CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: January 10, 2022 FILE REF: 02-13-000849

TO: John Fagiolo – U.S. EPA – Region V
Remedial Project Manager

FROM: Cindy Koepke – Wisconsin DNR CJK

SUBJECT: 2021 Annual Report for Refuse Hideaway Landfill, WID980610604

This is the annual report to EPA from the State of Wisconsin, the Settling Performing Party, as required by the final consent decree (August 29, 2001) for Refuse Hideaway Landfill.

Because of the age of the landfill and its contaminant control systems, there were numerous operational issues in keeping the systems operating. In 2020-2021, DNR hired a contractor to repair and upgrade the landfill and contaminant control systems and address other physical problems (such as drainage, vegetative cover, etc.).

Section X. REPORTING REQUIREMENTS

29(a): During 2021, DNR performed the following work in compliance with the consent decree:

Perimeter gas monitoring: During the 2021 reporting period, perimeter gas probes were monitored monthly. Methane was detected in several probe nests in the southeastern and western/southwestern parts of the property, similar to the patterns of detections in previous years. The levels detected ranged from non-detect to ~80% by volume. Repair of the gas collection system was completed in spring 2021. We expect to see reduced levels over time in perimeter probes now that the gas collection system is operational.

Leachate collection system: In 2021, 466,027 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. Repair of the leachate collection system was completed: the collection lines were cleaned, broken pumps replaced, and air lines installed so pumps can be put in two additional collection wells (previously those wells had only been used for gas collection).

Landfill cover: The landfill surface has been mowed twice. Vegetation was removed around the gas/leachate well cages, the blower/compressor skid enclosure, the leachate tank fence, the solar panels, and paths to some monitoring wells (to improve access for sampling).

Groundwater monitoring: DNR hired TRC to do routine groundwater sampling of the site's monitoring well network and 14 private wells. VOC results in 2021 for monitoring and private wells are consistent with past sampling events and show that groundwater quality has improved around the landfill over the years.

Continuing obligations: DNR issued a remedial actions approval with continuing obligations on December 16, 2013. As authorized in s. 292.12, Wis. Stats., the approval imposes obligations with which current and future property owners must comply. These obligations include landfill cap maintenance, gas and leachate collection, environmental monitoring, potable well water

treatment, and access restrictions. For the 2021 reporting period, the continuing obligations have been adequately maintained.

29(b): Attached to this email transmitting this report are:

- May 2021 list of volatile organic compounds detected
- Water table map with well locations marked

29(c): This annual progress report serves as the one required by the consent decree to be sent by the Settling Performing Party to EPA.

29(d): Planned work for 2022 includes: groundwater monitoring and perimeter gas probe monitoring, mailing water sample results to private well owners, and operation and maintenance of leachate and landfill gas systems. DNR will respond to information requests and perform appropriate community involvement as needed.

29(e): In 2021, landfill gas monitoring, leachate treatment and disposal, landfill cover repair, stormwater management features repair, and groundwater monitoring were conducted, and repairs to the leachate and landfill gas collection system were completed. Operation and maintenance work for source control systems has been conducted since summer 2021 with a focus on balancing and adjusting the new systems for optimal operation.

29(f): No modifications to any materials submitted to EPA are planned for 2021.

29(g): Public relations activities in 2021 were routine.

CERTIFICATION

The Wisconsin Department of Natural Resources certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Superfund Site in Middleton, Wisconsin. For the coming year, the State of Wisconsin's Environmental Fund, as appropriated by the Wisconsin Legislature, has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, Wisconsin.

Date: _____***January 10, 2022***_____

Cynthia L. Koepke, P.G.
Remediation & Redevelopment Hydrogeologist
South Central Region
Wisconsin Department of Natural Resources

TRC - GIS

Coordinate System: NAD 1983 StatePlane Wisconsin South FIPS 4803 Feet (Foot US)
Map Rotation: 0

Plot Date: 8/6/2021, 08:49:53 AM by RSUEMNICHT -- LAYOUT: ANSI B (11"x17")
Path: S:\1-PROJECTS\WI_DNR\Refuse Hideaway\335719\335719-010_WT.mxd

LEGEND

- GAS PROBE
- GAS WELL
- MONITORING WELL
- PRIVATE WELL
- (935.58) GROUNDWATER ELEVATION
- 5' GROUNDWATER CONTOUR (DASHED WHERE INFERRED)
- APPROXIMATE STREAM CENTERLINE
- 10' MINOR CONTOUR
- 100' MAJOR CONTOUR
- PARCEL BOUNDARY

NOTES

1. BASE MAP IMAGERY FROM DANE COUNTY, 2020.
2. TOPOGRAPHY FROM DANE COUNTY LIDAR SURVEY, 2017.
3. PARCELS FROM WISCONSIN STATE CARTOGRAPHER'S OFFICE, 2018.
4. SITE FEATURES SHOWN ARE APPROXIMATE.
5. GROUNDWATER ELEVATIONS COLLECTED ON 5/10/2021.

0 800 1,600 Feet

1 " = 800 '
1:9,600

PROJECT:
WISCONSIN DNR
REFUSE HIDEAWAY LANDFILL

TITLE:
MAY 2021 WATER TABLE MAP

DRAWN BY:	R. SUEMNICHT	PROJ NO.:	335719
CHECKED BY:	M. WESTOVER		
APPROVED BY:	K. VATER		**FIGURE 1**
DATE:	AUGUST 2021		

TRC
708 Heartland Trail, Suite 3000
Madison, WI 53717
Phone: 608.826.3600
www.trcsolutions.com

FILE NO.: 335719-010_WT.mxd

NR 140 Groundwater Quality Exceedances by Well
Refuse Hideaway Landfill - Middleton, Wisconsin
May 2021

Well ID	Sample Date	Parameter	Result	Data Qualifiers	Units	Standard	
						PAL	ES
7734 USH 14	5/11/2021	Tetrachloroethene	3.3		ug/L	X	
7734 USH 14	5/11/2021	Trichloroethene	1.2		ug/L	X	
7750 USH 14	5/11/2021	Tetrachloroethene	2.2		ug/L	X	
7750 USH 14	5/11/2021	Trichloroethene	0.55	J	ug/L	X	
P-08D	5/19/2021	1,2-Dichloroethane	0.57	J	ug/L	X	
P-08D	5/19/2021	Benzene	0.83	J	ug/L	X	
P-08D	5/19/2021	Tetrahydrofuran	51		ug/L		X
P-08D	5/19/2021	Vinyl chloride	0.44	J	ug/L		X
P-08D DUP	5/19/2021	1,2-Dichloroethane	0.53	J	ug/L	X	
P-08D DUP	5/19/2021	Benzene	0.92	J	ug/L	X	
P-08D DUP	5/19/2021	Tetrahydrofuran	51		ug/L		X
P-08D DUP	5/19/2021	Vinyl chloride	0.48		ug/L		X
P-08S	5/19/2021	Benzene	0.78	J	ug/L	X	
P-08S	5/19/2021	cis-1,2-Dichloroethene	13		ug/L	X	
P-08S	5/19/2021	Tetrachloroethene	0.94		ug/L	X	
P-08S	5/19/2021	Tetrahydrofuran	120		ug/L		X
P-08S	5/19/2021	Trichloroethene	1.7		ug/L	X	
P-08S	5/19/2021	Vinyl chloride	2.5		ug/L		X
P-09D	5/19/2021	Benzene	2.9		ug/L	X	
P-09D	5/19/2021	Tetrahydrofuran	78		ug/L		X
P-09S	5/19/2021	Benzene	0.95	J	ug/L	X	
P-09S	5/19/2021	Tetrachloroethene	2.1		ug/L	X	
P-09S	5/19/2021	Tetrahydrofuran	170		ug/L		X
P-09S	5/19/2021	Vinyl chloride	0.52		ug/L		X
P-16D	5/19/2021	Benzene	2		ug/L	X	
P-16D	5/19/2021	Tetrahydrofuran	67		ug/L		X
P-16D	5/19/2021	Trichloroethene	0.61	J	ug/L	X	
P-16D	5/19/2021	Vinyl chloride	0.3	J	ug/L		X
P-17S	5/20/2021	Tetrachloroethene	2.3		ug/L	X	
P-18S	5/20/2021	Tetrachloroethene	8		ug/L		X
P-18S	5/20/2021	Trichloroethene	0.69	J	ug/L	X	
P-20SR	5/18/2021	Tetrachloroethene	1.4		ug/L	X	
P-21BR	5/19/2021	cis-1,2-Dichloroethene	8		ug/L	X	
P-21BR	5/19/2021	Trichloroethene	4		ug/L	X	
P-21BR	5/19/2021	Vinyl chloride	1.9		ug/L		X
P-21D	5/19/2021	Benzene	3.3		ug/L	X	
P-21D	5/19/2021	Tetrahydrofuran	200		ug/L		X
P-21D	5/19/2021	Vinyl chloride	1.5		ug/L		X
P-22D	5/17/2021	Tetrachloroethene	2.4		ug/L	X	
P-22D	5/17/2021	Trichloroethene	0.64	J	ug/L	X	
P-22E	5/17/2021	Tetrachloroethene	15		ug/L		X
P-22E	5/17/2021	Trichloroethene	2.6		ug/L	X	
P-22E DUP	5/17/2021	Tetrachloroethene	15		ug/L		X
P-22E DUP	5/17/2021	Trichloroethene	2.7		ug/L	X	
P-23D	5/20/2021	Tetrachloroethene	0.53	J	ug/L	X	
P-23S	5/20/2021	Tetrachloroethene	1.8		ug/L	X	
P-24D	5/20/2021	Vinyl chloride	0.59		ug/L		X
P-24E	5/20/2021	Vinyl chloride	2.7		ug/L		X
P-25BR	5/13/2021	Tetrachloroethene	1.7		ug/L	X	
P-26S	5/14/2021	Tetrachloroethene	8.5		ug/L		X
P-26S	5/14/2021	Trichloroethene	0.72	J	ug/L	X	
P-27D	5/14/2021	Tetrachloroethene	16		ug/L		X
P-27D	5/14/2021	Trichloroethene	2.9		ug/L	X	
P-27S	5/14/2021	Tetrachloroethene	3.2		ug/L	X	
P-27S DUP	5/14/2021	Tetrachloroethene	3.1		ug/L	X	
P-28S	5/14/2021	Tetrachloroethene	1.7		ug/L	X	
P-29S	5/14/2021	Tetrachloroethene	0.59	J	ug/L	X	

