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March 30, 2018

Ms. Valerie Joosten
Wisconsin Department of Natural Resources
Waste Management Engineer
2984 Shawano Avenue
Green Bay, WI 54313-6727

**Re: Marathon County Solid Waste Landfill – Bluebird Ridge RDF
2017 Annual Solid Waste Report
WDNR License No. 4228, FID No. 337005680**

Dear Ms. Joosten:

On behalf of the Marathon County Solid Waste Department (Marathon County) Cornerstone Environmental Group, LLC (Cornerstone) is submitting one hard copy of the 2017 Annual Solid Waste Report for the Bluebird Ridge Recycling & Disposal Facility (BRRDF) of Marathon County. This Annual Solid Waste Report is being submitted in accordance with the approved plan of operation for BRRDF.

In accordance with your request, two (2) additional copies and the necessary electronic (CD burned) version are also being distributed to pertinent WDNR staff as noted below.

Should you have any questions or comments regarding this Annual Solid Waste Report do not hesitate to contact me at (630) 633-5849 or Ms. Meleesa Johnson at (715) 466-3101 ext 104.

Sincerely,

Cornerstone Environmental Group, LLC

C. Lee Daigle, P.E.
Project Manager

Enclosure: Marathon County Bluebird Ridge RDF - 2017 Annual Solid Waste Report

cc: Marathon County Solid Waste Landfill (File Copies)
Nathan Coller – WDNR Spooner Service Center (1 hard copy)
Jill Schoen – WDNR Eau Claire Service Center (1 hard copy and 1 CD)



Marathon County Solid Waste Department
Bluebird Ridge Recycling & Disposal Facility
2017 ANNUAL REPORT

WDNR License No. 4228
FID 337005680

Marathon County Solid Waste Management Department
R18500 Highway 29
Ringle, WI 54471

Solid Waste & Recycling Information Line: 877-270-3989

www.marathoncountysolidwaste.org



marathoncountysolidwaste

Staff, Consultants & Contractors

Marathon County Solid Waste Department Staff:

- Meleesa Johnson-Director
- David Hagenbucher-Operations Manager
- Jessica Knaup-Scale Operator
- Ron Smith-Environmental Technician
- Julie Groshek-Accounting Specialist
- Chris Wickman-Equipment Maintenance Specialist
- Kevin Steinke-Equipment Operator
- Eric Olson-Equipment Operator
- Dave Vitt-Equipment Operator
- Lindsey Carlson- Limited Term Employee
- Abby Lichtscheidl- Temporary Intern
- Serena Kuczmarski- Temporary Intern
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Engineering Consultants:

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Contractors:

- Ahern Fire Protection
- CQM, Inc.
- RDO Integrated Controls
- Northern Lakes Service, Inc.
- Northern Pipe, Inc.
- Recycling Connections Corporation
- Veolia ES-Technical Solutions
- Taylor Insulation
- Lloyd Trucking
- Marathon County Forestry Depart.
- Krueger & Stienfest, Inc
- Walt's Petroleum Service, Inc
- River View Construction, Inc.
- QED Environmental Systems
(Trinity Environmental Equipment))
- EPG Companies, Inc.
- Golder Associates Inc.
- SEH
- E-Con Electrical, Inc.
- Valley Scale
- Van Ert Electrical Company
- Wisconsin Public Service

Introduction

This document is being submitted to the WDNR to meet the annual reporting requirements included in the Wisconsin Department of Natural Resources (DNR) January 31, 2013 Plan of Operation approval and the January 15, 2015 Plan Modification approval.

Background

Marathon County Solid Waste Department (MCSWD) owns, operates, and manages Bluebird Ridge Recycling and Disposal Facility (BRRDF), with MCSWD staff directing all facets of the operation. The facility opened in July 2014, with an approved capacity of 2,900,000 cubic yards. This landfill is situated on the southeast corner of the 574 acre site owned by the MCSWD and is one of three landfills located on the property. The property is located along the north side of Hwy 29, in the Town of Ringle, Wisconsin.



Summary of Landfill Activities in 2017

Disposal operations began on July 21, 2014. As of December 31, 2017, the remaining estimated waste disposal capacity was 1,882,468 cubic yards. During 2017, approximately 189,522 tons of waste were disposed of at the BRRDF. Operational duties performed by the MCSWD personnel include, but are not limited to, complete site operations, administrative management, air permit compliance, gas system management, storm water management, and customer service. As needed, the county hired various contractors to perform specific tasks beyond the capabilities of the MCSWD staff (as noted above).

Cover materials including alternative daily cover (ADC) were used as the means to control odors. A gas collection and control system (GCCS) is planned for installation in 2018. Preliminary work that included extending a header pipe from the existing GCCS to the north and east side of BRRDF was completed in 2017.

Operations Summary

- Daily operations
 - Compact & cover operations
 - Supplemental cover added to control odors
 - Litter control-retained inmate labor to assist with this task
 - Plow roads
 - Grade roads
 - Water roads & also add calcium chloride for dust control
- Evaluated and approved special waste disposal requests for high volume industrial products, off-specification food additives, contaminated soils and other materials using approved special waste plan
- Conducted daily, monthly, annual environmental monitoring
- Conducted educational tours
- Continued work with Central WI Off-road Cycling Coalition, DNR and Ice Age Trail Alliance on off-road biking course development
- New yard area for dumpsters by the office/scale house

Construction Activities

An extension of the existing GCCS from Area B to BRRDF, was installed between October 9 and November 30, 2017. The portion of the GCCS that was installed in 2017, extended the 18-inch and then 12-inch diameter header pipe along the northern and eastern boundary of the BRRDF. One additional condensate knockout sump was installed in the northeast corner of the BRRDF perimeter and a dual contained condensate transfer pipe was installed alongside the header pipe between the two condensate sumps. This work was a continuation from activities completed in 2016. Additionally, the 18-inch landfill gas header pipe that was installed in 2016 from near the southeast corner of the Area A landfill was tied into the 20-inch header pipe from Area B and Area A landfills; however, the valve between the 20-inch header pipe and the 18-inch header pipe remains closed. A Construction Documentation Report for the 2017 GCCS Expansion was submitted to the WDNR on March 13, 2018.

