one mile west-southwest of the Site. The water quality of selected wells in the Deer Run Heights neighborhood is monitored semi-annually or annually. No VOCs have been detected in these wells. In addition, two "sentinel" groundwater monitoring wells that are located up-gradient from Deer Run Heights are monitored semi-annually and have consistently not had detectable levels of VOCs. Groundwater studies completed from 1991 to 1995 as part of Site characterization concluded the contaminant plume from the Site was no more than 250 feet deep. Sampling from 1991 through 1998 did not identify any problematic "pooling" of Non-Aqueous Phase Liquids in the Site hydrogeology. Similarly, although inorganic contaminants were discovered at the Site, subsequent studies proved these contaminants (such as naturally occurring iron) to be at background levels and levels typically found throughout the State of Wisconsin. All monitoring wells with recent ES exceedances are adjacent to the south and west boundaries.

Information on contaminants in groundwater was reviewed to determine the possibility of a vapor intrusion exposure pathway into homes near the Site. Using this data and recent guidance, an initial screening determined that contaminant levels are too low to suggest the possibility of a vapor intrusion exposure pathway into these homes.

The area's groundwater flow is such that groundwater contaminants are not discharging into nearby Black Earth Creek. No VOCs were detected in surface water samples collected in the drainage ditch south of the landfill and in Black Earth Creek in 1989. In 1992, the area south of the Site was drained and dredged and accumulated sediment was removed. This eliminated sediment as a pathway of concern. In 1995, surface water was not considered to be a pathway of concern. There have been no changes to Site topography since 1995 and the landfill leachate collection system is effectively operating. Therefore, surface water and sediment are not pathways of concern. The current landfill cap was completed in 1990; therefore, no contaminants in the Site's run-off threaten wetland areas near the Site. It was confirmed in 2007 during the first five-year review and again in 2012 that there is no indication of degradation in the wetland area to the southeast of the Site.

2.4 SELECTED REMEDY

The RI for RHL was completed in September 1994 and the FS was completed in February 1995. The WDNR issued a ROD on June 28, 1995. The ROD can be found for review at the following Internet site: http://www.epa.gov/superfund/sites/rods/fulltext/r0595281.pdf. With the exception of the deed restriction/zoning modifications and warning signs, the main components of the RHL Site remedy had been installed by WDNR by 1991. The ROD refined the remedy's requirements and provided for maintenance and potential future changes/additions to or optimization of the remedy. The selected remedy includes:

- Deed restrictions and zoning modifications;
- Warning signs posted around the perimeter of the property;
- Maintenance of the landfill cap, vegetation and surface run-off controls;
- Operation and maintenance of the existing landfill gas extraction and destruction system and of the leachate extraction and off-site treatment and disposal system;
- Groundwater monitoring on and near the Site;
- Maintenance of existing POE systems at private wells and
- Installation of a POE system for any private well exhibiting contaminants with concentrations exceeding NR 140 Enforcement Standards (Federal MCLs).

The Remedial Action Objectives (RAOs, or the cleanup goals) shown in the 1995 ROD are:

- Prevent direct contact with landfill contents;
- Minimize contaminant leaching to groundwater;
- Prevent the migration of landfill gas;
- Control surface water run-off and erosion;
- Attain compliance with all identified Federal and State ARARs;
- Attain NR 140 PALs for all groundwater impacted by the RHL at and beyond the landfill boundary;
- Reduce the potential for exposure to contaminants in groundwater and
- Provide potable water to residences with contaminated water.

The remedy required by the ROD included: a limited action for source control (landfill cap repair and upgrade), groundwater extraction and treatment with re-injection, and the installation of individual water treatment units at selected residences, as necessary. Based on information developed during the Remedial Design, EPA completed an Explanation of Significant Difference (ESD) in September 1998, which acknowledged that because the concentration of VOCs in groundwater at the Site was below the action level of 200 ppb, active groundwater extraction was not necessary. The remedy technology existing at the Site is effective in removing contaminants from groundwater. In September 1998, EPA also issued a Preliminary Close Out Report (PCOR) that documented the completion of construction activities for the work required by the ROD.

2.5 REMEDIAL ACTION

With the exception of the deed restriction/zoning modifications and warning signs, the main components of the RHL Site remedy had been installed by WDNR by 1991. In May 2000, EPA issued a Special Notice letter to Site PRPs (including the State of Wisconsin) to undertake the remaining Remedial Action work at the Site. Between 2000 and 2001, negotiations resulted in the State offering to continue performing Remedial Action work as a Settling Performing Defendant using resources provided by other PRPs in the group. In August 2001, the Consent Decree (CD) for Remedial Action was entered in U.S. District Court (Western District of Wisconsin) in U.S. v. State of Wisconsin, et. al., 01-C-0394-S. WDNR has successfully continued effective implementation of the Site remedy since 2001 with no unusual fluctuations of funding levels for the State Environmental Fund. The EPA Special Account has been utilized only for EPA's costs and remains at a level adequate for Site contingencies.

As documented in the 2007 Five Year Review Report, the landfill gas collection and ground flare system successfully collects landfill gas and reduces the level of on-site VOCs. No landfill gas has been detected in any home near the Site and the groundwater vapor intrusion path is not a new or ongoing risk pathway to buildings at or near the Site. The air pathway has been addressed with the installation and operation of the landfill gas collection and ground flare systems.

During initial Site investigation activity in the 1990s, nearby private water wells were discovered to have VOC impacts. Two of the wells had POE treatment systems, and a third was at a vacant property (confirmed in 2007 as remaining vacant). Monitoring of these two wells has been performed semi-annually since November 2000. Although the cleanup standards required in the 1995 ROD are PALs, since the ESs represent cleanup standards based on protection of human health, and because no WDNR ESs were ever exceeded in one of the wells, the associated POE treatment system was removed in 2007. WDNR had maintained the POE systems since 2001. As noted in Section 3.2 and Table 2 of this ESD, there have been some detections of tetrachloroethene slightly above and slightly below the ES in the well with the remaining POE treatment system. This system is still being maintained by the State of Wisconsin. Therefore all remnant contaminants are removed from the water of this well. Information on contaminants in groundwater was reviewed to determine the possibility of a vapor intrusion exposure pathway into these homes. Using this data and recent guidance, an initial screening determined that contaminant levels are too low to suggest the possibility of a vapor intrusion exposure pathway. As part of the five-year review process, EPA will evaluate vapor intrusion exposure pathways for the Site.