NR 140 Groundwater Quality Exceedances by Well
Refuse Hideaway Landfill - Middleton, Wisconsin
May 2021

Well ID	Sample Date	Parameter	Result	Data Qualifiers	Units	Standard	
						PAL	ES
P-31IA	5/12/2021	Tetrachloroethene	1.2		ug/L	X	
P-31IA	5/12/2021	Trichloroethene	0.67	J	ug/L	X	
P-31IB	5/12/2021	Tetrachloroethene	1.5		ug/L	X	
P-31IB	5/12/2021	Trichloroethene	0.86	J	ug/L	X	
P-31IB DUP	5/12/2021	Tetrachloroethene	1.5		ug/L	X	
P-31IB DUP	5/12/2021	Trichloroethene	0.87	J	ug/L	X	
P-40I	5/13/2021	Tetrachloroethene	2.6		ug/L	X	
P-40I	5/13/2021	Trichloroethene	0.65	J	ug/L	X	
P-40I DUP	5/13/2021	Tetrachloroethene	2.5		ug/L	X	
P-40I DUP	5/13/2021	Trichloroethene	0.6	J	ug/L	X	
TRIP BLANK	5/12/2021	Methylene chloride	0.54	J	ug/L	X	

NR 140 Groundwater Quality Exceedances by Parameter
Refuse Hideaway Landfill - Middleton, Wisconsin
May 2021

Well ID	Sample Date	Parameter	Result	Data Qualifiers	Units	Standard	
						PAL	ES
P-08D	5/19/2021	1,2-Dichloroethane	0.57	J	ug/L	X	
P-08D DUP	5/19/2021	1,2-Dichloroethane	0.53	J	ug/L	X	
P-08D	5/19/2021	Benzene	0.83	J	ug/L	X	
P-08D DUP	5/19/2021	Benzene	0.92	J	ug/L	X	
P-08S	5/19/2021	Benzene	0.78	J	ug/L	X	
P-09D	5/19/2021	Benzene	2.9		ug/L	X	
P-09S	5/19/2021	Benzene	0.95	J	ug/L	X	
P-16D	5/19/2021	Benzene	2		ug/L	X	
P-21D	5/19/2021	Benzene	3.3		ug/L	X	
P-08S	5/19/2021	cis-1,2-Dichloroethene	13		ug/L	X	
P-21BR	5/19/2021	cis-1,2-Dichloroethene	8		ug/L	X	
TRIP BLANK	5/12/2021	Methylene chloride	0.54	J	ug/L	X	
7734 USH 14	5/11/2021	Tetrachloroethene	3.3		ug/L	X	
7750 USH 14	5/11/2021	Tetrachloroethene	2.2		ug/L	X	
P-08S	5/19/2021	Tetrachloroethene	0.94		ug/L	X	
P-09S	5/19/2021	Tetrachloroethene	2.1		ug/L	X	
P-17S	5/20/2021	Tetrachloroethene	2.3		ug/L	X	
P-18S	5/20/2021	Tetrachloroethene	8		ug/L		X
P-20SR	5/18/2021	Tetrachloroethene	1.4		ug/L	X	
P-22D	5/17/2021	Tetrachloroethene	2.4		ug/L	X	
P-22E	5/17/2021	Tetrachloroethene	15		ug/L		X
P-22E DUP	5/17/2021	Tetrachloroethene	15		ug/L		X
P-23D	5/20/2021	Tetrachloroethene	0.53	J	ug/L	X	
P-23S	5/20/2021	Tetrachloroethene	1.8		ug/L	X	
P-25BR	5/13/2021	Tetrachloroethene	1.7		ug/L	X	
P-26S	5/14/2021	Tetrachloroethene	8.5		ug/L		X
P-27D	5/14/2021	Tetrachloroethene	16		ug/L		X
P-27S	5/14/2021	Tetrachloroethene	3.2		ug/L	X	
P-27S DUP	5/14/2021	Tetrachloroethene	3.1		ug/L	X	
P-28S	5/14/2021	Tetrachloroethene	1.7		ug/L	X	
P-29S	5/14/2021	Tetrachloroethene	0.59	J	ug/L	X	
P-31IA	5/12/2021	Tetrachloroethene	1.2		ug/L	X	
P-31IB	5/12/2021	Tetrachloroethene	1.5		ug/L	X	
P-31IB DUP	5/12/2021	Tetrachloroethene	1.5		ug/L	X	
P-40I	5/13/2021	Tetrachloroethene	2.6		ug/L	X	
P-40I DUP	5/13/2021	Tetrachloroethene	2.5		ug/L	X	
P-08D	5/19/2021	Tetrahydrofuran	51		ug/L		X
P-08D DUP	5/19/2021	Tetrahydrofuran	51		ug/L		X
P-08S	5/19/2021	Tetrahydrofuran	120		ug/L		X
P-09D	5/19/2021	Tetrahydrofuran	78		ug/L		X
P-09S	5/19/2021	Tetrahydrofuran	170		ug/L		X
P-16D	5/19/2021	Tetrahydrofuran	67		ug/L		X
P-21D	5/19/2021	Tetrahydrofuran	200		ug/L		X
7734 USH 14	5/11/2021	Trichloroethene	1.2		ug/L	X	
7750 USH 14	5/11/2021	Trichloroethene	0.55	J	ug/L	X	
P-08S	5/19/2021	Trichloroethene	1.7		ug/L	X	
P-16D	5/19/2021	Trichloroethene	0.61	J	ug/L	X	
P-18S	5/20/2021	Trichloroethene	0.69	J	ug/L	X	
P-21BR	5/19/2021	Trichloroethene	4		ug/L	X	
P-22D	5/17/2021	Trichloroethene	0.64	J	ug/L	X	
P-22E	5/17/2021	Trichloroethene	2.6		ug/L	X	
P-22E DUP	5/17/2021	Trichloroethene	2.7		ug/L	X	
P-26S	5/14/2021	Trichloroethene	0.72	J	ug/L	X	
P-27D	5/14/2021	Trichloroethene	2.9		ug/L	X	
P-31IA	5/12/2021	Trichloroethene	0.67	J	ug/L	X	
P-31IB	5/12/2021	Trichloroethene	0.86	J	ug/L	X	
P-31IB DUP	5/12/2021	Trichloroethene	0.87	J	ug/L	X	

NR 140 Groundwater Quality Exceedances by Parameter
Refuse Hideaway Landfill - Middleton, Wisconsin
May 2021

Well ID	Sample Date	Parameter	Result	Data Qualifiers	Units	Standard	
						PAL	ES
P-40I	5/13/2021	Trichloroethene	0.65	J	ug/L	X	
P-40I DUP	5/13/2021	Trichloroethene	0.6	J	ug/L	X	
P-08D	5/19/2021	Vinyl chloride	0.44	J	ug/L		X
P-08D DUP	5/19/2021	Vinyl chloride	0.48		ug/L		X
P-08S	5/19/2021	Vinyl chloride	2.5		ug/L		X
P-09S	5/19/2021	Vinyl chloride	0.52		ug/L		X
P-16D	5/19/2021	Vinyl chloride	0.3	J	ug/L		X
P-21BR	5/19/2021	Vinyl chloride	1.9		ug/L		X
P-21D	5/19/2021	Vinyl chloride	1.5		ug/L		X
P-24D	5/20/2021	Vinyl chloride	0.59		ug/L		X
P-24E	5/20/2021	Vinyl chloride	2.7		ug/L		X

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: January 26, 2021 FILE REF: 02-13-000849

TO: John Fagiolo – U.S. EPA – Region V
Remedial Project Manager

FROM: Cindy Koepke – Wisconsin DNR CJK

SUBJECT: 2020 Annual Report for Refuse Hideaway Landfill, WID980610604

This is the annual report to EPA from the State of Wisconsin, the Settling Performing Party, as required by the final consent decree (August 29, 2001) for Refuse Hideaway Landfill.

As you know, because of the age of the landfill and its contaminant control systems, there have been numerous operational issues over the last few years in keeping the systems operating. DNR hired a contractor to repair and upgrade the landfill and contaminant control systems and address other physical problems (such as drainage, vegetative cover, etc.).

Section X. REPORTING REQUIREMENTS

29(a): During 2019, DNR performed the following work in compliance with the consent decree:

Perimeter gas monitoring: During the 2020 reporting period, perimeter gas probes were monitored monthly. Methane was detected in several probe nests in the southeastern and western/southwestern parts of the property, similar to the patterns of detections in previous years. The levels detected ranged from non-detect to ~40% by volume. Repair of the gas collection system has begun and will be completed in spring 2021.

Leachate collection system: In 2020, 39878 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. Repair of the leachate collection system has begun: the collection lines were cleaned, broken pumps replaced, and air lines installed so pumps can be put in two additional collection wells (previously those wells had only been used for gas collection).

Landfill cover: The landfill surface has been mowed twice. Vegetation was removed around the gas/leachate well cages, the flare fence, the leachate tank fence, the solar panels, and some of the monitoring wells (to improve access for sampling).

After trees on the cap were cut down and their roots treated with herbicide, the contractor filled low areas in the cap and re-seeded them. This should prevent water pooling on the cap. Stormwater drainage ditches were cleared of trees, and the eroded western ditch was repaired. Accumulated sediment was removed from the sedimentation basin and used as part of the fill for low areas on the cap. Erosion on the southern wall of the sedimentation berm was repaired and an emergency spillway re-installed.

Site security upgrade:
DNR had two fences with locked gates installed. One is between the flare and leachate tank enclosures. The second section of fence was installed at the eastern end of the sedimentation basin berm next to the driveway. This restricts access to the southern end of the landfill but can be unlocked for access to gas probes and monitoring wells there.

Groundwater monitoring: DNR hired TRC to do groundwater sampling semi-annually at 23 monitoring wells and 3 private water supply wells and annual groundwater sampling at 26 monitoring wells and 11 private wells. VOC results in 2020 for monitoring and private wells are consistent with past sampling events and show that groundwater quality has improved around the landfill over the years.