Waste Disposal Activities

During 2017, approximately 294,507 tons of waste was accepted in BRRDF with a majority disposed in Phases 3 and 4. Included in this sum were the following waste categories (reported in tons):

• Category 1-Municipal Waste	138,448 tons
• Category 2-Utility Ash & Sludge	1,428 tons
• Category 3-Pulp/papermill mfg. waste	5,010 tons
• Category 4-Foundry Manufacturing Waste	59 tons
• Category 6-All other wastes	13,715 tons
• Category 21-High Volume Waste Used As Daily Cover, Berms, Dike, Etc.	20,584 tons
• Category 25-Construction/demolition	10,270 tons
• Category 27-Waste Generated by a Nonprofit Organization	8 tons

Waste that was disposed of at the facility originated from the following counties:

• Eau Claire	• Portage
• Clark	• Wood
• Taylor	• Shawano
• Vilas	• Marathon
• Ashland	• Waupaca
• Bayfield	• Price
• Oneida	• Forest
• Langlade	• Chippewa
• Menominee	

There were no issues or problems in handling the wastes delivered.

Special Wastes

BRRDF is licensed to accept waste what would be considered non-hazardous special wastes. This includes, but is not limited to, contaminated soils; petroleum contaminated soil; incinerator, boiler and other ash; industrial manufacturing process waste and sludge; waste water and water treatment plant sludge; large quantities of dead animal carcasses; street sweepings and car wash grit.

MCSWD pre-screens all special wastes via a Special Waste Profile form. Customers desiring to deliver non-standard wastes must complete the form and provide to it MCSWD staff for review and approval. The generator of waste, or their agent, must complete the form and also have a variety of select laboratory tests conducted on the special waste prior to a decision being made on acceptance. The MCSWD Special Waste Analytical Protocol and Acceptance Criteria delineates parameter thresholds the waste material must meet in order to qualify as a non-hazardous special waste. No special wastes are accepted without first completing this process. Records are retained on site. In 2017, the site had no non- approved wastes.

Approximately 40,896 tons of special waste was accepted into the BRRDF in 2017, which are included in the tons reported to the state, as identified above. The special waste accepted in BRRDF included the following waste categories (reported in tons):

• Contaminated Soil	7,135 tons
• Ash	9 tons
• WPS Bottom Ash	20,584 tons
• Papermill Ash	71 tons

- Ash out of County 511 tons
- Industrial Waste 137 tons
- Sludge (other) 5,924 tons
- Sludge Papermill 4,938 tons
- Sludge Power Plant 1,528 tons
- Foundry Sand 59 tons

Approximately 2,253 tons of contaminated soil (C-Soil) and street sweepings were used as alternative daily cover (ADC) material as well as 18,331 tons of WPS Bottom Ash. No ADC was used on exterior side-slopes or within 100 feet of the limits of waste. Native soils were also used as cover material.

Odor Monitoring Summary

Odor complaints received in 2017 included two separate residents on 9/11/2017, one resident on 9/14/2017, one resident on 11/12/2017, and one complaint received by the WDNR employee Ashley Gray, from a resident on 12/14/17. The odors have been attributed to general operations and not a specific source. Efforts to reduce odor migration have included covering exposed drainage stone as quickly as possible, additional site monitoring and inspections for pin pointing possible sources, additional intermediate soil cover added to areas no longer receiving waste, seeding of intermediate cover area which established full vegetation by fall 2017, and continued to immediately cover certain putrescible wastes that are known or exhibit odorous characteristics.

Load Inspections

Load inspections were completed periodically, at least every 5,000 tons, and for suspicious loads. Forms documenting load inspections are kept in the facility files.

Additional Waste & Recycling Services Information

The MCSWD offers a full range of solid waste and recycling services. During 2017, the following material were either separated for recycling from the waste stream by staff or source separated by the generator:

- Appliances
- Electronics
- Fluorescent lighting
- Household hazardous waste
- Lead-acid batteries
- Oil filters
- Rechargeable batteries
- Recyclable containers and papers
- Scrap metal
- Sharps
- Tires
- Waste anti-freeze
- Waste oil
- Shingles

In 2012, the MCSWD was granted, by the DNR, a NR502.05(3)(j) exemption for a short-term, non-containerized, waste storage facility for the collection and short-term storage of waste shingles. The shingle recycling drop-off opened in June 2012 and was permitted to receive both residential and residential-like commercial shingle for recycling. Only clean shingles (free of debris and garbage-nails allowed) are accepted for recycling. Loads that do not meet the criteria are required to be landfilled.

In 2017, the shingle recycling program diverted 946 tons of shingles from landfill disposal. All shingles were taken to Pitlik & Wick in Eagle River, Wisconsin, where they were ground up and nails were removed via magnet. Ground shingles were mixed with asphalt.

MCSWD hosts a yard material site. Yard waste accepted at BRRDF includes grass, leaves and brush. Incoming yard waste is placed in a pile located north of BRRDF and west of the BRRDF leachate storage tank and left to naturally decompose.

MCSWD administers a multi-municipality street sweeping low hazard exemption beneficial reuse program. Participating municipalities can divert from landfilling the sand/grit collected after the winter season. Collected sweepings are used in municipal utility and public works projects. In 2017, this program diverted over 700 tons of sweepings from landfill disposal.

In addition to the above noted materials, MCSWD underwrote the entire cost of the county's Medication Drop Box Program, at six local police departments, for unused/unwanted/outdated medications. MCSWD operated a household hazardous materials collection facility which provided service to Marathon county residents, farmers, and businesses on a fee-free system. Shawano, Lincoln, and Wood county residents, farmers, and businesses were provided this service on a fee-based system.

Landfill Maintenance

During 2017, the following site maintenance activities were completed:

- Regular inspections of leachate tank, the loadout station area and sump were conducted to check for potential leaks on a daily basis.
- Quarterly inspections of the leachate forcemain and gas condensate secondary containment access points.
- Roadways were treated with calcium chloride as a means of dust control during April 2017.
- Plantings on the vegetative buffers along the southern and eastern boundaries were regularly checked for predation and water needs. Fencing was installed where needed to prevent destruction to plantings.
- The storm water and infiltration basin was inspected to ensure the integrity of overflow and slopes.
- Storm water grates were cleared routinely and as needed of both windblown litter and sediment.
- Storm water culvert were cleaned out during the annual leachate line jetting.
- Upkeep of silt fences around identified wetland areas and periodic inspection.
- Hydro seeded approximately 10 acres for erosion control.
- Maintained storm water system & biofilter.