3.0 BASIS FOR THE DOCUMENT

CERCLA Section 117(c) and CFR § 300.435(c)(2)(i) of the NCP authorize the publishing of an ESD when EPA determines that a remedial action differs significantly in scope, performance or cost from the remedy originally selected for a Superfund site, but the change to the remedial action does not fundamentally alter the selected remedy. As noted above, the ROD documenting the choice of final remedial actions for the Site was finalized and signed by the WDNR Secretary and the EPA Region 5 Regional Administrator on June 28, 1995. The first Explanation of Significant Difference (ESD) was issued by EPA on September 30, 1998 in which the implementation of the groundwater extraction and treatment component of the selected remedy of the ROD was determined to be no longer necessary. Decreasing trends of groundwater contaminants continue both near the landfill and in the plume southwest of the landfill. Section VII.A. of the ROD contains the Remedial Action Objectives (RAOs) of the Remedial Alternatives considered in the ROD. One of the RAOs listed in the ROD on page 29 is: "Attain the NR 140 PALs for all groundwater impacted by the RHL at and beyond the landfill boundary." With this ESD, the Enforcement Standards of Chapter NR 140, Wisconsin Administrative Code, will be used as the groundwater quality standards and RAOs for RHL and not the PALs.

3.1 APPLICABLE OR RELEVANT AND APPROPRIATE REQUIREMENTS

Justification for the significant difference is found in several documents. In the ROD, Section X.B.2. Chemical Specific Applicable or Relevant and Appropriate Requirements (ARARs) contains a section under the sub-heading "Safe Drinking Water Act [40 U.S.C. Sec. 300 et seq.]" with a discussion of NR 140 Groundwater Quality Standards. The following sentences in that section note: "To the extent it is subsequently determined that it is not technically or economically feasible to achieve PALs, NR 140.28 provides substantive standards for granting exemptions from the requirement to achieve PALs. Such exemption levels may not be higher than the ESs." When compared against Safe Drinking Water Act MCLs for contaminants currently present at the Site, the ESs represent a cleanup standard equal to or more stringent than the MCLs (for contaminants that have MCLs). For contaminants that do not have MCLs, the ESs are cleanup standards based on protection of human health.

Justification can also be found in section NR 140.22, Wis. Administrative Code, which specifies compliance with PALs only to the extent that this compliance is technically and economically feasible. WDNR has concluded since the mid-1990s that groundwater quality compliance with PALs at contaminant discharge sites in the State is in many cases not technically or economically feasible. Cases involving contaminated soil and/or groundwater are closed by the WDNR's Remediation and Redevelopment Program on a consistent State-wide basis using enforcement standards (ESs) as the basis of closure.

3.2 REVIEW OF SITE DATA

The remedy installed in 1991 has been operating for approximately 20 years with contaminant concentrations in groundwater generally declining. Residences closest to the Site that have had contaminants in drinking water received point-of-entry (POE) treatment systems. Contaminants present at the Site have been reduced over the past 20 years due to the continued operation of contamination source control systems (leachate extraction and gas extraction systems), and because of natural degradation, dilution and dispersion mechanisms. The 1998 ESD noted the general decrease of concentrations of contaminants in groundwater. As long as source control measures are continued, contamination remaining on the Site will continue to be controlled and removed. WDNR will continue operation and maintenance of the remedy and adequate groundwater sampling until ES cleanup goals for each contaminant have been reached on and around the Site.

Table 2 shows the chronology of contamination levels at sampling points on and around the Site and Figure 4 shows sampling locations. Since 2006, concentrations of contaminants in groundwater have generally decreased or remained fairly stable. Groundwater data reviewed for the 2007 five-year review and data collected thereafter has shown a general decrease in concentrations of contaminants in groundwater since 1998. For those contaminants that are present at concentrations near or above the ES, the direction of groundwater flow at and near the Site is such that there is no unacceptable exposure to human or ecological receptors away from the Site. For those contaminants that are present at concentrations near or above the ES at one nearby residence, the POE system continues to operate to remove remnant contamination from the water.

4.0 DESCRIPTION OF SIGNIFICANT DIFFERENCES

The significant difference between the RAO in the ROD and the RAO described in this ESD is that the revised RAO would be the attainment of NR 140 ESs for all groundwater impacted by RHL at and beyond the landfill boundary. As noted above, this change reflects the Site closure criteria that is currently used, and has been used for years, in accordance with WDNR administrative codes. It is anticipated that the timeframe to achieve the ESs will be shorter than that which was originally estimated

in 1995 for achievement of PALs. Specifically, it has been estimated that for the most persistent contaminant at the Site (tetrachloroethylene) it will require a time period of approximately 78 years to achieve the PAL standard of 0.5 ppb required by the 1995 Record of Decision for the Site. Conversely, a time period of approximately 31 years has been estimated for achievement of the ES standard of 5 ppb. Achievement of ESs in the estimated 31 year time frame provides the most effective remedy in the shortest possible project time period. Using ESs as the cleanup standard for the Refuse Hideaway Landfill Site is the best alternative that provides protection of human health and the environment and the best cost effectiveness. Conversely, using PALs as the Site cleanup standards is not economically feasible. Costs to operate and maintain the remedy systems in place and operating at the Site will not change.

5.0 SUPPORT AGENCY COMMENTS

WDNR supports this significant change for the RHL Superfund Site. WDNR indicated to EPA their approval of the ESD content and direction in a March 7, 2012 electronic mail message and a June 8, 2012 letter (See Appendix A).

6.0 STATUTORY DETERMINATIONS

The revised remedy complies with the public participation portions of both the NCP at 40 CFR Section 300.435(c)(2)(i) and the statutory requirements of CERCLA Section 117(c), and satisfies the requirements of Section 121 of CERCLA, which are: to protect human health and the environment; comply with ARARs; be cost effective; utilize permanent solutions and alternate treatment technologies to the maximum extent practicable and satisfy the preference for treatment as a principal element of the remedy.