Continuing obligations: DNR issued a remedial actions approval with continuing obligations on December 16, 2013. As authorized in s. 292.12, Wis. Stats., the approval imposes obligations with which current and future property owners must comply. These obligations include landfill cap maintenance, gas and leachate collection, environmental monitoring, potable well treatment, and access restrictions. The specific requirements are found in the Operating Manual for the facility. For the 2020 reporting period, the continuing obligations have been adequately maintained.

29(b): Attached to this email transmitting this report are:

- 2020 report of volatile organic compounds detected
- Water table map with well locations marked

29(c): This annual progress report serves as the one required by the consent decree to be sent by the Settling Performing Party to EPA.

29(d): Planned work for 2021 includes: groundwater monitoring and perimeter gas probe monitoring, mailing water sample results to private well owners, and completion of planned source control upgrades and repairs. DNR will respond to information requests and perform appropriate community involvement as needed.

29(e): In 2020, landfill gas monitoring, leachate tank measurements and pumping, landfill cover repair, stormwater management features repair, and groundwater monitoring were conducted, and repairs to the leachate and landfill gas collection system were begun. All other operation and maintenance work for source control systems are temporarily suspended until the source control systems are repaired and/or upgraded (expected to resume in summer 2021).

29(f): No modifications to any materials submitted to EPA are planned for 2021.

29(g): Public relations activities in 2020 were routine.

CERTIFICATION
The Wisconsin Department of Natural Resources certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Superfund Site in Middleton, Wisconsin. For the coming year, the State of

Wisconsin's Environmental Fund, as appropriated by the Wisconsin Legislature, has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, Wisconsin.

Date: _____**1/26/2021**_____

Cynthia L. Koepke, P.G.
Remediation & Redevelopment Hydrogeologist
South Central Region
Wisconsin Department of Natural Resources

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: January 30, 2020 FILE REF: 02-13-000849

TO: John Fagiolo – U.S. EPA – Region V
Remedial Project Manager

FROM: Cindy Koepke – Wisconsin DNR

SUBJECT: 2019 Annual Report for Refuse Hideaway Landfill, WID980610604

The final consent decree for Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to EPA.

As you know, because of the age of the landfill and its contaminant control systems, there have been numerous operational issues over the last few years in keeping the systems operating. DNR hired a contractor to thoroughly evaluate the landfill and contaminant control systems and is planning for a significant construction project to upgrade the contaminant control systems and address other physical problems (such as drainage, vegetative cover, etc.).

Section X. REPORTING REQUIREMENTS

29(a): During 2019, DNR performed the following work in compliance with the consent decree:

Perimeter gas monitoring: During the 2019 reporting period, perimeter gas probes were monitored monthly. Methane was detected in several probe nests in the southeastern and western/southwestern parts of the property, similar to the patterns of detections in previous years. The levels detected ranged from non-detect to 40% by volume.

Leachate collection system: In 2019, 42,993 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. DNR staff measured the leachate tank level every 1-2 months, depending on precipitation, to determine when the tank needed pumping.

Landfill cover: Two eroded areas on the southern slope of the landfill cap were stabilized with a temporary repair; this is expected to stop further erosion there until the 2020 construction project provides a long-term repair for the area. Settlement along the access road on the top of the landfill has made travel difficult for maintenance vehicles. The landfill surface has been mowed twice, but there are several groups of trees on the landfill that will need to be removed. Vegetation was removed around the gas/leachate well cages, the flare fence, the leachate tank fence, the solar panels, and some of the monitoring wells (to improve access for sampling).

Groundwater monitoring: DNR hired TRC to do groundwater sampling semi-annually at 23 monitoring wells and 3 private water supply wells and annual groundwater sampling at 26 monitoring wells and 11 private wells. During the May 2019 groundwater sampling round, TRC discovered numerous monitoring well items needing repair or replacement, including pumps,

surface seals, and tubing; a number of wells scheduled for sampling were not able to be sampled. The repairs are discussed below.

VOC results in 2019 for monitoring and private wells are consistent with past sampling events and show that groundwater quality has improved around the landfill over the years.

During the May 2019 sampling rounds, 10 monitoring wells were sampled for PFAS:

- Five were no detect
- Three had PFBA only (approx. 6-23 ng/l)
- One had PFBA (28 ng/l) and PFHxA (4.8 ng/l)
- One had 7 PFAS compounds (PFBA highest at 672 ng/l; PFHxS lowest at 7 ng/l)

During the fall sampling, 8 monitoring wells were sampled for PFAS:

- Three were previously sampled in the spring round and were no detect in both the spring and fall rounds
- One was previously sampled in the spring round and had PFBA at 1.7 ng/l (very close to its spring result)
- One well sampled for the first time was no detect
- One well sampled for the first time had PFBA at 2.5 ng/l
- Two wells sampled for the first time had 6 PFAS compounds (PFBA highest at 74 ng/l; PFHxS lowest at 2 ng/l)
- While detected in every private well sampled at trace levels, PFOSA was not detected in any monitoring wells; the reporting limit for the fall round is the same as for the private wells

The monitoring wells sampled for PFAS in the spring and fall rounds were chosen to give us preliminary information on what PFAS might be in groundwater near the landfill and whether it was advisable to sample private wells for PFAS; **data collected from monitoring wells to date is NOT sufficient to determine the degree and extent of PFAS in groundwater in the area from any possible source.**

In October 2019, two private wells impacted by landfill VOCs were sampled for PFAS. The analytical results for the water samples collected at the two private wells showed the following:

- 7734 Highway 14 had 7 PFAS compounds detected:
  - PFBA at 81 ng/l
  - PFPeA at 8.17 ng/l
  - PFHxA at 13.6 ng/l
  - PFHpA at 2.7 ng/l
  - PFHxS at 2.5 ng/l
  - PFOA at 5.61 ng/l
  - PFOSA at 6.58 ng/l
- 7750 Highway 14 had 3 PFAS compounds detected:
  - PFBA at 47.8 ng/l
  - PFHxA at 2.28 ng/l
  - PFOSA at 8.46 ng/l

Confirmation sampling was conducted at both homes in early November 2019, and results were consistent with those listed above.

Six additional homes sampled for VOCs in November 2019 were also sampled for PFAS; these private wells had detections of 1-8 PFAS compounds, each in the 2-8 ng/l range.

Gas probe and monitoring well repairs: Extensive repairs were made to the monitoring well and gas probe networks, beginning in November 2019. Much of the needed work was completed in November and December, and the few remaining items will be completed before the May 2020 groundwater sampling round. Repair items were:

- Fixing labeling and replacing locks, well caps, and minor fittings at numerous monitoring wells
- Replacement of pumps and tubing at 15 monitoring wells
- Installation of new or replacement flow control devices at 10 wells
- Repairs to protective casings, well heads, and surface seals
- Fixing labels and replacing locks, tubing, and valves at numerous gas probe locations
- Proper abandonment of one broken gas probe
- Repairs or replacements of protective casings and surface seals

Current conditions evaluation and source control recommendations: Because of the age of many of the source control systems and of the landfill itself, conditions are much different than when the systems were originally installed. DNR hired a contractor to inspect and report on all source control systems at the landfill and make recommendations for repairs, replacements, or upgrades. DNR will use the reported information and recommendations to have constructions plans and specs prepared and then get the source control systems repaired or upgraded in 2020.

Continuing obligations: DNR issued a remedial actions approval with continuing obligations on December 16, 2013. As authorized in s. 292.12, Wis. Stats., the approval imposes obligations with which current and future property owners must comply. These obligations include landfill cap maintenance, gas and leachate collection, environmental monitoring, potable well treatment, and access restrictions. The specific requirements are found in the Operating Manual for the facility. For the 2019 reporting period, the continuing obligations have been adequately maintained.

29(b): Attached to this email transmitting this report are:

- Table summarizing NR 140 exceedances, May 2019 data
- July 12, 2019 report for May with a water table map, summary of needed maintenance, and lab sheets for groundwater samples
- January 24, 2020 report for November/December groundwater sampling with exceedance tables and lab sheets

29(c): This annual progress report serves as the one required by the consent decree to be sent by the Settling Performing Party to EPA.

29(d): Planned work for 2020 includes: groundwater monitoring and perimeter gas probe monitoring, mailing water sample results to private well owners, preparation of plans and specs

for reconstruction/repair of non-functional source control systems, and construction to carry out the reconstruction/repair plans. DNR will respond to information requests and perform appropriate community involvement as needed.

29(e): In 2019, landfill gas monitoring, leachate tank measurements and pumping, landfill cover erosion repair, and groundwater monitoring were conducted. All other operation and maintenance work for source control systems are temporarily suspended until the source control systems are repaired and/or upgraded (planned for 2020).

29(f): No modifications to any materials submitted to EPA are planned for 2020.

29(g): Public relations activities in 2019 were routine. Additional communication was conducted with private well owners and township officials to keep them informed about sampling and future repair plans.

CERTIFICATION

The Wisconsin Department of Natural Resources certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Superfund Site in Middleton, Wisconsin. For the coming year, the State of Wisconsin's Environmental Fund, as appropriated by the Wisconsin Legislature, has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, Wisconsin.

Date: 1/30/2020

Cynthia L. Koepke, P.G.
Remediation & Redevelopment Hydrogeologist
South Central Region
Wisconsin Department of Natural Resources

CORRESPONDENCE/MEMORANDUM

State of Wisconsin

DATE: February 19, 2019 FILE REF: 02-13-000849

TO: John Fagiolo – U.S. EPA – Region V
Remedial Project Manager

FROM: Cindy Koepke – Wisconsin DNR

SUBJECT: 2017/2018 Annual Reports for Refuse Hideaway Landfill, WID980610604

The final consent decree for Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to EPA. Due to staffing changes, submittal of the 2017 report was delayed. This report summarizes activities for both 2017 and 2018.

As you know, because of the age of the landfill and its contaminant control systems, there have been numerous operational issues over the last few years in keeping the systems operating. DNR is planning to have the landfill and contaminant control systems thoroughly evaluated and for a significant construction project there to upgrade the contaminant control systems and address other physical problems (such as drainage, vegetative cover, etc.).