Gas Collection System

The gas collection system was not required to be installed during 2017 inside the limits of waste at BRRDF. Landfill gas emissions from BRRDF are regulated under and in accordance with Air Pollution Control Operation Permit 737092730-P20 (issued November 2, 2015). Refer to the Construction Activities section of this report for details regarding GCCS improvements installed outside the limits of waste for the BRRDF.

Soil Gas Monitoring

During 2017, the soil gas probes were monitored quarterly for relative pressure, methane (CH₄), oxygen (O₂), ambient air temperature, gas temperature, ground conditions, barometric pressure, and barometric pressure trend. In 2017, these monitoring results indicated no migration of landfill gas from BRRDF.

First Quarter Probe Data (January 24, 2017):

Gas Probe	Location	Methane	Oxygen	Pressure	Notes:
[Depth in feet]		(%CH ₄ by Vol.)	(%O ₂ by Vol.)	(inch W.C.)	
WDNR Parameter #		85547	85550	46389	WDNR ID No.
BRRDF Probes	Lic. 4228				
GP101	N BRRDF	0	20.0	0	550
GP102	E BRRDF	0	20.2	-0.02	551
GP103	E BRRDF	0	20.3	-0.03	552
GP104	S BRRDF	0	20.5	-0.02	553
GP105	S BRRDF	0	20.5	-0.1	554
GP106	W BRRDF	0	20.5	-0.08	555

Second Quarter Probe Data (April 10, 2017):

Gas Probe	Location	Methane	Oxygen	Pressure	Notes:
[Depth in feet]		(%CH ₄ by Vol.)	(%O ₂ by Vol.)	(inch W.C.)	
WDNR Parameter #		85547	85550	46389	WDNR ID No.
BRRDF Probes	Lic. 4228				
GP101	N BRRDF	0	22.1	0.07	550
GP102	E BRRDF	0	22.1	0.01	551
GP103	E BRRDF	0	22.1	-0.04	552
GP104	S BRRDF	0	22.4	0.02	553
GP105	S BRRDF	0	22.5	0.02	554
GP106	W BRRDF	0	22.5	0.02	555

Third Quarter Probe Data (July 25, 2017):

Gas Probe	Location	Methane	Oxygen	Pressure	Notes:
[Depth in feet]		(%CH ₄ by Vol.)	(%O ₂ by Vol.)	(inch W.C.)	
WDNR Parameter #		85547	85550	46389	WDNR ID No.
BRRDF Probes	Lic. 4228				
GP101	N BRRDF	0	21.2	0.04	550
GP102	E BRRDF	0	20.8	0.01	551
GP103	E BRRDF	0	20.6	0.01	552
GP104	S BRRDF	0	18.7	0.01	553
GP105	S BRRDF	0	20.9	0.07	554
GP106	W BRRDF	0	20.4	0.06	555

Fourth Quarter Probe Data (October 5, 2017):

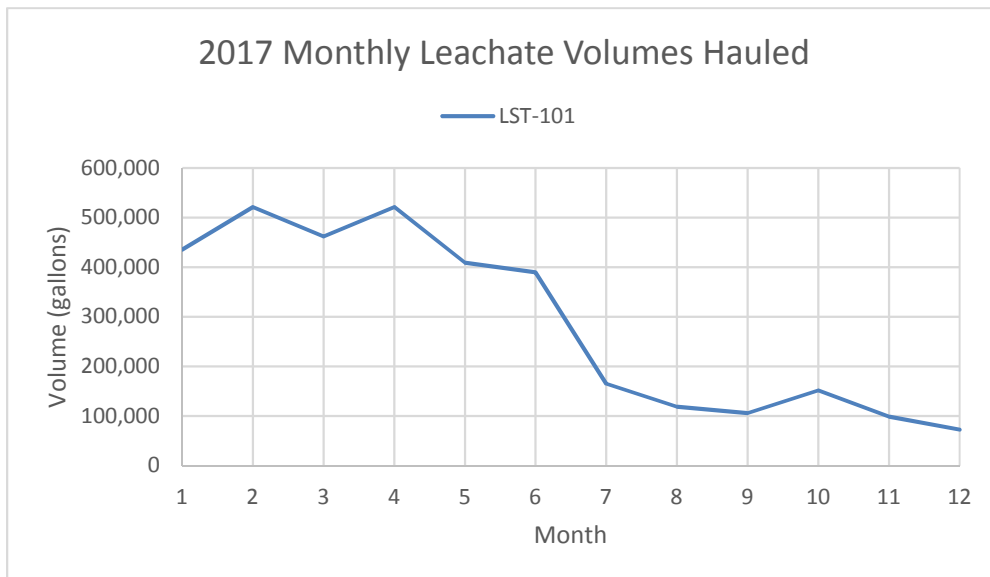
Gas Probe	Location	Methane	Oxygen	Pressure	Notes:
[Depth in feet]		(%CH₄ by Vol.)	(%O₂ by Vol.)	(inch W.C.)	
WDNR Parameter #		85547	85550	46389	WDNR ID No.
BRRDF Probes	Lic. 4228				
GP101	N BRRDF	0	19.3	0	550
GP102	E BRRDF	0	21.2	0	551
GP103	E BRRDF	0	20.4	0	552
GP104	S BRRDF	0	19.7	-0.01	553
GP105	S BRRDF	0	18.4	0.1	554
GP106	W BRRDF	0	20.3	0	555

Leachate System Information:

Leachate is collected within the leachate management system that includes a granular drainage layer and perforated piping laid in gravel filled trenches that drain to collection sumps. Leachate gathers in sumps in the low points of Phase 2 and Phase 4. Each sump includes a pump and a forcemain within a side slope risers. A pump within the riser pipes transfers leachate through a forcemain system to an aboveground storage tank. Two of the proposed three sideslope riser pipes are operational (one for Phase 1 and 2 and one for Phase 3 and 4). Pumping from the side slope risers can be interrupted should the level sensor system inside the aboveground storage tank indicate the liquid has reached a specified level to ensure the tank does not overflow. The contracted hauler routinely visits the site to pump the stored leachate into a 6,600 gallon tanker truck. The leachate is then delivered to a licensed waste water treatment facility (WWTF).