7.0 PUBLIC PARTICIPATION COMPLIANCE

EPA, working in coordination with WDNR, shall issue an Explanation of Significant Differences of an RHL RAO and shall make this explanation and supporting information available to the public via the Administrative Record and the information repositories (noted elsewhere in this document). In coordination with WDNR, EPA will ensure that a notice that briefly summarizes the explanation of significant differences, and provides basic reasons for such differences, is published in a newspaper of local circulation (See Appendix B). By doing so, EPA will meet the public participation requirements of NCP Section 300.435(c)(2)(i).

In coordination with WDNR, EPA will observe community reaction to the notice placed in the newspaper. If numerous questions or significant reaction from the public are forthcoming, EPA is prepared to open an official comment period, if necessary.

8.0 APPROVAL

Approved by:

Richard C. Karl, Director
Superfund Division
EPA Region 5

6/22/12
Date

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-08S [3]	Tetrachloroethylene [5]	1991	7 *	5
		1998	2.5	
		2006	1.3	
		2007		
		2008	0.83	
		2009	DNE [1]	
		2010	0.77	
		2011	0.69	
	Vinyl Chloride	1991	DNE	0.2
		2006	DNE	
		2007		
		2008	1.6 *	
		2009	DNE	
		2010	0.22 *	
		2011	0.22 *	
	Benzene	1998	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	0.77	
		2010	DNE	
		2011	DNE	
	Trichloroethylene	1988	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	0.77	
		2010	0.68	
		2011	0.59	
	cis -1,2-Dichloroethene	1998	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	15 *	
		2010	DNE	
		2011	9.6 *	
P-08D [4]	Trichloroethylene	1988	45 *	5
		1998	1.6	
		2006	0.91	
		2007		
		2008	DNE	
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Tetrachloroethylene	1988	DNE	5
		1991	DNE	
		1998	DNE	
		2006	DNE	
		2007		
		2008	0.68	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-08D [4] (cont'd.)	Tetrachloroethylene (cont'd.)	2009	0.96	
		2010	DNE	
		2011	DNE	
P-09S	Tetrachloroethylene	1988	70 *	
		1991	16 *	
		1998	2.9	
		2006	0.93	5
		2007		
		2008	0.81	
		2009	0.65	5
		2010	0.62	
		2011	DNE	
P-09D	1,2- Dichloropropane	1998	2.8	
		2006	1.7	
		2007		
		2008	2.0	5
		2009	1.7	
		2010	1.2	
		2011	0.82	
	Benzene	1998	3.3	
		2006	1.4	
		2007		
		2008	2.9	5
		2009	3.2	
		2010	2.4	
		2011	1.0	
	Trichloroethylene	1988	36 *	
		2006	0.94	
		2007		
		2008	1.4	5
		2009	0.97	
		2010	0.76	
		2011	DNE	
	Vinyl Chloride	1991	32 *	
		2006	0.9	
		2007		
		2008	0.73	0.2
		2009	DNE	
		2010	0.27	
		2011	DNE	
	Tetrahydrofuran	1998	DNE	
		2006	DNE	50
		2007		