Section X. REPORTING REQUIREMENTS

29(a): Actions taken during 2017 and 2018 for compliance with the consent decree are primarily associated with continuing operation and maintenance of the facility contaminant control systems. Routine inspections and adjustments to the gas and leachate collection systems were made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance of the leachate and gas systems is described in the attached excerpts from the annual report prepared by DNR's consultant, LBG Inc. (company name is now WSP USA).

Gas collection and destruction system: As described in the 2016 report, the landfill gas collection and combustion system have a number of operational problems. The blower has been off-line since August 2016. Functioning was restored to the combustion system for part of 2016 and 2017, but the system has been off-line since September 2017. The valves at the gas wellheads and in the blower building have been closed to prevent direct venting of landfill gas while the system is off-line.

Perimeter gas monitoring: During the 2017 and 2018 reporting periods, perimeter gas probes were monitored monthly. Methane was detected in four probe nests (G-1S/G-1D, G-2S, GP-11S/GP-11D, and GP-12S/GP-12D); these points have also had detections in previous years. The levels detected ranged from non-detect to 30.5% by volume. LBG repaired several monitoring points and removed significant amounts of brush from 3 gas monitoring well nests.

Leachate collection system: From July 2016-June 2017, 201,223 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. The amount collected and hauled there for treatment from July 2017-June 2018 was 53,679 gallons; the reduced volume collected is because the compressor that powers the leachate pumps failed in late August 2017, causing the leachate pumps to be off-line. After an initial rise in GW4, GW10, and GW11, which had consistently been pumped, leachate heads stabilized.

Leachate head levels were measured monthly. The annual pulling and cleaning of pumps was carried out in August 2017 and June 2018.

Landfill cover: The clay and soil cap are inspected throughout the year for areas of erosion and stressed vegetation. Settling in several areas has led to stormwater pooling on the cap. Some erosion rills exist on the southeastern and western slopes. Settlement along the entrance road have made travel difficult for maintenance vehicles. The landfill surface has been mowed but several groups of saplings exist on top of the landfill that will need to be removed.

Groundwater monitoring: LBG conducted groundwater sampling semi-annually at 23 monitoring wells and 3 private water supply wells; LBG also conducted annual groundwater sampling at 22 monitoring wells and 11 private wells. Results are consistent with past sampling events and show that groundwater quality has improved around the landfill over the years.

Continuing obligations: DNR issued a remedial actions approval with continuing obligations on December 16, 2013. As authorized in s. 292.12, Wis. Stats., the approval imposes obligations with which current and future property owners must comply. These obligations include landfill cap maintenance, gas and leachate collection, environmental monitoring, potable well treatment, and access restrictions. The specific requirements are found in the Operating Manual for the facility. For the 2017 and 2018 reporting time period, the continuing obligations have been adequately maintained.

29(b): Attached to this report are:

- Summaries of groundwater standard exceedances
- Copy of the LBG July 2016-June 2017 operation & maintenance report (without lab sheets)
- Copy of the LBG July 2017-June 2018 operation & maintenance report (without lab sheets)

If you would like copies of the lab sheets, please let me know.

29(c): The consent decree requires the Settling Performing Party to send EPA an annual progress report. You indicated you had not received a report for 2017. This combined report addresses this deficiency. We plan to send timely annual reports as required in the future.

29(d): Planned work for 2019 includes: groundwater monitoring and perimeter gas probe monitoring, mailing water sample results to private well owners, conducting a detailed evaluation of the landfill and its systems, and planning for reconstruction/repair of non-functional contaminant control systems based on the recommendations from the detailed evaluation. DNR will respond to information requests and perform appropriate community involvement as needed.

29(e): All operation and maintenance work for source control systems was conducted as described in this report and its attachments for 2017 and through summer 2018. We will have delays in 2019 as we get new contracts into place for routine monitoring of groundwater quality and perimeter gas levels and for evaluation of the landfill and its systems.

29(f): No modifications to any materials submitted to EPA are planned for 2019.

29(g): Public relations activities in 2017 and 2018 were routine and included only information requests to the DNR project manager on the Site's status and groundwater quality.

CERTIFICATION

The Wisconsin Department of Natural Resources certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Superfund Site in Middleton, Wisconsin. For the coming year, the State of Wisconsin's Environmental Fund, as appropriated by the Wisconsin Legislature, has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, Wisconsin.

Signed on: 2/19/2019

Cynthia L. Koepke, P.G.
Remediation & Redevelopment Hydrogeologist
South Central Region
Wisconsin Department of Natural Resources

Scanned & emailed to John 2/19/2019. CK

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2016 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2016 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: Sufficient vacuum was applied to the North and Central branch wells; however, vacuum cannot be applied to wellheads GW1, GW2 and GW3 on the South branch due to low points within the South branch header. In September 2015, sewer balls were placed within the solid piping of the GW5 laterals to prevent vacuum from being applied to the laterals. The sewer balls were installed because monitoring data indicated that elevated methane concentrations and low oxygen levels could not be sustained from the lateral wells. The integrity of the sewer balls has been monitored quarterly by LBG.

Several mechanical issues were encountered and addressed at the flare throughout the 2016 reporting period. On December 17, 2015, LBG could not restart the flare. The flame from the flare had melted the wiring that attaches to the electrode causing a poor electrical connection. Maintenance was conducted on January 21, 2016. The flare remained down due to elevated oxygen levels through January and February, but was brought on-line on March 22, 2016. The flare system was operational until May 25, 2016 when the transformer on the flare ceased to create the necessary spark to the electrode. Maintenance scheduled in July 2016 was completed to bring the system back on-line.

During the 2016 reporting period, methane was detected in the SW gas probe cluster at concentrations at or above the LEL. Elevated methane concentrations have been detected occasionally at these wells during previous years.

LFG flow rates varied during the 2016 reporting period due to the number of extraction wells on-line and other site factors (i.e. - leachate head levels). The maximum total LFG flow rate of the three branches recorded was 1,400 standard cubic feet per minute. There has been no migration of methane away from the landfill.

Leachate collection system: From July 2015 until June 2016, 148,645 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. During

the current contract period, the volume of leachate recovered was greater than the 2014-2015 period; however, it was lower than previous years dating back to 2007. During December 2015, minor maintenance was conducted on the compressor in which a new solenoid and an unloader were installed by EMS Industrial, Inc. The compressor ran reliably during the remainder of the reporting period. The annual pulling and cleaning of pumps was completed in June 2016. Some of the pumps will require additional troubleshooting and/or replacement parts to address operational issues related to proper cycling. In addition, the pumps in GW7 and GW13 cannot be removed. Landfill settlement may have impacted the well casing above the pumps in such a manner that the pumps can no longer be removed for cleaning and troubleshooting. Leachate lines, driplegs, and cleanouts were also cleaned.

Landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. With the exception of the sparse vegetation near GW1, GW2 and GW4, the cover is well vegetated with no significant erosion or settling, and was mowed on a biennial basis in 2016.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22 monitoring wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contractors: The landfill operation and maintenance contractor has been the same one since July 1, 2009 - LBG. The groundwater monitoring contractor is LBG.

Continuing Obligations: An approval of remedial actions with continuing obligations was signed by the department on December 16, 2013. This document outlines actions consistent with provisions of s. 292.12 of Wisconsin Statutes that any current or future property owners must comply with. It includes such measures as maintaining the landfill cap, gas and leachate collection, environmental monitoring, and potable well treatment systems and restricting access to the site. The specific requirements are contained in the Operating Manual for the facility. For the time period of January 1, 2015 through December 31, 2015, there have been no violations of the restrictions on the use of the Site Property, real estate, and adjacent surrounding areas. For this time period, Continuing Obligations have been adequately maintained.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2015 through June 2016) on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2016 was an annual progress report for 2015. This report was submitted to the Region 5 Remedial Project Manager on September 13, 2016.

29.(d) Planned work for 2017 includes routine monitoring and O&M activities. Where needed, the state will also pursue updating access agreements for properties with monitoring points, and will perform appropriate community involvement and/or responding to informational requests as needed.

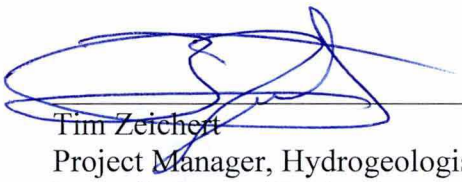
29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2016. No delays or other hindrances to routine operation and maintenance activities in 2017 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2017.

29.(g) Public relations activities in 2016 were not significant and included only various information requests to the WDNR Project Manager. WDNR responded to these requests for information on the Site's status and groundwater quality.

CERTIFICATION

The WDNR certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Landfill Superfund Site in Middleton, WI, for the coming year, The State of Wisconsin's Environmental Fund (as appropriated by the Wisconsin Legislature) has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, WI.



Tim Zeichert
Project Manager, Hydrogeologist
Remediation and Redevelopment Program
Division of Environmental Management
Wisconsin Department of Natural Resources

6/1/17
Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2015 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2015 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: Through a remedial design services contract, LBG designed upgrades to the LFG system to restore vacuum to GW4, GW5, and the east and west lateral wells installed at GW5 (GW5-LE, GW5-LW). The LFG system upgrade was completed in September 2014. During the time period from July 2014 until June 2015, LBG performed an assessment of the perimeter gas probe monitoring system. LBG replaced methane sensors in gas detection meters as needed. In July 2013, LBG rehabilitated the existing pedestal flare for reuse at the Site. The pedestal flare is designed to operate at a lower flow rate and methane concentration than the enclosed flare; thereby, resulting in a higher operational percentage and less direct emissions of LFG to the atmosphere. No major repairs were made by LBG to the pedestal flare from July 2014 to June 2015. LFG flow rates varied considerably during this time period due to the number of extraction wells on-line and other site factors (i.e. leachate head levels). The maximum total LFG flow rate of the three branches recorded during this time period was 1,070 standard cubic feet per minute. There has been no migration of methane away from the landfill.