Leachate collected in 2017 was transported to either the Domtar, Inc. WWTF in Rothschild, Wisconsin or the Stevens Point Wastewater Utility in Stevens Point, Wisconsin. Leachate is pumped into the WWTF and treated to ensure all effluent meets Wisconsin Pollutant Discharge Elimination System (WPDES) standards prior to discharge into the Wisconsin River. Preventative maintenance of the leachate storage and pumping system was conducted, as needed, by on-site operations contractor or other tank and pump specialists when required. Unplanned repairs were performed by the most available, qualified tank and pump specialists. The total volume (gallons) of leachate collected/transported/treated in 2017 is as follows:

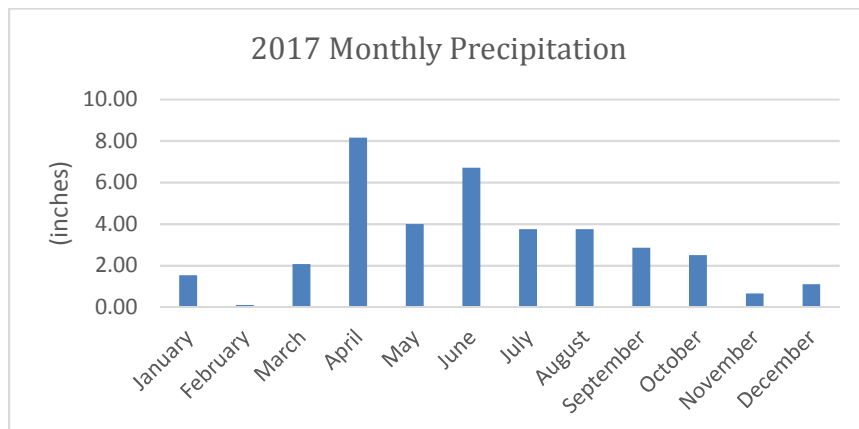
2017	LST-101
January	435,600
February	521,400
March	462,000
April	521,400
May	409,200
June	389,400
July	165,000
August	118,800
September	105,600
October	151,800
November	99,000
December	72,600
Total	3,451,800



Precipitation:

2017 Precipitation Monthly Totals			
Month	Snow (inches)	Rain (inches)	Precipitation* (inches)
January	15.25		1.53
February	1.00		0.10
March	5.75	1.50	2.08
April	0.50	8.10	8.15
May		4.00	4.00
June		6.70	6.70
July		3.75	3.75
August		3.75	3.75
September		2.85	2.85
October		2.50	2.50
November	1.50	0.50	0.65
December	6.00	0.50	1.10
Total			37.15

* Snow converted to liquid precipitation by dividing by 10



Leachate Line Jetting:

On July 12-13, 2017 Northern Pipe, Inc. of Green Bay, Wisconsin, water jetted the BRRDF leachate lines with a total of 2,500 gallons of water. Jetting was accomplished by accessing pipes from both ends for cleaning to overlap in the center or jetting the full length from access at end. The results/findings follow:



MARATHON COUNTY LANDFILL LEACHATE PIPE CLEANOUT RECORDS

DATE: July 13, 2017

CONTRACTOR NAME: Northern Pipe, Inc.

CONTRACTOR PHONE: 920-468-7074

EQUIPMENT USED: #36 Vac-Con w/ 1,200 ft. 3/4" hose

BLUE BIRD RIDGE

CLEANOUT ACCESS POINT	Line Name	PIPE SIZE	PIPE LENGTH (FT)	FT. JETTED NORTH	FT. JETTED SOUTH	COMMENTS
LH W4	West Line	6"	1070	110	1,000	Jetter stops on North side ; South side no problems ; Achieved overlap
North Side	Ease Line	6"	1020	800	270	Jetter stops on North side ; South side no problems ; Achieved overlap
West End	U Shape	6"	395	0	395	Good all the way

AMOUNT OF WATER USED: 1,000 Gallons of water

DATE: July 12, 2017

CONTRACTOR NAME: Northern Pipe, Inc.

CONTRACTOR PHONE: 920-468-7074

EQUIPMENT USED: #36 Vac-Con w/ 1,200 ft. 3/4" hose

BLUE BIRD RIDGE

CLEANOUT ACCESS POINT		PIPE SIZE	PIPE LENGTH (FT)	FT. JETTED NORTH	FT. JETTED SOUTH	COMMENTS
LCR8	LCR9	6"	1144	517	627	Line is good
LCR12	LCR11	6"	1180	547	635	Line is good
LCR7	LCR10	6"	650	404	276	Line is good

AMOUNT OF WATER USED: 1,500 Gallons of water

Leachate Head Well Monitoring

Leachate head wells are monitored by MCSWD staff on a quarterly basis. The site's monitoring results indicate that the leachate head wells were dry during 2017.

Leachate Sampling

Leachate sampling and analytical analysis was conducted semi-annually in April and October 2017. Sampling results for VOCs and metals show a variety of compounds present. Semi-volatile organics are sampled for and tested in October. Full results are available on the WDNR Groundwater and Environmental Monitoring System (GEMS) database and are maintained in site files. Conductivity and pH values reported in 2017 are summarized below.

Leachate	2017	Conductivity	pH
		umho/cm	S.U.
LST-101	April	8,570	7.12
	October	10,530	7.30

Storm Water Management

The biofilter stormwater collection and infiltration system located north of Phases 1 and 2 was periodically checked and inspected for signs of failure, erosion and/or operational problems. The basin and infiltration basin preformed as designed and lost no structural integrity. A small temporary runoff basin exists in the southeast corner of future Phase 5. This basin is continually monitored to ensure it remains operational to discharge runoff from the west side of Phase 3 and 4 to the stormwater ditch located on the south side of the active site. This runoff ultimately drains to the biofilter stormwater collection and infiltration system. No storm water left the site.

In accordance with Condition 21 of the Plan of Operation, an annual stormwater inspection was performed September 20, 2017. This included the outfall to the BioFilter and general inspection of ditches associated with BRRDF. This inspection is maintained in site files.

Environmental Monitoring

Environmental monitoring at the BRRDF is conducted and reported as specified in the January 31, 2013 Plan of Operation Approval. No new environmental monitoring points were constructed during 2017, nor were any points abandoned during 2017. The three-year assessment of the groundwater quality and other environmental monitoring data was last performed and reported in the 2016 Annual Report for the three-year period covering 2014 to 2016.

Private Well Monitoring

Water supply wells, as defined in the Plan of Operation Approval and located on properties adjacent to or in the vicinity of the landfill, were sampled in April and October. The collection of samples from these wells was performed in conjunction with the Area A private wells routine monitoring program. No exceedances of NR 140 Groundwater Quality Standards or NR 812 Drinking Water Standards were reported in the samples collected from the private wells. However, a low-level (estimated between limit of quantitation and the limit of detection) detection of tetrachloroethene (PCE) was reported in a sample collected from private well PW-68 during April 2017 and a low-level detection of dichlorofluoromethane was reported in a sample collected from private well PW-27 in October 2017.