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-09D (cont'd.)	Tetrahydrofuran (cont'd.)	2008	56 *	
		2009	56 *	
		2010	DNE	
		2011	DNE	
P-16S	Dichloromethane [6]	1988	1.0	
		2006	1.2	
		2007		
		2008	DNE	5
		2009	DNE	
		2010	DNE	
		2011	DNE	
P-16D	1,2-Dichloropropane	1998	1.2	
		2006	0.78	
		2007		
		2008	0.77	5
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Benzene	1998	6.1 *	
		2006	2.3	
		2007		
		2008	2.6	5
		2009	3.4	
		2010	1.5	
		2011	0.70	
	Dichloromethane	1998	1.0	
		2006	1.2	
		2007		
		2008	DNE	5
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Trichloroethylene	1998	11 *	
		2006	2.5	
		2007		
		2008	0.68	5
		2009	0.74	
		2010	DNE	
		2011	DNE	
	Vinyl Chloride	1998	7.1 *	
		2006	1.3 *	0.2
		2007		
		2008	0.5 *	
		2009	DNE	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-16D (cont'd.)	Vinyl Chloride (cont'd.)	2010	DNE	0.2
		2011	0.23	
	Tetrahydrofuran	1998	DNE	50
		2006	DNE	
		2007		
		2008	89 *	
		2009	46 *	
		2010	DNE	
		2011	DNE	
P-17S	1,2-Dichloropropane	1998	DNE	5
		2006	DNE	
		2007		
		2008	1.2	
		2009	1.2	
		2010	0.68	
		2011	0.56	
	Benzene	1998	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	0.79	
		2010	DNE	
		2011	DNE	
	cis -1,2-Dichloroethene	1998	DNE	70
		2006	DNE	
		2007		
		2008	65	
		2009	81 *	
		2010	19	
		2011	10	
	Tetrachloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	5.7 *	
		2009	4.5	
		2010	4	
		2011	4.2	
	Trichloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	7.5 *	
		2009	6.7 *	
		2010	3.5	
		2011	3.2	
	Vinyl Chloride	1998	DNE	0.2
		2006	DNE	
		2007		
		2008	6.1 *	
		2009	6.6 *	
		2010	0.51 *	
		2011	DNE	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-18S	Tetrachloroethylene	1998	11 *	5
		2006	7.8 *	
		2007		
		2008	12 *	
		2009	12 *	
		2010	5.3	
		2011	5.5 *	
	Trichloroethylene	1998	2.2	5
		2006	1.4	
		2007		
		2008	1.9	
		2009	1.8	
		2010	0.92	
		2011	0.84	
P-20SR [7]	Tetrachloroethylene	1998	3.7	5
		2006	2.6	
		2007		
		2008	1.5	
		2009	2.4	
		2010	2.1	
		2011	2.1	
P-21D	1,2-Dichloropropane	1998	2.1	5
		2006	0.54	
		2007		
		2008	DNE	
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Benzene	1998	1.8	5
		2006	0.66	
		2007		
		2008	DNE	
		2009	1.2	
		2010	1.1	
		2011	DNE	
	cis 1,2-Dichloroethene	1998	120 *	70
		2006	27	
		2007		
		2008	12	
		2009	33	
		2010	10	
		2011	14	
	Dichloromethane	1988	3.7	5
		2006	1	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-21D (cont'd.)	Dichloromethane (cont'd.)	2007		5
		2008	DNE	
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Vinyl Chloride	1998	16 *	0.2
		2006	3.1 *	
		2007		
		2008	4.1 *	
		2009	9.3 *	
		2010	3.1 *	
		2011	7.3 *	
	Tetrahydrofuran	1998	DNE	50
		2006	DNE	
		2007		
		2008	DNE	
		2009	52 *	
		2010	DNE	
		2011	DNE	
P-22S	Tetrachloroethylene	1998	2.9	5
		2006	0.68	
		2007		
		2008	DNE	
		2009	3.1	
		2010	1.9	
		2011	DNE	
	Trichloroethylene	2005	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	1.2	
		2010	DNE	
		2011	DNE	
P-22E	Tetrachloroethylene	2005	1.31	5
		2006	3.9	
		2007		
		2008	6.2	
		2009		
		2010	1.2	
		2011	1.6	
	Trichloroethylene	2005	0.62	5
		2006	1.1	
		2007		
		2008	DNE	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-22E (cont'd.)	Trichloroethylene (cont'd.)	2009	0.74	5
		2010	0.59	
		2011	0.84	
P-22D	Tetrachloroethylene	1998	6.4 **	5
		2005	2.4	
		2006	3.1	
		2007		
		2008	3.0	
		2009	DNE	
		2010	3.3	
		2011	1.6	
	Trichloroethylene	1998	1.8	5
		2005	0.65	
		2006	0.66	
		2007		
		2008	0.73	
		2009	0.66	
		2010	0.7	
		2011	DNE	
P-23S	Tetrachloroethylene	1998	4.6	5
		2006	1.6	
		2007		
		2008	3.6	
		2009	5.6 **	
		2010	4.6	
		2011	3.4	
P-23D	Tetrachloroethylene	1988	2.3	5
		2006	1	
		2007		
		2008	0.9	
		2009		
		2010	0.68	
		2011	0.62	
P-24E	Vinyl Chloride	2004	4.1 *	0.2
		2006	5.7 *	
		2007		
		2008	2.1 *	
		2009	2.6 *	
		2010	1.1 *	
		2011	DNE	
P-24D	Vinyl Chloride	1998	2.2 *	0.2
		2006	3.2 *	
		2007		
		2008	1.4 *	
		2009	6.6 *	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-24D (cont'd.)	Vinyl Chloride (cont'd.)	2010	4.8 *	0.2
		2011	4.0 *	
P-25D	Tetrachloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	0.97	
		2009	DNE	
		2010	1.9	
		2011	1.7	
	Trichloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	1.5	
		2009	0.87	
		2010	DNE	
		2011	DNE	
	Vinyl Chloride	1998	DNE	0.2
		2006	DNE	
		2007		
		2008	0.59 **	
		2009	DNE	
		2010	DNE	
		2011	DNE	
P-26S	Tetrachloroethylene	1998	33 **	5
		2006	16 **	
		2007		
		2008	6.4 **	
		2009	15 **	
		2010	8.8 **	
		2011	15 **	
	Trichloroethylene	1998	5.1 **	5
		2006	2.3	
		2007		
		2008	0.77	
		2009	2.2	
		2010	8.1 **	
		2011	2.2	
	Vinyl Chloride	1998	4 **	0.2
		2006	0.56 **	
		2007		
		2008	0.31 **	
		2009	0.6 **	
		2010		
		2011	0.27 **	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-26D	Tetrachloroethylene	1998	17	5
		2006	1.8	
		2007		
		2008	1.5	
		2009		
		2010	1.7	
		2011	DNE	
	Vinyl Chloride	1998	DNE	0.2
		2006	DNE	
		2007		
		2008	0.44 **	
		2009	DNE	
		2010	DNE	
		2011	DNE	
P-27S	Tetrachloroethylene	1998	30 **	5
		2006	10 **	
		2007		
		2008	6.6 **	
		2009	6.7 **	
		2010	12 **	
		2011	5.0	
	Vinyl Chloride	1998	4 **	0.2
		2006	0.56 **	
		2007		
		2008	DNE	
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Trichloroethylene	1998	4.7	5
		2006	1.7	
		2007		
		2008	1.0	
		2009	1.0	
		2010	1.2	
		2011	0.64	
P-27D	Tetrachloroethylene	1998	54	5
		2006	10	
		2007		
		2008	33 **	
		2009	46 **	
		2010	26 **	
		2011	23 **	
	Trichloroethylene	1998	8.4 **	5
		2006	2.1	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-27D (cont'd.)	Trichloroethylene (cont'd.)	2007		5
		2008	5.7 **	
		2009	8.7 **	
		2010	4.7	
		2011	3.9	
P-28S	Tetrachloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	33 **	
		2009	4.8	
		2010	1.4	
		2011	1.5	
P-29S	Chloromethane	1994	0.6	5
		2006	0.32	
		2007		
		2008	DNE	
		2009	DNE	
		2010	0.32	
		2011	DNE	
	Tetrachloroethylene	1998	0.9	5
		2006	0.75	
		2007		
		2008	1.6	
		2009	DNE	
		2010	1.1	
		2011	0.94	
P-31IA	Tetrachloroethylene	1998	13 **	5
		2006	4.8	
		2007		
		2008	5.4 **	
		2009	5.9 **	
		2010	5.0	
		2011	4.8	
	Trichloroethylene	1998	3.3	5
		2006	1.4	
		2007		
		2008	1.8	
		2009	2.1	
		2010	1.7	
		2011	1.6	
P-31IB	Tetrachloroethylene	1998	13	5
		2006	5.3 **	
		2007		
		2008	4.6	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
P-31IB (cont'd,.)	Tetrachloroethylene (cont'd.)	2009	5.9 **	5
		2010	4.7	
		2011	4.2	
	Trichloroethylene	1998	3.6	
		2006	1.6	
		2007		
		2008	1.7	5
		2009	2.0	
		2010	1.6	
		2011	1.4	
P-34S	Dichloromethane	1995	2	
		2006	1.9	
		2007		
		2008	DNE	5
		2009	DNE	
		2010	DNE	
		2011	DNE	
P-40I	Tetrachloroethylene	1998	9.2	
		2006	4.6	
		2007		
		2008	6.3 **	5
		2009	4.9	
		2010	4.5	
		2011	5.1 **	
	Trichloroethylene	1998	2.5	
		2006	1.3	
		2007		
		2008	1.6	5
		2009	1.3	
		2010	1.1	
		2011	1.3	
NOLES [8] (formerly Schultz)	Dichloromethane	1996	0.14	
		2006	4.1	
		2007		
		2008	DNE	5
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Tetrachloroethylene	1998	9.2 **	
		2006	4.6	
		2007		5
		2008	6.3 **	
		2009	5.6 **	

Table 2 - Summary of Groundwater Data[1]: Refuse Hideaway Landfill Middleton, WI

Results marked with an asterisk (*) are on-site ES exceedances; double asterisk (**) are off-site ES exceedances.