Leachate collection system: From July 2014 until June 2015, 97,736 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. This is less than the previous year due to less precipitation in the area. LBG performed an assessment of the 25,000 gallon leachate collection tank and the integrity of the tank is good. During May and June 2015, leachate pumps were removed during this time period, cleaned, and adjusted to allow for proper cycling. Leachate lines, driplegs, and cleanouts were also cleaned.

Landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion, and was mowed during this current contract period.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22 monitoring

wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contractors: The landfill operation and maintenance contractor has been LBG since July 1, 2009. LBG also performs sampling for the groundwater monitoring.

Continuing Obligations: An approval of remedial actions with continuing obligations was signed by the department on December 16, 2013. This document outlines actions consistent with provisions of s. 292.12 of Wisconsin Statutes that any current or future property owners must comply with. It includes such measures as maintaining the landfill cap, gas and leachate collection, environmental monitoring, and potable well treatment systems and restricting access to the site. The specific requirements are contained in the Operating Manual for the facility. In 2014, LBG completed the revision of the Operating Manual to update operation and maintenance procedures for Continuing Obligations.

For the time period of January 1, 2014 through December 31, 2014, there have been no violations of the restrictions on the use of the Site Property, real estate, and adjacent surrounding areas. For this time period, Continuing Obligations have been adequately maintained.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2014 through June 2015) on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2015 was an annual progress report for 2014. This report was submitted to the Region 5 Remedial Project Manager.

29.(d) Planned work for 2015 includes routine monitoring and O&M activities. Where needed, the state will also pursue updating access agreements for properties with monitoring points, and will perform appropriate community involvement and/or responding to informational requests as needed.

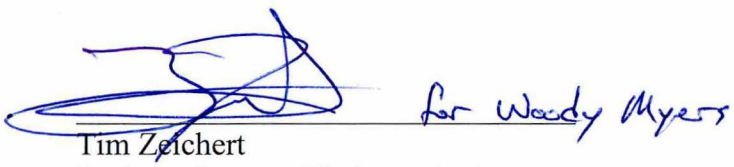
29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2015. No delays or other hindrances to routine operation and maintenance activities in 2016 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2015.

29.(g) Public relations activities in 2015 were not significant and included only various information requests to the WDNR project manager. WDNR responded to these requests for information on the Site's status and groundwater quality.

CERTIFICATION

The WDNR certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Landfill Superfund Site in Middleton, WI. For the coining year, The State of Wisconsin's Environmental Fund (as appropriated by the Wisconsin Legislature) has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, WI.



for Wendy Myers

Tim Zeichert
Project Manager, Hydrogeologist
Remediation and Redevelopment Program
Division of Environmental Management
Wisconsin Department of Natural Resources

4/21/17
Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2014 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2014 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: Through a remedial design services contract, LBG designed upgrades to the LFG system to restore vacuum to GW4, GW5, and the east and west lateral wells installed at GW5 (GW5-LE, GW5-LW). During this period, LBG completed the design and bidding of a pipe network that will connect GW4, GW5, GW5-LE, and GW5-LW to the Central branch of the LFG collection network. This LFG system upgrade will be completed during the next contract year.

LBG performed an assessment of the perimeter gas probe monitoring system. In June 2014, LBG conducted repairs to the perimeter gas probe monitoring network. New tubing and ball valves were installed on gas probes in need of repair, and gas probes were equipped with locks.

During July 2013, LBG rehabilitated the existing pedestal flare for reuse at the Site. The pedestal flare is designed to operate at a lower flow rate and methane concentration than the enclosed flare; thereby, resulting in a higher operational percentage and less direct emissions of LFG to the atmosphere. During July 2013, LBG replaced the ignitor connection and electrical wiring to the pedestal flare to complete the combustion system upgrade project The pedestal flare ignition transformer and electrode were replaced in January and February, respectively.

LFG flow rates varied considerably during this time period due to the number of extraction wells on-line and other site factors (i.e. leachate head levels). The total LFG flow rate of the three branches ranged from approximately 288 to 1,413 standard cubic feet per minute. There has been no migration of methane away from the landfill.

Leachate collection system: From July 2013 until June 2014, 190,229 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. This is somewhat less than the previous year, likely due to less rainfall in the area. LBG performed an assessment of the 25,000 gallon leachate collection tank and the integrity of the tank is good.

Various leachate pumps were removed during this time period, cleaned, and adjusted to allow for proper cycling. Leachate lines, driplegs, and cleanouts were also cleaned.

Landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. A landscaper was hired to re-seed a couple of bare areas in 2013. The cover is mowed on a biennial basis. This was done in the fall of 2012.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22 monitoring wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contractors: The landfill operation and maintenance contractor has been LBG since July 1, 2009. LBG also performs sampling for the groundwater monitoring.

Continuing Obligations: An approval of remedial actions with continuing obligations was signed by the department on December 16, 2013. This document outlines actions consistent with provisions of s. 292.12 of Wisconsin Statutes that any current or future property owners must comply with. It includes such measures as maintaining the landfill cap, gas and leachate collection, environmental monitoring, and potable well treatment systems and restricting access to the site. The specific requirements are contained in the Operating Manual for the facility. In 2014 LBG will complete a revision of the Operating Manual to reflect recent changes in operation and maintenance procedures.

For the time period of January 1, 2013 through December 31, 2013, there have been no violations of the restrictions on the use of the Site Property, real estate, and adjacent surrounding areas. For this time period, Continuing Obligations have been adequately maintained.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2013 through June 2014) on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2014 was an annual progress report. This report was submitted to the Region 5 Remedial Project Manager.

29.(d) Planned work for 2015 includes routine monitoring and O&M activities. Where needed, the state will also pursue updating access agreements for properties with monitoring points, and will perform appropriate community involvement and/or responding to informational requests as needed.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2014. No delays or other hindrances to routine operation and maintenance activities in 2015 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2015.

29.(g) Public relations activities in 2014 were not significant and included only various information requests to the WDNR project manager. WDNR responded to these requests for information on the Site's status and groundwater quality.

CERTIFICATION

The WDNR certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Landfill Superfund Site in Middleton, WI. For the coining year, The State of Wisconsin's Environmental Fund (as appropriated by the Wisconsin Legislature) has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, WI.

for Woody Myers — 4/21/17

Tim Zeichert
Project Manager, Hydrogeologist
Remediation and Redevelopment Program
Division of Environmental Management
Wisconsin Department of Natural Resources

Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2013 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2013 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: In July, LBG connected the gas collection system to a smaller flare. This flare is more appropriately sized for the current gas production at the landfill. Since the smaller flare has been put into use, gas has been combusted virtually 100% of the time. The previously used flare had been too large for the diminished gas production from the landfill. Because of that and malfunctioning of the telemetry system, gas had been venting to ambient air a significant portion of the time. Settlement and blockage of one of the three collection lines inhibits gas collection in the southwest portion of the landfill. This problem is being addressed as described below. Migration of methane away from the landfill has not been significant. LBG performed an assessment of the perimeter gas probe monitoring system. Based on their recommendations, a number of changes to the gas monitoring system are being implemented (monitoring of additional probes, modification of some probes).

Leachate collection system: From July 2012 until June 2013, 275,000 gallons of leachate were collected and hauled to the Madison Metropolitan Sewerage District plant for treatment. This is somewhat less than the previous year and reflects drier conditions which existed prior to late spring 2013. LBG performed an assessment of the leachate collection tank. Pressure testing of the tank indicated that the integrity of the tank was good. Pressure testing of the tank will be done biennially in the future.

The landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. A landscaper was hired to re-seed a couple of bare areas in 2013. The cover is mowed on a biennial basis. This was done in the fall of 2012.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22

monitoring wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contractors: The landfill operation and maintenance contractor has been the same one since July 1, 2009 - LBG. The groundwater monitoring contractor is now also LBG.

Continuing Obligations: An approval of remedial actions with continuing obligations was signed by the department on December 16, 2013. This document outlines actions consistent with provisions of s. 292.12 of Wisconsin Statutes that any current or future property owners must comply with. It includes such measures as maintaining the landfill cap, gas and leachate collection, environmental monitoring, and potable well treatment systems and restricting access to the site. The specific requirements are contained in the Operating Manual for the facility. In 2014 LBG will complete a revision of the Operating Manual to reflect recent changes in operation and maintenance procedures.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2012 through June 2013) on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2013 was an annual progress report for 2012. This report was submitted on January 10, 2013, which was prior to the required deadline of February 1, 2013.

29.(d) Planned work for 2014 includes routine monitoring and O&M activities. LBG is in the process of designing a redundant gas/leachate collection line to replace the blocked line in the southwest portion of the landfill. Construction of this line is anticipated to take place during the summer of 2014. Where needed, the state will also pursue up-dating access agreements for properties with monitoring points.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2013. No delays or other hindrances to routine operation and maintenance activities in 2014 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2014.

29.(g) Public relations activities in 2013 included the WDNR RHL project manager responding to several requests for information on groundwater contamination in the area surrounding the landfill.

The WDNR certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Landfill Superfund Site in Middleton, WI. For the coming year, The State of Wisconsin's Environmental Fund (as appropriated by the Wisconsin Legislature) has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, WI.

1/6/14

James Walden
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Remediation and Redevelopment Program

Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2012 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2012 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: The system has operated significantly less than 100% of the time during 2012. The primary reason for the down-time is that the landfill no longer generates sufficient methane to keep the flare operating on a full-time basis. The flare cuts out when gas concentrations are insufficient to maintain combustion. Faulty controls on the gas system are allowing the blower to vent gas into the air until the contractor can manually shut off the blower. The contractor then has to wait up to several days for sufficient methane to accumulate within the landfill, when the flare can be manually re-ignited. Settlement and blockage of the collection system in parts of the landfill inhibits gas collection in those areas. Despite the operational problems, migration of methane away from the landfill has not been significant.

Leachate collection system: Leachate extraction efforts have been going well. From July 2011 until June 2012, 304,143 gallons of leachate were collected, hauled, and treated. This is substantially less than the previous year and reflects the drought conditions which existed in 2012.

The landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis. This was done in the fall of 2012.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22 monitoring wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contactors: The landfill operation and maintenance contractor has been the same one since July 1, 2009 - LBG. The groundwater monitoring contractor continues to be SCS BT^2.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2011 through June 2012) on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2011 was an annual progress report for 2011. This report was submitted on January 20, 2012, which was prior to the required deadline of February 1, 2012.