Ground Water Monitoring

Groundwater wells associated with BRRDF were sampled in April and October. The samples were analyzed by Northern Lake Service Laboratory. Exceedances more than well-specific Prevention Action Limits (PALs) and NR 140 PALs are summarized below.

Bluebird Ridge Recycling and Disposal Facility Groundwater Well Exceedance Table April 2017

Marathon County Solid Waste: Bluebird Ridge Groundwater Monitoring Wells									
Project #	BRRDF Date	Facility #4228 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
278046	April 18 2017	R59P	Alkalinity	mg/L	250.00	230.00			well
278046	April 18 2017	R59P	Conductivity	umhos@25C	500.00	470.00			well
278046	April 18 2017	R59P	Hardness	mg/L	280.00	230.00			well
278046	April 18 2017	R59WT	Alkalinity	mg/L	270.00	230.00			well
278046	April 18 2017	R59WT	Conductivity	umhos@25C	510.00	470.00			well
278046	April 18 2017	R59WT	Hardness	mg/L	300.00	230.00			well

Bluebird Ridge Recycling and Disposal Facility Groundwater Well Exceedance Table **October 2017**

Marathon County Solid Waste: Bluebird Ridge Groundwater Monitoring Wells									
	BRRDF	Facility #4228	Exceedances						
Project #	Date	Well #	Parameter	Units	Result	PAL	ES	ACL	Comments
289255	October 17&18 2017	R59P	Alkalinity	mg/L	280.00	230.00			well
289255	October 17&18 2017	R59P	Conductivity	umhos@25C	530.00	470.00			well
289255	October 17&18 2017	R59P	Hardness	mg/L	310.00	230.00			well
289255	October 17&18 2017	R59WT	Alkalinity	mg/L	330.00	230.00			well
289255	October 17&18 2017	R59WT	Conductivity	umhos@25C	620.00	470.00			well
289255	October 17&18 2017	R59WT	Hardness	mg/L	360.00	230.00			well
289255	October 17&18 2017	R68P	Hardness	mg/L	260.00	230.00			well


Indicator parameters which include alkalinity, hardness and conductivity, were reported above well specific PALs at wells R59P, R59WT and R68P during 2017. The exceedance reports submitted to the WDNR for sampling events in April and October 2017 are provided in Attachment A.

ATTACHMENT A

EXCEEDANCE REPORTS FOR BRRDF GROUNDWATER MONITORING
APRIL AND OCTOBER 2017



marathoncountysolidwaste.org

 [marathoncountysolidwaste](https://www.facebook.com/marathoncountysolidwaste)

Marathon County Solid Waste Department

R18500 E. Hwy 29

Ringle, WI 54471

Director:

Site Supervisor:

Administrative Office:

Scale Master

Solid Waste & Recycling Info Line

715-446-3101 X104

715-446-3101 X102

715-446-3101 X100

715-446-3101 X103

877-270-3989 toll-free

June 2, 2017

Wisconsin Department of Natural Resources

Bureau of Solid Waste Management

GEMS Data Submittal Contact, WA/3

P.O. Box 7921

Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill: License No.
2892 Area A

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of April 2017. An exceedance table has been attached for the Area A landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher

Operations Manager

Marathon County Solid Waste

C.c: Nathan Coller, Sarah Shiel, Eric Syftestad, Meleesa Johnson, Mark Torresani.

Area A Groundwater Well Exceedance Table April 2017

Marathon County Solid Waste: Area A Groundwater Monitoring Wells									
Project #	Area A Date	Facility #2892 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
277948	April 17&18 2017	Dup 041817	Tetrachloroethylene	ug/L	4.10	0.50	5.00		NR140
277948	April 17&18 2017	Dup 041817	Trichloroethylene	ug/L	5.40	0.50	5.00		NR140
277948	April 18 2017	R12R	Tetrachloroethylene	ug/L	1.10	0.50	5.00		NR140
277948	April 18 2017	R12R	Trichloroethylene	ug/L	1.80	0.50	5.00		NR140
277948	April 18 2017	R12R	Vinyl Chloride	ug/L	0.17	0.02	0.20		NR140
277948	April 18 2017	R13R	Tetrachloroethylene	ug/L	4.20	0.50	5.00		NR140
277948	April 18 2017	R13R	Trichloroethylene	ug/L	5.60	0.50	5.00		NR140
277948	April 18 2017	R38	Tetrachloroethylene	ug/L	0.84	0.50	5.00		NR140
277948	April 18 2017	R38	Trichloroethylene	ug/L	1.20	0.50	5.00		NR140
277948	April 18 2017	R47	Tetrachloroethylene	ug/L	0.56	0.50	5.00		NR140
277948	April 18 2017	R47	Trichloroethylene	ug/L	0.81	0.50	5.00		NR140
277948	April 17 2017	R50P	Tetrachloroethylene	ug/L	0.70	0.50	5.00		NR140
277948	April 17 2017	R50P	Trichloroethylene	ug/L	0.54	0.50	5.00		NR140
277948	April 18 2017	R35	Conductivity	umho@25C	630.00	510.00			Well

The Area A exceedances that were detected during the April 2017 sampling event are consistent with the exceedances that were detected in previous sampling events.

Groundwater contamination was detected southeast of Area A during the late 1980s. By May of 1993, Marathon County completed a groundwater quality investigation and submitted a report to WDNR titled "Marathon County, Area A Landfill – Environmental Contamination Assessment (ECA) report". The ECA report suggested that contaminants may have been released to the environment from one or more of the leachate collection basins and other source locations. Consequently, several improvements were made and both leachate collection basins were removed in 1995. The identified groundwater contaminants of primary concern at this facility are VOCs, specifically the chlorinated aliphatic hydrocarbons (CAHs) and vinyl chloride. Since the remedial work from 1993 to 1996, significant reductions of CAH concentration have been measured near the suspected source zone.

It is the opinion of Marathon County that the exceedances are related to the leachate basins that were removed in 1995. Marathon County will continue to monitor these wells for exceedances as required, and report any anomalies to the WDNR. Marathon County has installed groundwater monitoring wells along State Highway 29, just southeast of the site. If these particular wells begin showing signs of contamination, the County has a contingency plan in place and will respond to protect residents.