Well Number	Contaminant [2]	Year	Concentration (ug/L or ppb)	Health Based Cleanup Standard (WI ES, ppb)
NOLES (cont'd.)	Tetrachloroethylene (cont'd.)	2010	DNE	5
		2011	DNE	
	Trichloroethylene	1998	DNE	5
		2006	DNE	
		2007		
		2008	1.7	
		2009	2.2	
		2010	DNE	
		2011	DNE	
SATHER	Dichloromethane	1996	0.14	5
		2006	4.3	
		2007		
		2008	DNE	
		2009	DNE	
		2010	DNE	
		2011	DNE	
	Bromodichloromethane	2011	0.45	0.6
	Chloroform	2011	1.2	6
STOPPLEWORTH [8]	Chloromethane	2004	DNE	5
		2006	DNE	
		2007		
		2008	DNE	
		2009	3.5	
		2010	DNE	
		2011	DNE	
	Tetrachloroethylene	2004	3.3	5
		2006	2.9	
		2007		
		2008	2.9	
		2009	3.5	
		2010	3.2	
		2011	3.1	
	Trichloroethylene	2004	0.85	5
		2006	0.63	
		2007		
		2008	0.63	
		2009	0.74	
		2010	0.68	
		2011	0.72	

TABLE 2 FOOTNOTES

[1] The summary of groundwater data is for contaminants that continue to be present at potentially unacceptable levels, shown in annual reports. DNE: "Did Not Exceed" the cleanup standard. Figure 4 shows the sampling locations.

[2] Contaminants listed are the only contaminants of concern shown in 2006 to remain at or near the Site. Data collected since 1998 has shown that other contaminants no longer pose any further threat. Approximately 70 contaminants are analyzed for twice a year at on- and off-site wells. Table 2 shows only those contaminants that are still present at the Site.

[3] Wells with S designations have screens at shallow depths.

[4] Wells with D designations have screens at deeper depths.

[5] Tetrachloroethylene is Perchloroethylene (PCE).

[6] Dichloromethane is Methylene Chloride.

[7] Wells with E, I, and R designations are monitoring wells that have been replaced since 1988.

[8] These wells are at residences with Point of Entry Water Treatment Systems.

Table 3 - Summary of Cleanup Standards for the Refuse Hideaway Landfill Site [1]

COMPOUND	1995 Preventative Action Limit [2] (ppb)*	2012 Federal MCL[3] (ppb)	2012 Wisconsin Enforcement Std. [4] (ppb)
Benzene	0.5	5	5
Chloroform	0.6	70 [6]	6
1,2-Dichloroethane [5]	0.5	5	5
cis-1 ,2-Dichloroethene	7	70	5
1,2-Dichloropropane	0.5	5	5
Tetrachloroethene	0.5	5	5
Trichloroethene	0.5	5	5
Vinyl Chloride	0.02	2	0.2

TABLE 3 FOOTNOTES

* ppb = Parts per billion, or microgram of contaminant per Liter of water (ug/L).

[1] This Table updates Table 5 of the 1995 Record of Decision.

[2] There are no published generic PALs. PALs for contaminants are calculated on a site-specific basis and are generally multiples of standard deviations from background concentrations.

[3] Maximum Contaminant Limits as published at http://water.epa.gov/drink/contaminants/index.cfm

[4] Enforcement Standard as published at http://dnr.wi.gov/org/water/dwg/health/haltable.htm

[5] This compound is no longer present anywhere on the Refuse Hideaway Landfill site.

[6] There is no MCL for Chloroform but there is a Maximum Contaminant Level Goal (MCLG) of 70 ppb.