29.(d) Planned work for 2013 includes routine monitoring and O&M activities. The state has hired LBG to assess the integrity of the leachate collection tank and the perimeter gas monitoring system, and design a replacement of the gas flare and controls, and repairs of leachate/gas collection line blockages. Construction of these improvements are anticipated to take place in 2013. After these improvements have been constructed, the state will write a Continuing Obligations Addendum to the Site O&M Plan. This Addendum will specify continuing obligations for the property consistent with provisions of s. 292.12 of Wisconsin Statutes. Where needed, the state will also pursue up-dating access agreements for properties with monitoring points.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2012. No delays or other hindrances to routine operation and maintenance activities in 2013 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2013 other than the addendum described above.

29.(g) Public relations activities in 2012 included the WDNR RHL project manager responding to several requests for information on groundwater contamination in the area surrounding the landfill.

The WDNR certifies that for the coming year, the State of Wisconsin shall meet its financial obligations under the August 29, 2001 Consent Decree for the Refuse Hideaway Landfill Superfund Site in Middleton, WI. For the coming year, The State of Wisconsin's Environmental Fund (as appropriated by the Wisconsin Legislature) has included budget items and/or appropriations for performing the work at the Refuse Hideaway Landfill Superfund Site in Middleton, WI.

1/10/13

James Walden
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Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2011 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2011 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Routine inspections and adjustments to the gas and leachate collection systems are made on a weekly, monthly, quarterly, or annual basis, depending on the system component. Maintenance on the leachate and gas systems are described in the attached Leggette, Brashears & Graham (LBG) annual report.

Gas collection and destruction system: The system has operated significantly less than 100% of the time during 2011. The primary reason for the down-time is that the landfill no longer generates sufficient methane to keep the flare operating on a full-time basis. The flare cuts out when gas concentrations are insufficient to maintain combustion. Faulty controls on the gas system are allowing the blower to vent gas into the air until the contractor can manually shut off the blower. The contractor then has to wait up to several days for sufficient methane to accumulate within the landfill, when the flare can be manually re-ignited. Settlement and blockage of the collection system in parts of the landfill inhibits gas collection in those areas. Despite the operational problems, migration of methane away from the landfill has not been significant.

Leachate collection system: Leachate extraction efforts have been going well. From July 2010 until June 2011 563,145 gallons of leachate were collected, hauled, and treated. This is a substantial increase from recent years. The O&M contractor attributes this to pump optimization activities.

The landfill cover: The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis. This was last done in the fall of 2010.

The groundwater monitoring system: Groundwater was sampled semi-annually at 23 groundwater monitoring wells and 3 private water supply wells; and annually at 22 monitoring wells and 11 private water supply wells. Results show that groundwater quality has continued to improve around the landfill.

Contactors: The landfill operation and maintenance contractor has been the same one since July 1, 2009 - Leggette, Brashears, and Graham, Inc. The groundwater monitoring contractor continues to be SCS BT^2.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances at groundwater monitoring wells and water supply wells; and 2) a copy of the LBG annual report (July 2010 through June 2011) on the operation of the gas and leachate systems (tables, most figures, and laboratory sheets are not included with this report but are available upon request).

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2011 was an annual progress report for 2010. This report was submitted on January 26, 2011, which was prior to the required deadline of February 1, 2011.

29.(d) Planned work for 2012 includes routine monitoring and O&M activities. The state will also be pursuing replacement of the gas flare and controls, and repair of leachate/gas collection line blockages. Where needed, the state will also pursue up-dating access agreements for properties with monitoring points.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2011. No delays or other hindrances to routine operation and maintenance activities in 2012 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2012.

29.(g) Public relations activities in 2010 included the WDNR RHL project manager making a presentation to the Town of Middleton Board on the status of current conditions at the RHL property. The WDNR manager also responded to several requests for information on groundwater contamination in the area surrounding the landfill.

1/20/12

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South Central Region

Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2010 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2010 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 resulted in nearly continuous operation of the system between February 2001 and April 2005 when the system began experiencing component failures numerous times throughout the remainder of the year. However, all of the repairs and improvements made in 2005 resulted in improved performance of the system. However, the system has operated significantly less than 100% of the time during most months of 2010. Several problems have caused this, one of which is that repairs have been needed and made to address equipment failures. However, the primary reason for the consistent down-time for this system is that the landfill is no longer generating sufficient methane to keep the flare operating on a full-time basis. The contractor is currently allowing the flare to be non-operational for periods of several days to allow methane concentrations and volumes to accumulate within the landfill to allow full operation of the system for several days before shut-down again occurs.
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system operated full time during nine months in 2010. The months in which the system operated less than full-time are: January - operated approximately 95% (system shut-down for electrical system improvements); May – approximately 65% (electrical system improvements for photo-voltaic system and compressor repair); June – 93% (solenoid valve repair). The volume of leachate collected, hauled, and treated in 2010 totaled 395,122 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil

cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was most recently completed in the fall of 2010.

- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the landfill. Completed in 2010 were: the semi-annual monitoring of 23 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.
- The landfill operation and maintenance contractor has been the same one since July 1, 2009 - Leggette, Brashears, and Graham, Inc. The groundwater monitoring contractor changed prior to the first monitoring event in May 2010 to BT Squared, which has past groundwater monitoring experience for RHL.
- No significant repair or improvement work was completed on the leachate collection system or on the gas extraction and thermal treatment system in 2010. However, minor repairs were completed to both systems in 2010, several of which are mentioned above.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells for each of the two rounds of groundwater monitoring of 2010; and 2) a copy of the most-recently received annual report (July 2009 through June 2010) on the operation of the gas and leachate systems (tables, most figures, and laboratory sheets are not included with this report but are available upon request).

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2010 was an annual progress report for 2009. This report was submitted on January 29, 2010, which was prior to the required deadline of February 1, 2010.

29.(d) Planned work for 2010 includes not only the routine monitoring and O&M activities but may also include a change in the electronic operating system of the flare to prevent on-going landfill gas emissions to the atmosphere when the flare is automatically shut off. Work this year may also include the excavation and repositioning of a leachate header line that currently has a problematic low point.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2010. No delays or other hindrances to routine operation and maintenance activities in 2011 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2011, other than a draft Explanation of Significant Difference is currently in review by EPA and a final version will probably be issued sometime in 2011.

29.(g) Public relations activities in 2010 included the WDNR RHL project manager attending a public informational meeting on the development of a Dane County park on property that is southwest and west of the RHL property. The WDNR manager also responded to several requests for information on groundwater contamination in the area surrounding the landfill.

Hank Kuehling

01/20/11

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Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2009 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2009 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 resulted in nearly continuous operation of the system between February 2001 and April 2005 when the system began experiencing system component failures numerous times throughout the remainder of the year. However, all of the repairs and improvements made in 2005 resulted in improved performance of the system. However, the system has operated significantly less than 100% of the time during most months of 2009. Several problems have caused this, one of which is that repairs have been needed to address equipment failures. However, the primary reason for the consistent down-time for this system is that the landfill is no longer generating sufficient methane to keep the flare operating on a full-time basis. The contractor is currently shutting the system down for periods of several days to allow methane concentrations and volumes to accumulate within the landfill to allow full operation of the system for several days before shut-down again occurs.
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system operated full time during 10 months in 2009. The months in which the system operated less than full-time are: November – approximately 82% (fuse replacement was needed); and December – 90% (severed compressed air line and faulty solenoid valve). The cleaning of the leachate header pipes was completed in May 2009. The volume of leachate collected, hauled, and treated in 2009 totaled 293,301 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation.

Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was most recently completed in the fall of 2008. However, some cover areas with invasive woody shrubs and trees were mowed in the fall of 2009. Also noteworthy is that several small areas of the cover had been damaged during surface rock removal in the fall of 2008. These areas were repaired in the spring of 2009.

- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the landfill. Completed in 2009 were: the semi-annual monitoring of 23 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.
- The landfill operation and maintenance contractor changed on July 1, 2009 to Leggette, Brashears, and Graham, Inc.; however, the groundwater monitoring contractor remained the same (Environmental Sampling Corporation).
- No significant repair work was completed on the leachate collection system or on the gas extraction and thermal treatment system in 2009. However, minor repairs were completed to both systems in 2009, several of which are mentioned above.

29.(b) Included with this report as attachments are: 1) a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells for each of the two rounds of groundwater monitoring of 2009,; and 2) a copy of the most-recently received annual report (July 2008 through June 2009), with data, on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2009 was an annual progress report for 2008. This report was submitted on January 29, 2009, which was prior to the required deadline of February 1, 2009. (This 2009 annual progress report is being submitted after the February 1, 20010 deadline. WDNR was granted a deadline extension to February 28, 2010 by EPA on January 20, 2010.).

29.(d) Planned work for 2010 includes not only the routine monitoring and O&M activities but will also include a change in the electronic operating system of the flare to prevent on-going landfill gas emissions to the atmosphere when the flare is automatically shut off. Work this year may also include the excavation and repositioning of a leachate header line that currently has a problematic low point.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2009. No delays or other hindrances to planned activities in 2010 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2010.

29.(g) Public relations activities in 2009 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. Similar activities will probably take place in 2010.

Hank Kuehling

02/02/2010

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Remediation and Redevelopment Program
South Central Region

Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2008 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2008 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 resulted in nearly continuous operation of the system between February 2001 and April 2005 when the system began experiencing system component failures numerous times throughout the remainder of the year. However, all of the repairs and improvements made in 2005 resulted in improved performance of the system. The system operated 100% of the time during seven months of 2008. The months in which the system operated less than full-time, with associated run-times, are: April – 90% (flare shut-down, possibly because of rain events); May – 99% (flare shut-down, possibly because of rain events); September - 75% (flare system repairs); November – 90% (flare shut-down, possibly because of low-methane content of the gas or low gas volumes); December – 75% (flare shut-down, possibly because of low-methane content of the gas or low gas volumes).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system operated full time during 10 months in 2008. The months in which the system operated less than full-time are: July–95% (a minor equipment repair was needed); October – 90% (no apparent reason). The cleaning of the leachate header pipes was last completed in October 2007. The volume of leachate collected, hauled, and treated in 2008 totaled 255,202 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation.

Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was most recently completed in the fall of 2008.

- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the landfill. Completed in 2008 were: the semi-annual monitoring of 23 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.
- The landfill operation and maintenance contractor remained the same in 2008 (Liesch Environmental Services, Inc.), as did the groundwater monitoring contractor (Environmental Sampling Corporation).
- No significant repair work was completed on the leachate collection system. In September, an expert in the construction and operation of the gas combustion flare spent several days inspecting and repairing the RHL flare, resulting in the improved function of the flare. Other minor repairs were completed to both systems in 2008, several of which are mentioned above.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells for each of the two rounds of groundwater monitoring of 2008, and a copy of the most-recently received annual report (July 2007 through June 2008), with data, on the operation of the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2008 was an annual progress report for 2007. This report was submitted on February 12, 2008, which was after the required deadline of February 1, 2008 (WDNR was granted a deadline extension to February 29, 2008 by EPA on February 5, 2008.). (This 2008 annual progress report is being submitted prior to the February 1, 2009 deadline.)

29.(d) Planned work for 2009 includes not only the routine monitoring and O&M activities and but may also include the excavation and repositioning of a leachate header line that currently has a problematic low point, and may also include work to increase the efficiency of the leachate pumps.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2008. No delays or other hindrances to planned activities in 2009 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2009.

29.(g) Public relations activities in 2008 included the WDNR RHL project manager responding to information requests from area landowners and persons considering

purchasing property or development rights on property in the vicinity of the landfill. Similar activities will probably take place in 2009.

Hank K Kuehling

01/27/09

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Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
South Central Region

Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2007 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2007 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 resulted in nearly continuous operation of the system between February 2001 and April 2005 when the system began experiencing system component failures numerous times throughout the remainder of the year. However, all of the repairs and improvements made in 2005 resulted in improved performance of the system. The system operated 100% of the time during nine months of 2007. The months in which the system operated less than full-time, with associated run-times are: February – 97% (flare shut-down, possibly because of a low-methane level in the collected gas); March – 85% (flare shut-down, possibly because of a high-methane level in the collected gas or because of high winds); June - 98% (flare shut-down; no known reason).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system was operable full time during eight months in 2007. The months in which the system operated less than full-time are: March – 95%; April – 0%; May – 75% (compressor was inoperable from late March to early May because of starter motor, overload circuits, desiccant filter drain, and compressor air line problems); July – 50% (loose electrical panel connection). The annual cleaning of the leachate header pipes was accomplished on October 23, 2007. The volume of leachate collected, hauled, and treated in 2007 totaled 308,525 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation.

Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was most recently completed in September, 2006.

- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the landfill. Completed in 2007 were: the semi-annual monitoring of 23 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.
- The landfill operation and maintenance contractor remained the same in 2007 (Liesch Environmental Services, Inc.). Because of the State-required bid process for contracts every three years, the groundwater monitoring contractor changed in 2007 to Environmental Sampling Corporation, a previous RHL groundwater monitoring contractor.
- No significant repair work was completed on the gas collection and combustion system or the leachate collection system, other than that mentioned above.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells for each of the two rounds of groundwater monitoring of 2007, and a copy of the most-recently received annual report (July 2006 through June 2007) with data from the gas and leachate systems.

29.(c) A submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2007 was an annual progress report for 2006. This report was submitted on January 23, 2007, prior to the required deadline of February 1, 2007. (This 2007 annual progress report is being submitted after the February 1, 2008 deadline; WDNR was granted a deadline extension to February 29, 2008 by EPA on February 5, 2008.)

Another set of submittals required in 2007 were a five-year review site inspection check list, submitted to EPA on June 13, 2007, and a final five-year review report that was signed by EPA officials on September 19, 2007.

29.(d) Planned work for 2008 includes not only the routine monitoring and O&M activities and but may also include the excavation and repositioning of a leachate header line that currently has a problematic low point, and may also include a flare inspection and improvements by an expert on the RHL flare.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2007. No delays or other hindrances to planned activities in 2008 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2008.

29.(g) Public relations activities in 2007 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. Similar activities will probably take place in 2008.

Hank K Kuehling

02/12/08.

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Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2006 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2006 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 resulted in nearly continuous operation of the system between February 2001 and April 2005 when the system began experiencing system component failures numerous times throughout the remainder of the year. However, all of the repairs and improvements made in 2005 resulted in improved performance of the system. The system operated essentially 100% of each month of 2006 with the following two exceptions: May – 90% and August – 68% (the system was inoperable during system repairs in both months).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system was operable essentially for the entire year. However, during the year, numerous leachate pumps became inoperable, possibly because of inactivity during an extended period of drought. Seven leachate pumps were replaced in the fall. The annual cleaning of the leachate header pipes was accomplished in August. The volume of leachate collected, hauled, and treated in 2006 totaled 298,080 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was completed in September, 2006.
- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the

landfill. Completed in 2006 were: the semi-annual monitoring of 21 groundwater monitoring wells; the annual monitoring of 23 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.

- The landfill operation and maintenance contractor remained the same in 2006 (Liesch Environmental Services, Inc.). The groundwater monitoring contractor also remained the same in 2006 (BT^2, Inc.).
- No significant repair work was completed on the gas collection and combustion system or the leachate collection system, other than that mentioned above.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells in 2006, and a copy of the most-recently received annual report (July 2005 through June 2006) with data from the gas and leachate systems.

29.(c) The only submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2006 was an annual progress report for 2005. This report was submitted on January 27, 2006, prior to the required deadline of February 1, 2006. (This 2006 annual progress report is being submitted before the February 1, 2007 deadline.) A five-year review will be completed for RHL in the first half of 2007.

29.(d) Planned work for 2007 includes not only the routine monitoring and O&M activities and but may also include the excavation and repositioning of a leachate header line that currently has a problematic low point, and may also include a flare inspection and improvements by an expert on the RHL flare.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2006. No delays or other hindrances to planned activities in 2007 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2007.

29.(g) Public relations activities in 2006 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. This has included participating in several meetings with developers and their consultants and with local government officials interested in constructing a new road very near RHL. Similar activities will probably take place in 2007.

Hank Kuehling 01/23/07

Hank Kuehling, P.G. Date
Project Manager
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
South Central Region

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2005 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2005 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to the gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 have resulted in nearly continuous operation of the system since February 2001 until April 2005 when the system began experiencing system component failures numerous times throughout the remainder of the year. The monthly exceptions to full operation are: March (90% run-time; no reason for the shut-down was apparent); April (20% run-time; flare flame and re-starting problems); May (70% run-time; continuing flame and re-starting problems); July (75% run-time; occasional low methane levels led to flare shut-downs); August (60% run-time; occasional low methane levels at the flare caused by clogged flame arrestors); September (7% run-time; flame arrestor and thermal valve failure and replacement); November (53% run-time; another thermal valve failure and replacement); December (83% run-time; lower methane concentrations caused by extended dry conditions may have caused thermal valve failure).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is consequently not available for migration from the landfill, preventing further contamination of groundwater. This system was operable essentially for the entire year. The annual cleaning of the leachate header pipes was accomplished in August. The volume of leachate collected, hauled, and treated in 2005 totaled 75,314 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was completed in September, 2004 and will again be completed in the fall of 2006.

- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers and also to better monitor groundwater quality near the landfill. Completed in 2005 were: the semi-annual monitoring of 22 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; monitoring of 5 monitoring wells that are sampled on a three-year frequency; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.
- The landfill operation and maintenance contractor remained the same in 2005 (Liesch Environmental Services, Inc.). The groundwater monitoring contractor also remained the same in 2005 (BT^2, Inc.).
- In addition to the repair work on the gas collection system components mentioned above, other repair and maintenance tasks were completed during 2005: buried and well head control valve replacement; flare station repairs and improvements (including the chart recorder, pilot assembly, and header drip leg); and leachate collection system repairs and improvements (installation of an additional leachate pump and existing leachate pump maintenance).

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells in 2005, and a copy of the most-recently received annual report (July 2004 through June 2005) with data from the gas and leachate systems.

29.(c) The only submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2005 was an annual progress report for 2004. This report was submitted on January 24, 2005, prior to the required deadline of February 1, 2005. (This 2005 annual progress report is being submitted before the February 1, 2006 deadline.)

29.(d) Because extensive repairs and maintenance were completed for leachate pumps and for the gas collection and destruction system and associated valves, no similar work is expected to be necessary during 2006. Planned work is limited to the routine monitoring and O&M activities and any necessary repairs.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2005. No delays or other hindrances to planned activities in 2006 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2006.

29.(g) Public relations activities in 2005 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. This has included participating in several meetings with developers and their consultants and

with local government officials interested in constructing a new road very near RHL. Similar activities will probably take place in 2006.

Hank K. Kuehling

Hank Kuehling, P.G.
Project Manager
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
South Central Region

01/27/06
Date

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2004 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2004 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 have resulted in nearly continuous operation of the system since February 2001. The exceptions to this in 2004 are the months of February (95% run-time; no reason for the shut-down was apparent), July (95% run-time; the system was shut down during blower building repairs), and November (90% run-time; no reason for the shut-down was apparent).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is not available for migration from the landfill, preventing further contamination of groundwater. This system was inoperatable three times during the year: in April, the compressor motor failed and was replaced; in May, the compressor pump failed and was replaced; and, in September, a faulty valve was replaced. The annual cleaning of the leachate header pipes was accomplished in August. The volume of leachate collected, hauled, and treated in 2004 totaled 232,000 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis; this was completed in September.
- The groundwater monitoring system
  - In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers. Completed in 2004 were: the semi-annual monitoring of 22 groundwater monitoring wells; the annual monitoring of 22 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.

- In response to State of Wisconsin procurement requirements, bids were solicited by the WDNR project manager in Spring 2004 for the groundwater monitoring contract. The qualifying contractor with the lowest bid was selected. Because of difficulties in obtaining samples from the deepest wells, the selected contractor terminated the contract after completing the spring semi-annual monitoring. The next highest qualifying contractor, BT^2, Inc. of Madison, WI, was then chosen to complete the fall monitoring, which was completed in November.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells, and a copy of the most-recently received annual report (July 2003 through June 2004) with data from the gas and leachate systems.