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats. When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30; NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- * Prepare one form for each license or monitoring ID.
- * Please type or print legibly.
- * Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- * Attach a notification of any gas values that attain or exceed explosive gas levels.
- * Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
Bureau of Waste and Materials Management
Wisconsin Department of Natural Resources
101 South Webster Street
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lms@nls-lab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County Landfill - Area A	02892	737054890	APRIL -17-2017 through APRIL -18-2017
Some Area A wells are linked to BRRDF site (Lic. 04228) but reported here.			

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

APRIL -2017

Type of Data Submitted (Check all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells | <input type="checkbox"/> Gas monitoring data |
| <input type="checkbox"/> Groundwater monitoring data from private water supply wells | <input type="checkbox"/> Air monitoring data |
| <input type="checkbox"/> Leachate monitoring data | <input type="checkbox"/> Other (specify) _____ |

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- ☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Haggenbucher

Manager

715-446-3101

Facility Representative Name (Print)

Title

(Area Code) Telephone No.

David Haggenbucher

6/1/17

Signature

Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials _____
- ☐ Notified contact of problems on _____ Uploaded data successfully on _____
- EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☐ E-mail (follow-up only) Other _____

Marathon County Solid Waste Mgmnt Dept
Area A
04-01-2017


Lab ID: 721026460
 NLS Project: 277948
 Collected: 04-01-2017
 License: 02892
 FID: 737054890

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
Dup 041817	Tetrachloroethylene	ug/L	4.1	.5	5	NR140
Dup 041817	Trichloroethylene	ug/L	5.4	.5	5	NR140
R12R	Tetrachloroethylene	ug/L	1.1	.5	5	NR140
R12R	Trichloroethylene	ug/L	1.8	.5	5	NR140
R12R	Vinyl Chloride	ug/L	0.17	.02	.2	NR140
R13R	Tetrachloroethylene	ug/L	4.2	.5	5	NR140
R13R	Trichloroethylene	ug/L	5.6	.5	5	NR140
R38	Tetrachloroethylene	ug/L	0.84	.5	5	NR140
R38	Trichloroethylene	ug/L	1.2	.5	5	NR140
R47	Tetrachloroethylene	ug/L	0.56	.5	5	NR140
R47	Trichloroethylene	ug/L	0.81	.5	5	NR140
R50P	Tetrachloroethylene	ug/L	0.70	.5	5	NR140
R50P	Trichloroethylene	ug/L	0.54	.5	5	NR140
R35	Conductivity	umho@25C	630	510		well



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Marathon County Solid Waste Department

R18500 E. Hwy 29

Ringle, WI 54471

Director:

Site Supervisor:

Administrative Office:

Scale Master

Solid Waste & Recycling Info Line

715-446-3101 X104

715-446-3101 X102

715-446-3101 X100

715-446-3101 X103

877-270-3989 toll-free

June 2, 2017

Wisconsin Department of Natural Resources

Bureau of Solid Waste Management

GEMS Data Submittal Contact, WA/3

P.O. Box 7921

Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill, License No.
3338 Area B.

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of April 2017. An exceedance table has been attached for the Area B landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher

Operations Manager

Marathon County Solid Waste

C.c: Nathan Coller, Sarah Shiel, Eric Syftestad, Meleesa Johnson, Mark Torresani

Area B Groundwater Well Exceedance Table April 2017

Marathon County Solid Waste: Area B Groundwater Monitoring Wells									
	Area B	Facility #3338	Exceedances						
Project #	Date	Well #	Parameter	Units	Result	PAL	ES	ACL	Comments
277947	April 18 2017	R27	Nitrate+Nitrite	mg/L	4.70	2.00	10.00		NR140

The Area B Nitrate/Nitrite levels at well R27 can be a result of improper farming practices. Throughout the past 3 years, Area B has had ongoing vegetation management to establish growth on slopes. Seed, fertilizer, and mulch have all been applied in an effort to control erosion. This well has not shown a significant change in concentration since the previous sampling event. The well will continue to be monitored closely to ensure that levels decrease.

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats.
When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30; NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- * Prepare one form for each license or monitoring ID.
- * Please type or print legibly.
- * Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- * Attach a notification of any gas values that attain or exceed explosive gas levels.
- * Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lims@nls-lab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County Landfill - Area B	03338	737092730	APRIL -17-2017 through APRIL -18-2017

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

APRIL -2017

Type of Data Submitted (Check all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells | <input type="checkbox"/> Gas monitoring data |
| <input type="checkbox"/> Groundwater monitoring data from private water supply wells | <input type="checkbox"/> Air monitoring data |
| <input type="checkbox"/> Leachate monitoring data | <input type="checkbox"/> Other (specify) _____ |

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- ☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Hagenbucher
Facility Representative Name (Print)

Manager
Title

715-446-3101
(Area Code) Telephone No.

David Hagenbucher
Signature

6/11/17
Date

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- | | |
|---|-------------------------------------|
| <input type="checkbox"/> Found uploading problems on _____ | Initials _____ |
| <input type="checkbox"/> Notified contact of problems on _____ | Uploaded data successfully on _____ |
| EDD format(s): <input checked="" type="checkbox"/> Diskette <input type="checkbox"/> CD (initial submittal and follow-up) <input checked="" type="checkbox"/> E-mail (follow-up only) Other _____ | |


Marathon County Solid Waste Mgmt Dept
Area B
04-01-2017

Lab ID: 721026460
NLS Project: 277947
Collected: 04-01-2017
License: 03338
FID: 737092730

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
R27	Nitrate+Nitrite, dis.	mg/L	4.7	2	10	NR140



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Marathon County Solid Waste Department

R18500 E. Hwy 29
Ringle, WI 54471

Director:
Site Supervisor:
Administrative Office:
Scale Master
Solid Waste & Recycling Info Line

715-446-3101 X104
715-446-3101 X102
715-446-3101 X100
715-446-3101 X103
877-270-3989 toll-free

June 2, 2017

Wisconsin Department of Natural Resources
Bureau of Solid Waste Management
GEMS Data Submittal Contact, WA/3
P.O. Box 7921
Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill, License
No.4228 BRRDF.