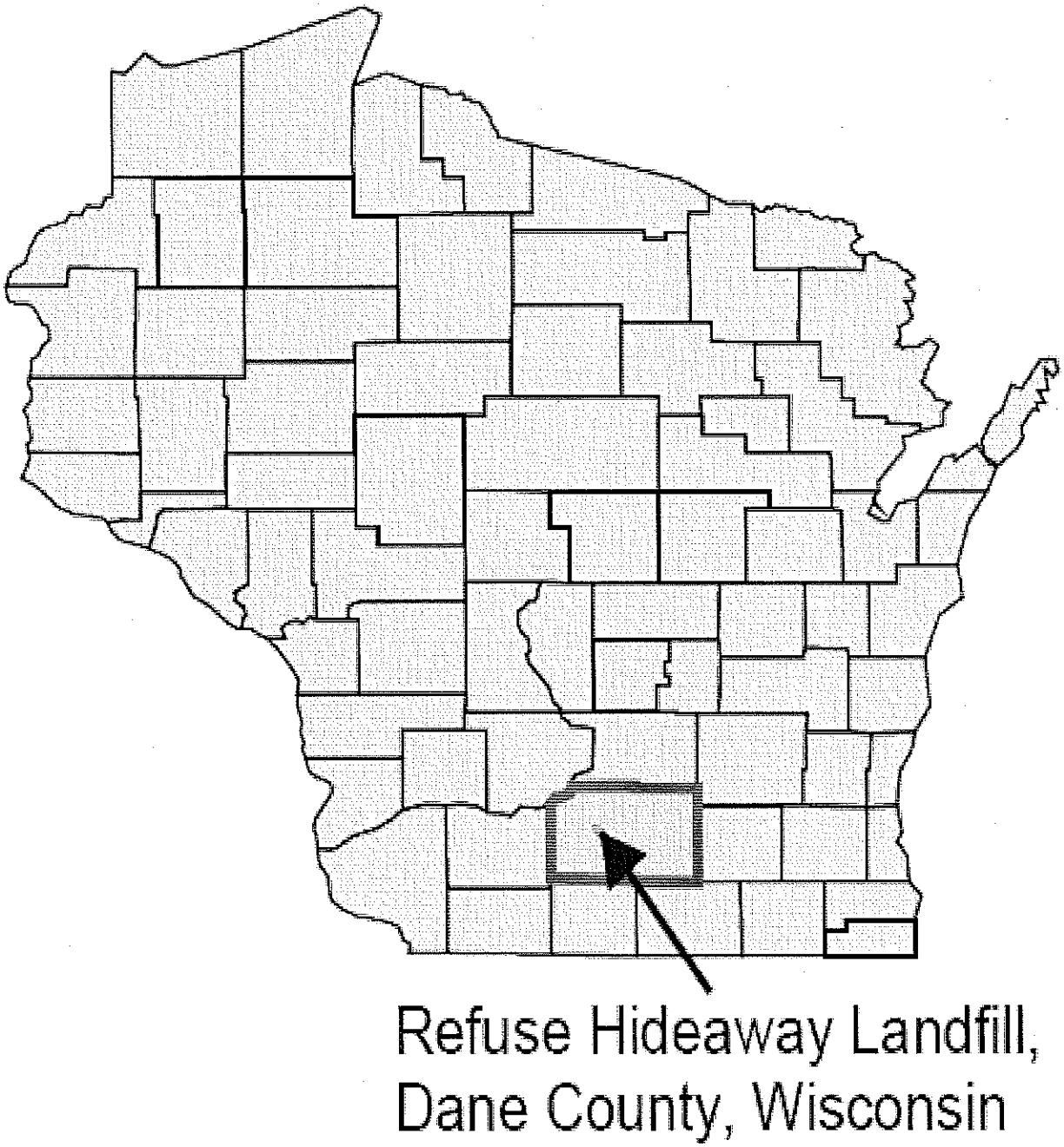
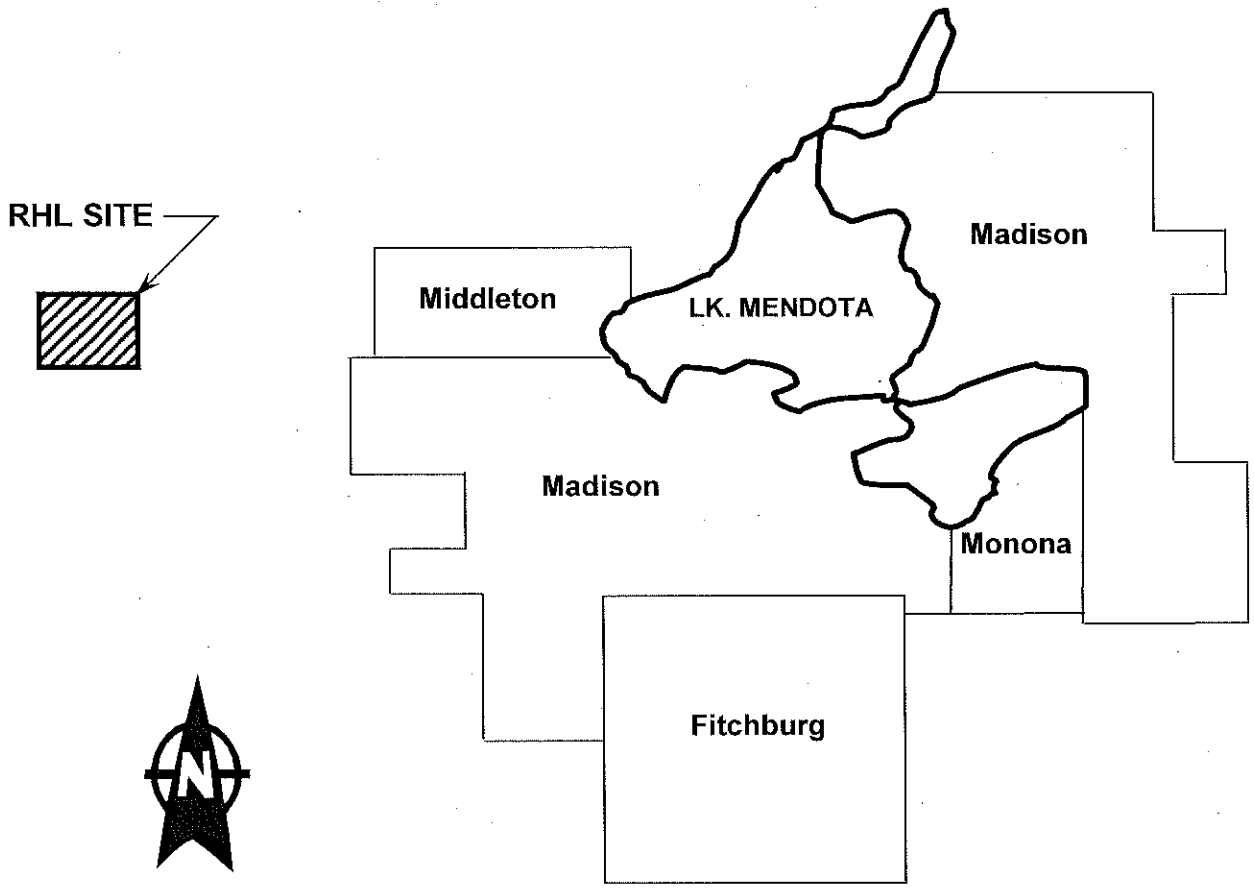


FIGURE 1: Site Location Map;
State of Wisconsin



NOTE: Map is Not To Scale

FIGURE 2: - Site Location Map (Local)