29.(c) The only submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2004 was an annual progress report for 2003. This report was submitted in mid-February, 2004, not long after the required deadline of February 1, 2004, and in compliance with an EPA-issued deadline extension. (This 2004 annual progress report is being submitted before the February 1, 2005 deadline.)

29.(d) Actions planned for 2005 include the routine monitoring and O&M activities; some maintenance of the leachate pumps, flare, and valves will also be done.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2004. No delays or other hindrances to planned activities in 2005 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2005.

29.(g) Public relations activities in 2004 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. This has included participating in several meetings with developers and their consultants and with local government officials interested in constructing a new road very near RHL. Similar activities will probably take place in 2005.

Hank K Kuehling — 01/24/05

Hank Kuehling, P.G. — Date
Project Manager
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program
South Central Region

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2003 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2003 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 have resulted in nearly continuous operation of the system since February 2001. The exceptions to this in 2003 are the months of February (86% run-time; down-time due to control panel changes), July (80% run-time; storm-caused shut-down and start-up problems), and September (90% run-time; down-time due to maintenance activities).
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is not available for migration from the landfill, preventing further contamination of groundwater. No repairs were needed to keep this system operating continuously throughout the year. The annual cleaning of the leachate header pipes was accomplished in August. The volume of leachate collected, hauled, and treated in 2003 totaled 184,600 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis, and will be done again this fall.
  -
  - Differential settlement of the waste has resulted in the low areas of the cover that allow small areas of water to collect on the cover, particularly in the spring. Three of these low areas were filled with fine-grained soil, regraded to match the surrounding grade, and reseeded in August. In addition, several linear mounds of dirt and associated erosion gullies on the south slope of the landfill were graded to blend in with the surrounding grades and then reseeded.
- The groundwater monitoring system

- In 2003, the routine groundwater-monitoring program was revised to address increased groundwater quality information requests from surrounding landowners and interested developers. Four new deep bedrock monitoring wells were installed in September to better define the horizontal and vertical extent of the contaminated groundwater in the mid-plume area. Completed in 2003 were: the semi-annual monitoring of 20 groundwater monitoring wells, plus the four new wells; the annual monitoring of 10 monitoring wells; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells, and a copy of the most-recently received monthly report with data from the gas and leachate systems.

29.(c) The only submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2003 was an annual progress report for 2002. This report was submitted on February 12, 2003, not long after the required deadline of February 1, 2003. (This 2003 annual progress report is being submitted after the February 1, 2004 deadline. A due-date extension has been granted by EPA.)

29.(d) Actions planned for 2004 include the routine monitoring and O&M activities, and the repair of the gas collection system blower building. Some maintenance of the leachate pumps, flare, and valves will also be done.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2003. No delays or other hindrances to planned activities in 2004 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2004, other than minor modifications to the groundwater monitoring plan, which will be submitted to EPA.

29.(g) Public relations activities in 2003 included the WDNR RHL project manager responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. This has included participating in several meetings with developers and their consultants and local government officials. This same activity will take place in 2004.

_____ _____

Hank Kuehling, P.G. Date
Project Manager
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program

State of Wisconsin \ DEPARTMENT OF NATURAL RESOURCES

Jim Doyle, Governor
Scott Hassett, Secretary
Ruthe E. Badger, Regional Director

South Central Region Headquarters
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July 23, 2003

Mr. John Fagiolo
U.S. EPA, Region V
77 West Jackson Blvd.
Chicago, IL 60604

Subject: Refuse Hideaway Landfill - Change of O&M Contractor

Dear John:

At your request, I am sending this letter to notify you of a change in the contractor employed by the Wisconsin Department of Natural Resources (WDNR) to operate and maintain the gas and leachate management and gas monitoring systems at Refuse Hideaway Landfill (RHL). WDNR is the agent for the State of Wisconsin, which is the settling performing party for RHL as agreed to in an August, 2001 consent decree.

As part of the State's services procurement procedures, WDNR awards a contract for services, such as O&M at RHL, for one year with the possibility of renewal for two additional years. At the end of the three-year period, sealed bids are solicited for the contract and the lowest qualified bidder is awarded the contract. For two three year periods, SCS Field Services, Inc. has been the O&M contractor. However, in the bidding process conducted in May and June of this year, Liesch Environmental Services, Inc. (LES) was awarded the contract after submitting the lowest qualified bid.

Enclosed with this letter is a copy of "Statement of Bidder's Qualifications", prepared by LES. WDNR's bidder qualifications require that "The successful bidder shall have a minimum of 3 years of experience in operating and maintaining a gas extraction and combustion system and a leachate extraction system with components similar to those found at the Refuse Hideaway Landfill. The successful bidder shall also have experience operating a ground flare system at the flare's minimum-required gas volume threshold (necessitated by low landfill gas generation rates)." LES has extensive experience in landfill design and construction management, as well as O&M of landfill systems and meets the WDNR's bidder qualification requirements. The engineer from the LES Madison, Wisconsin office who has been conducting the O&M activities has thus far proven to be more than competent. In addition to several qualified staff members in their Madison office, one of the LES company owners in their Minneapolis office has extensive experience in the operation and maintenance of gas extraction and flare systems operating at low gas generation rates. This person is available on an as-needed basis to address problems for which the local staff needs assistance.

Assuming LES fulfills the contract requirements adequately, the contract with LES will be renewed for two additional years. At the end of this three year period, bids for the contract will again be solicited.

If you have any questions or comments, please contact me.

Sincerely,

Hank Kuehling, P.G.
Remediation & Redevelopment Program Hydrogeologist
608.275.3286
harlan.kuehling@dnr.state.wi.us

enclosure

REFUSE HIDEAWAY LANDFILL
STATE OF WISCONSIN DEPARTMENT OF NATURAL RESOURCES
2002 ANNUAL REPORT

The final consent decree regarding Refuse Hideaway Landfill, issued on August 29, 2001, requires the State of Wisconsin, as the settling performing party, to submit an annual report to the United States Environmental Protection Agency. This report fulfills that requirement and uses the requirements of the consent decree as the report format.

Section X. REPORTING REQUIREMENTS

29.(a) Actions taken during 2002 toward achieving compliance with the consent decree are primarily those associated with continuation of the operation and maintenance of the facility contaminant source control systems. Note that routine inspections and necessary adjustments to gas collection and destruction system and leachate collection system are made on a weekly, monthly, quarterly, or annual basis, depending on the system component.

- Gas collection and destruction system
  - This system removes significant amounts of VOCs from the waste that would otherwise be available for migration from the landfill. The modifications to the flare in 2001 have resulted in nearly continuous operation of the system since February 2001. The exceptions are the months of April, August, and September 2002 when power outages, possibly from storms, together with a malfunctioning alarm system, resulted in reduced run times. The auto-alarm system has been repaired.
- Leachate collection-for-treatment system
  - The leachate, including the contaminants that it contains, that is collected is not available for migration from the landfill, preventing further contamination of groundwater. The air compressor that drives the leachate collection pumps was plagued with problems throughout the year. Short-term repairs were made as necessary until a major failure of the unit resulted in long-term repairs in October and November. No other repairs were needed to keep this system operating continuously throughout the year. The annual cleaning of the leachate header pipes was accomplished in September. The volume of leachate collected, hauled, and treated in 2002 totaled 363,800 gallons.
- The landfill cover
  - The precipitation that is prevented from infiltrating into the waste by the landfill cover will not be available to form leachate within the landfill. The clay and soil cap is inspected throughout the year for areas of erosion and stressed vegetation. Generally, the cover is well vegetated with no significant erosion. The cover is mowed on a biennial basis, and this was completed in the fall of 2002. Differential settlement of the waste has resulted in the low areas of the cover that allow small areas of water to collect on the cover, particularly in the spring.
- The groundwater monitoring system
  - In 2002, the routine groundwater-monitoring program was revised to reflect the plan submitted to EPA in the fall of 2001. Completed in 2002 were: the semi-

annual monitoring of 20 groundwater monitoring wells; the annual monitoring of 10 monitoring wells; the sampling of 4 monitoring wells that are monitored on a 3-year frequency; and the semi-annual monitoring of 3 private water supply wells and the annual sampling of 11 private water supply wells.

29.(b) Included with this report as attachments are a summary of the contaminant standards exceedances detected in the groundwater monitoring wells and water supply wells, and a copy of the most-recently received monthly report with data from the gas and leachate systems.

29.(c) The only submittal that was required by the consent decree to be sent to EPA by the Settling Performing Party in 2002 is an annual progress report for 2001. This report was submitted prior to the required deadlines of February 1, 2002. (This 2002 annual progress report is being submitted after the February 1, 2003 deadline. A due-date extension has been granted by EPA.)

29.(d) Several actions are planned for 2003. In addition to the routine monitoring and O&M activities, the State will arrange for the completion of a design for the regrading of the landfill cover in selected areas to improve drainage. Some routine maintenance of the leachate pumps, flare, and valves will also be done.

29.(e) All work necessary for the continuing operation and maintenance of the source control systems was completed in 2002. No delays or other hindrances to planned activities in 2003 are anticipated.

29.(f) No modifications to any materials submitted to EPA are planned for 2003. If and when landfill cover re-grading plans are completed, a copy will be sent to EPA.

29.(g) Public relations activities in 2002, as in 2001, included responding to information requests from area landowners and persons considering purchasing property or development rights on property in the vicinity of the landfill. This same activity will take place in 2003. Also in 2002, the WDNR RHL project manager (PM) was involved in a controversy over the purchase of some property adjacent to RHL that involved expansion of a sand and gravel quarry. The PM attended meetings with the purchaser, the seller and purchaser, a township planning commission meeting, and a county board zoning and natural resources committee meeting. At these meetings, the PM provided information on the current status of groundwater contamination at RHL and information on the potential liability of landowners adjacent to RHL.

Hank Kuehling

2/12/03

Hank Kuehling, P.G.
Project Manager
Wisconsin Department of Natural Resources
Remediation and Redevelopment Program

Date

South Central Region