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of April 2017. An exceedance table has been attached for the Bluebird Ridge Landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher
Operations Manager
Marathon County Solid Waste

C.c: Nathan Coller, Sarah Shiel, Eric Syftestad, Meleesa Johnson, Mark Torresani

Bluebird Ridge Recycling and Disposal Facility Groundwater Well Exceedance Table April 2017

Marathon County Solid Waste: Bluebird Ridge Groundwater Monitoring Wells									
Project #	BRRDF Date	Facility #4228 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
278046	April 18 2017	R59P	Alkalinity	mg/L	250.00	230.00			well
278046	April 18 2017	R59P	Conductivity	umhos@25C	500.00	470.00			well
278046	April 18 2017	R59P	Hardness	mg/L	280.00	230.00			well
278046	April 18 2017	R59WT	Alkalinity	mg/L	270.00	230.00			well
278046	April 18 2017	R59WT	Conductivity	umhos@25C	510.00	470.00			well
278046	April 18 2017	R59WT	Hardness	mg/L	300.00	230.00			well

Groundwater hardness can exhibit natural fluctuation over time. In addition, a typical indicator of hard water can be increased levels of calcium. In the past few years, Marathon County has been utilizing liquid Calcium Chloride solution for dust control on main haul roads. It is a possibility that small amounts of Calcium Chloride may have leached into groundwater due to runoff from haul roads. This solution may also contribute to slight increases in conductivity. In addition to the Calcium Chloride application, this particular well is located within 50 feet of a major soil stockpile. During 2016, this stockpile received over 250,000 cubic yards of soil from the 10 acre cell expansion of the Bluebird Ridge Landfill. R59WT and R59P are directly at the toe of the slope of a 500,000+ cubic yard soil stockpile. The stockpile has been properly vegetated; however, the construction activity is likely a contributing factor. This well will continue to be monitored to evaluate the source of the exceedances.

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- * Attach a notification of any gas values that attain or exceed explosive gas levels.
- * Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lims@nlsilab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County - BRRDF	04228	337005680	APRIL -18-2017 through APRIL -19-2017

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

APRIL -2017

Type of Data Submitted (Check all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells | <input type="checkbox"/> Gas monitoring data |
| <input type="checkbox"/> Groundwater monitoring data from private water supply wells | <input type="checkbox"/> Air monitoring data |
| <input type="checkbox"/> Leachate monitoring data | <input type="checkbox"/> Other (specify) _____ |

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- ☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Hagenbucher
Facility Representative Name (Print)

Manager
Title

715-446-3101
(Area Code) Telephone No.

David Hagenbucher
Signature

6/1/17
Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials _____
- ☐ Notified contact of problems on _____ Uploaded data successfully on _____
- EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☒ E-mail (follow-up only) Other _____

Marathon County Solid Waste Mgmnt Dept
BRRDF
04-01-2017


Lab ID: 721026460
NLS Project: 278046
Collected: 04-01-2017
License: 04228
FID: 337005680

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
R59P	Alkalinity	mg/L	250	230		well
R59P	Conductivity	umhos@25C	500	470		well
R59P	Hardness	mg/L	280	230		well
R59WT	Alkalinity	mg/L	270	230		well
R59WT	Conductivity	umhos@25C	510	470		well
R59WT	Hardness	mg/L	300	230		well



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Marathon County Solid Waste Department

R18500 E. Hwy 29

Ringle, WI 54471

Director:	715-446-3101 X104
Site Supervisor:	715-446-3101 X102
Administrative Office:	715-446-3101 X100
Scale Master	715-446-3101 X103
Solid Waste & Recycling Info Line	877-270-3989 toll-free

December 12, 2017

Wisconsin Department of Natural Resources
Bureau of Solid Waste Management
GEMS Data Submittal Contact, WA/3
P.O. Box 7921
Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill: License No.
2892 Area A

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of October 2017. An exceedance table has been attached for the Area A landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher
Operations Manager
Marathon County Solid Waste

C.c: Nathan Coller, Amanda Dehmlow, Valerie Joosten, Meleesa Johnson, Mark Torresani.

Area A Groundwater Well Exceedance Table October 2017

Marathon County Solid Waste: Area A Groundwater Monitoring Wells									
Project #	Area A Date	Facility #2892 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
289162	October 16&17 2017	Dup 101717	Tetrachloroethylene	ug/L	1.60	0.50	5.00		NR140
289162	October 16&17 2017	Dup 101717	Trichloroethylene	ug/L	4.50	0.50	5.00		NR140
289162	October 16&17 2017	R12R	Tetrachloroethylene	ug/L	0.57	0.50	5.00		NR140
289162	October 16&17 2017	R13R	Tetrachloroethylene	ug/L	1.70	0.50	5.00		NR140
289162	October 16&17 2017	R13R	Trichloroethylene	ug/L	4.60	0.50	5.00		NR140
289162	October 16&17 2017	R13R	Vinyl Chloride	ug/L	0.19	0.02	0.20		NR140
289162	October 16&17 2017	R38	Tetrachloroethylene	ug/L	1.00	0.50	5.00		NR140
289162	October 16&17 2017	R38	Trichloroethylene	ug/L	1.50	0.50	5.00		NR140
289162	October 16&17 2017	R47	Tetrachloroethylene	ug/L	0.66	0.50	5.00		NR140
289162	October 16&17 2017	R47	Trichloroethylene	ug/L	1.50	0.50	5.00		NR140
289162	October 16&17 2017	R50P	Tetrachloroethylene	ug/L	0.80	0.50	5.00		NR140
289162	October 16&17 2017	R50P	Trichloroethylene	ug/L	0.56	0.50	5.00		NR140
289162	October 16&17 2017	R35	Conductivity	umho@25C	560.00	510.00			Well

The Area A exceedances that were detected during the October 2017 sampling event are consistent with the exceedances that were detected in previous sampling events.

Groundwater contamination was detected southeast of Area A during the late 1980s. By May of 1993, Marathon County completed a groundwater quality investigation and submitted a report to WDNR titled "Marathon County, Area A Landfill – Environmental Contamination Assessment (ECA) report". The ECA report suggested that contaminants may have been released to the environment from one or more of the leachate collection basins and other source locations. Consequently, several improvements were made and both leachate collection basins were removed in 1995. The identified groundwater contaminants of primary concern at this facility are VOCs, specifically the chlorinated aliphatic hydrocarbons (CAHs) and vinyl chloride. Since the remedial work from 1993 to 1996, significant reductions of CAH concentration have been measured near the suspected source zone.

It is the opinion of Marathon County that the exceedances are related to the leachate basins that were removed in 1995. The overall general concentrations reported at wells within the core of the plume are stable to decreasing. Marathon County will continue to monitor these wells for exceedances as required, and report any anomalies to the WDNR. Marathon County has installed groundwater monitoring wells along State Highway 29, just southeast of the site. If these particular wells begin showing signs of contamination, the County has a contingency plan in place and will respond to protect residents.