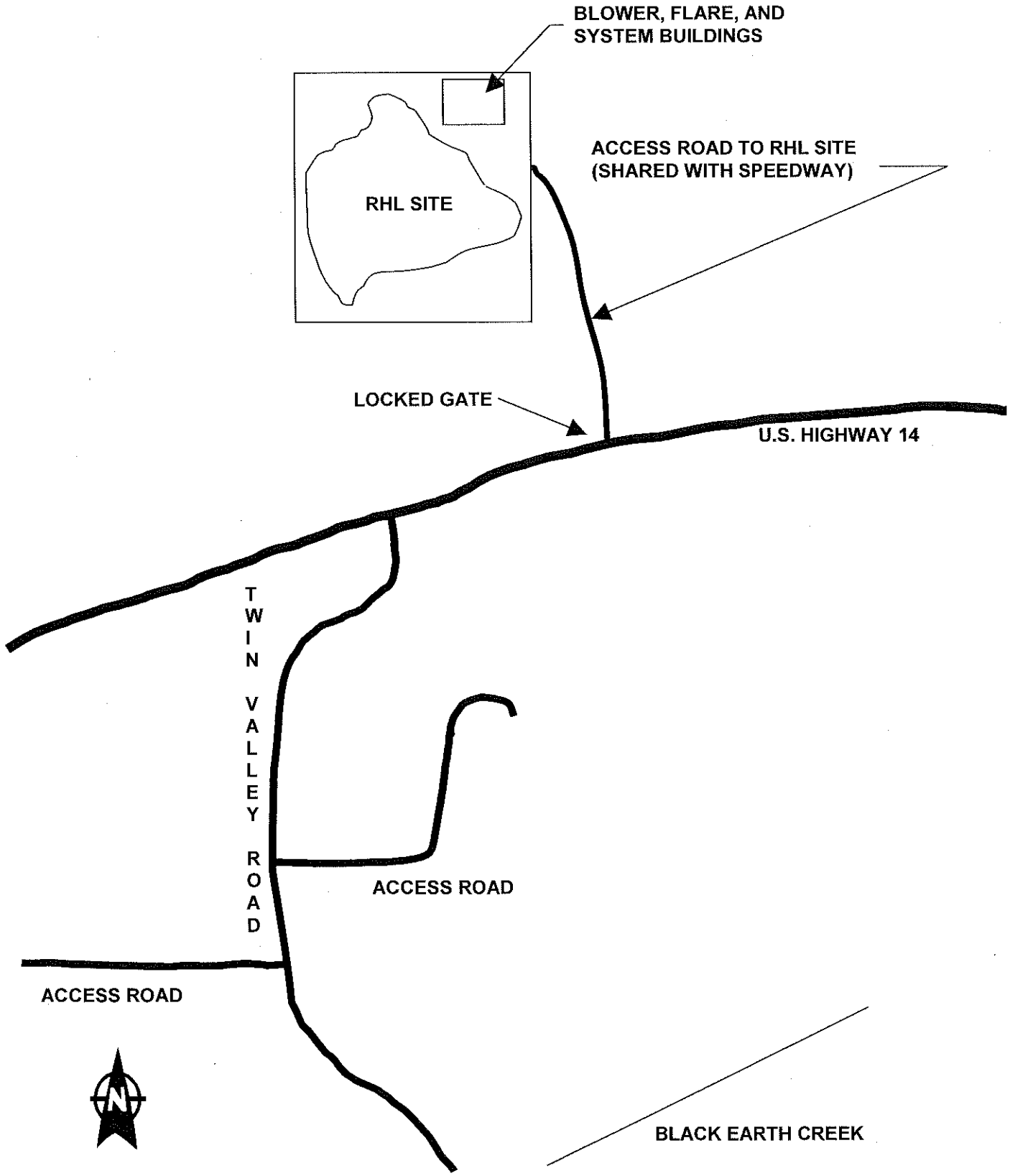


FIGURE 3: Site Layout

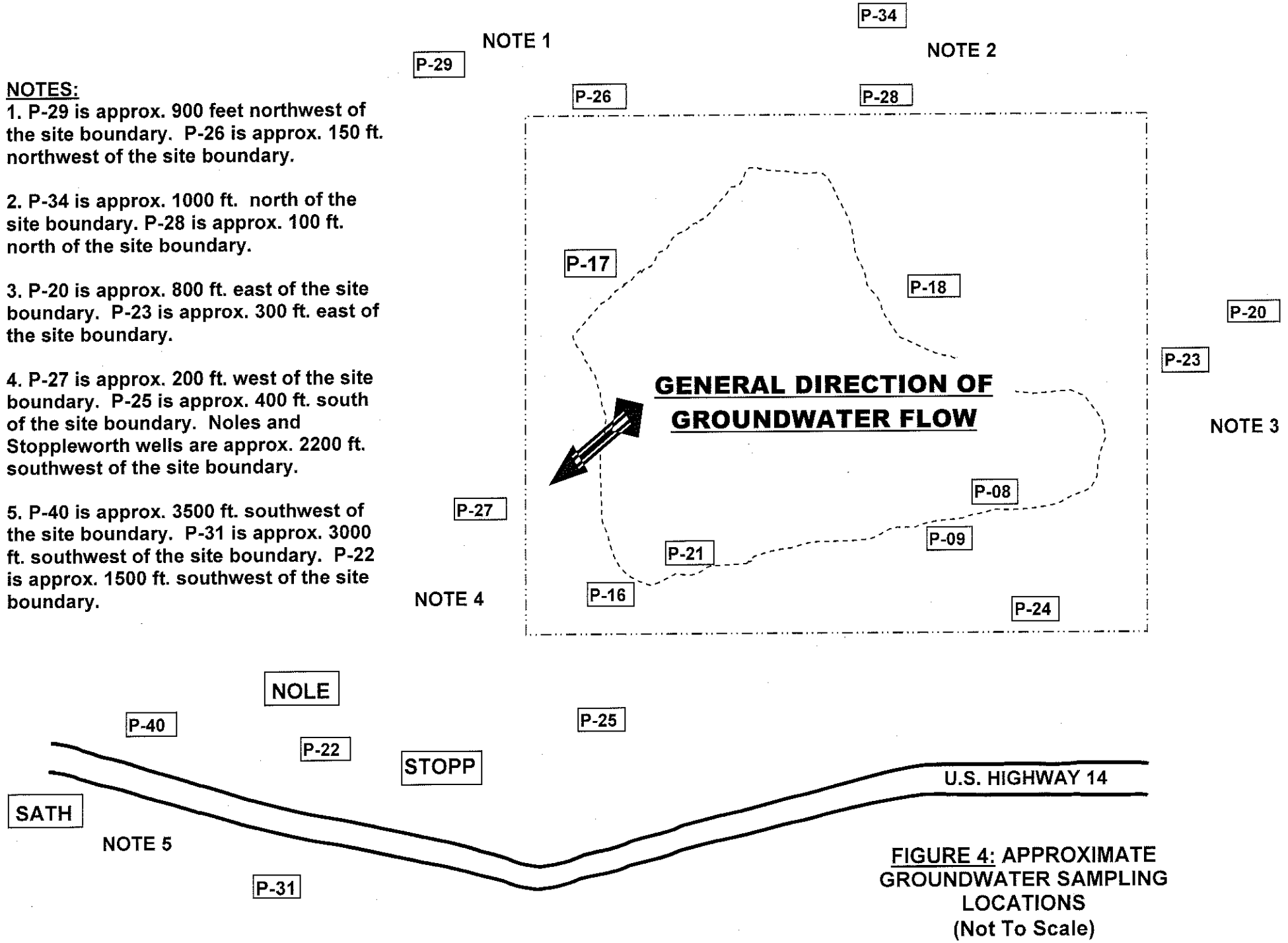


FIGURE 4: APPROXIMATE GROUNDWATER SAMPLING LOCATIONS
(Not To Scale)

Appendix A - Concurrence Letter From the Wisconsin Department of Natural Resources

State of Wisconsin
DEPARTMENT OF NATURAL RESOURCES
101 S. Webster Street
Box 7921
Madison WI 53707-7921

Scott Walker, Governor
Cathy Stepp, Secretary
Telephone 608-266-2621
Toll Free 1-888-936-7463
TTY Access via relay - 711

June 8, 2012

John Fagiolo, Remedial Project Manager
U.S. EPA Region 5 - Superfund Div.
77 West Jackson Blvd. (SR-6J)
Chicago IL 60604

Subject: Concurrence with Explanation of Significant Differences #2 for the Refuse Hideaway Landfill Superfund Site.

Dear John:

This letter serves as the notice of concurrence by the Wisconsin Department of Natural Resources (WDNR) with the draft Explanation of Significant Differences #2 for the Refuse Hideaway Landfill Superfund Site.

Preventive Action Limits (PALs) were established by statute and require that, for substances of public health concern, PAL values are either 10 percent or 20 percent of the Enforcement Standard (ES) for those contaminants. Wisconsin Administrative Code NR 140 related to Groundwater Quality allows WDNR to grant exemptions to the PALs provided the criteria established in the rule are met.

Based on these provisions, the language included in the draft ESD adequately describes this allowance for PAL exemptions, and WDNR supports the modification of the approved remedial action set forth in the draft ESD.

Sincerely,

Jim Walden
Hydrogeologist
Bureau for Remediation and Redevelopment

cc: Mark Gordon – RR/5

{In Archive} RE: REMINDER: 3/15/12 Comments on Draft ESD for Refuse Hideaway LF

Gordon, Mark E - DNR to: JOHN FAGIOLO, Stephanie Linebaugh, Sherry Estes, Walden, James E - DNR , Strasbaugh, 03/07/2012 11:50 AM

From: "Gordon, Mark E - DNR" <Mark.Gordon@wisconsin.gov>
To: JOHN FAGIOLO/R5/USEPA/US@EPA, Stephanie Linebaugh/R5/USEPA/US@EPA, Sherry Estes/R5/USEPA/US@EPA, "Walden, James E - DNR" <James.Walden@Wisconsin.gov>, "Strasbaugh, Kathleen J - DNR" <Kathleen.Strasbaugh@wisconsin.gov>
Archive: This message is being viewed in an archive.

Hi John. I had talked with Hank Kuehling about this several years ago and also spoke with Jim Walden and Kathleen Strasbaugh (program attorney) more recently. Based on these conversations, WDNR supports modifying the approved remedial action as set forth in the draft ESD. Any questions, let me know. Thanks.

---Mark

-----Original Message-----
From: JOHN FAGIOLO [mailto:Fagiolo.John@epamail.epa.gov]
Sent: Tuesday, March 06, 2012 11:48 AM
To: Johnson, Deborah D - DNR; Stephanie Linebaugh; Sherry Estes; Walden, James E - DNR; Gordon, Mark E - DNR
Subject: REMINDER: 3/15/12 Comments on Draft ESD for Refuse Hideaway LF

Hi - I had sent the following message on 2/14/12 requesting comments by next Thursday 3/15/12. This is just an e-mail reminder of this request.
Thanks !!!

COMMENTS REQUESTED: ESD for Refuse Hideaway LF

John Fagiolo
to: Deborah.Johnson, Stephanie Linebaugh, Sherry Estes, James.Walden, mark.gordon
02/14/2012 04:28 PM

Attached to this message is a Draft ESD for the Refuse Hideaway Landfill Superfund Site in Middleton, WI.

This document changes the cleanup goals at the Site from Preventive Action Limits (PALs) for contaminants in groundwater to the NR 140 Enforcement Standards (ESs). NR 140 provides that the ES is the groundwater quality cleanup level for protection of human health.

At this time, I am sending this to my immediate supervisor, the Office of Regional Counsel, and WDNR personnel (including the last point of contact I have in my file for the WDNR attorney, Deb Johnson).

I would sincerely appreciate it if you could provide me your comments as soon as you can, but no later than Thursday March 15, 2012.

Thank You.
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Appendix B - Draft Advertisement of the Explanation of Significant Differences

EPA Announces

An Explanation of Significant Differences

for the

Refuse Hideaway Landfill Superfund Site

Middleton, Wisconsin

The U.S. Environmental Protection Agency is changing the ground water cleanup standards detailed in its 1995 decision document for the Refuse Hideaway Landfill Superfund site. The changes are outlined in an official document called an "explanation of significant differences."

Originally, EPA used Wisconsin's Preventative Action Limits, or PALs, as its cleanup goals rather than the state's Enforcement Standards described in Wisconsin Administrative Code NR 140. Wisconsin NR 140 uses PALs as an indicator of potential ground water contamination problems. It also uses the Enforcement Standards as a compliance standard for human health and welfare concerns. Wisconsin Department of Natural Resources has also found in many cases that achieving PALs is not technically or economically feasible. The Enforcement Standards will now serve as the ground water cleanup goals for this site.

The report outlining the differences in cleanup standards, along with other site-related documents, is available for review at Middleton Public Library, 7425 Hubbard Ave.

For more information, contact:

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