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats. When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30; NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- * Prepare one form for each license or monitoring ID.
- * Please type or print legibly.
- * Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- * Attach a notification of any gas values that attain or exceed explosive gas levels.
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Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lms@nlsilab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County Landfill - Area A	02892	737054890	OCTOBER -16-2017 through OCTOBER -17-2017
Some Area A wells are linked to BRRDF site (Lic. 04228) but reported here.			

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

OCTOBER -2017

Type of Data Submitted (Check all that apply)

- | | |
|---|--|
| <input checked="" type="checkbox"/> Groundwater monitoring data from monitoring wells | <input type="checkbox"/> Gas monitoring data |
| <input type="checkbox"/> Groundwater monitoring data from private water supply wells | <input type="checkbox"/> Air monitoring data |
| <input type="checkbox"/> Leachate monitoring data | <input type="checkbox"/> Other (specify) _____ |

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
- ☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
- ☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Hagenbucher

Manager

715-551-5864

Facility Representative Name (Print)

Title

(Area Code) Telephone No.

David Hagenbucher

12/12/17

Signature

Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials _____
- ☐ Notified contact of problems on _____ Uploaded data successfully on _____
- EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☒ E-mail (follow-up only) Other _____

Marathon County Solid Waste Mgmt Dept
Area A
10-01-2017


Lab ID: 721026460
 NLS Project: 289162
 Collected: 10-01-2017
 License: 02892
 FID: 737054890

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
Dup 101717	Tetrachloroethylene	ug/L	1.6	.5	5	NR140
Dup 101717	Trichloroethylene	ug/L	4.5	.5	5	NR140
R12R	Tetrachloroethylene	ug/L	0.57	.5	5	NR140
R13R	Tetrachloroethylene	ug/L	1.7	.5	5	NR140
R13R	Trichloroethylene	ug/L	4.6	.5	5	NR140
R13R	Vinyl Chloride	ug/L	0.19	.02	.2	NR140
R38	Tetrachloroethylene	ug/L	1.0	.5	5	NR140
R38	Trichloroethylene	ug/L	1.5	.5	5	NR140
R47	Tetrachloroethylene	ug/L	0.66	.5	5	NR140
R47	Trichloroethylene	ug/L	1.5	.5	5	NR140
R50P	Tetrachloroethylene	ug/L	0.80	.5	5	NR140
R50P	Trichloroethylene	ug/L	0.56	.5	5	NR140
R35	Conductivity	umho@25C	560	510		well



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Marathon County Solid Waste Department

R18500 E. Hwy 29

Ringle, WI 54471

Director:

715-446-3101 X104

Site Supervisor:

715-446-3101 X102

Administrative Office:

715-446-3101 X100

Scale Master

715-446-3101 X103

Solid Waste & Recycling Info Line

877-270-3989 toll-free

December 12, 2017

Wisconsin Department of Natural Resources

Bureau of Solid Waste Management

GEMS Data Submittal Contact, WA/3

P.O. Box 7921

Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill, License No.
3338 Area B.

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of October 2017. An exceedance table has been attached for the Area B landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher

Operations Manager

Marathon County Solid Waste

C.c: Nathan Coller, Amanda Dehmlow, Valerie Joosten, Meleesa Johnson, Mark Torresani.

Area B Groundwater Well Exceedance Table October 2017

Marathon County Solid Waste: Area B Groundwater Monitoring Wells									
Project #	Area B Date	Facility #3338 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
289160	October 16&17 2017	R27	Nitrate+Nitrite	mg/L	4.30	2.00	10.00		NR140
289160	October 16&17 2017	R52	Nitrate+Nitrite	mg/L	2.00	2.00	10.00		NR140
289160	October 16&17 2017	R52	Hardness tot. CaCO3	mg/L	300.00	290.00			well

The Area B Nitrate/Nitrite levels at wells R27 and R52 can be a result of improper farming practices. Throughout the past few years, Area B has had ongoing vegetation management to establish growth on slopes. Seed, fertilizer, and mulch have all been applied in an effort to control erosion. R27 has not shown a significant change in concentration since the previous sampling event. The well will continue to be monitored closely to ensure that levels decrease. R52 will also continue to be monitored as required, and report any significant changes to the WDNR.

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats. When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30; NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- * Prepare one form for each license or monitoring ID.
- * Please type or print legibly.
- * Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- * Attach a notification of any gas values that attain or exceed explosive gas levels.
- * Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to: GEMS Data Submittal Contact - WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lms@nlslab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County Landfill - Area B	03338	737092730	OCTOBER -16-2017 through OCTOBER -17-2017

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

OCTOBER -2017

Type of Data Submitted (Check all that apply)

- ☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☐ Gas monitoring data
☐ Air monitoring data
☐ Other (specify) _____

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Hagenbucher
Facility Representative Name (Print)

Manager
Title

715-551-5864
(Area Code) Telephone No.

David Hagenbucher
Signature

12/12/17
Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials _____
☐ Notified contact of problems on _____ Uploaded data successfully on _____
EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☒ Email (follow-up only) Other _____

Marathon County Solid Waste Mgmt Dept
Area B
10-01-2017


Lab ID: 721026460
NLS Project: 289160
Collected: 10-01-2017
License: 03338
FID: 737092730

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
R27	Nitrate+Nitrite, dis.	mg/L	4.3	2	10	NR140
R52	Nitrate+Nitrite, dis.	mg/L	2.0	2	10	NR140
R52	Hardness, tot. recoverable as CaCO3 (calc/filt/trace)	mg/L	300	290		ACL_well



marathoncountysolidwaste.org

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Marathon County Solid Waste Department

R18500 E. Hwy 29

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December 12, 2017

Wisconsin Department of Natural Resources

Bureau of Solid Waste Management

GEMS Data Submittal Contact, WA/3

P.O. Box 7921

Madison, WI 53707-7921

RE: Exceedance of Groundwater Standards for Marathon County Landfill, License
No.4228 BRRDF.

In accordance with NR 140, please accept this notification of groundwater monitoring results for the reporting period of October 2017. An exceedance table has been attached for the Bluebird Ridge Landfill and can be found on the following page.

If you have any questions, please contact me.

Thank you,

David Hagenbucher
Operations Manager
Marathon County Solid Waste

C.c: Nathan Coller, Amanda Dehmlow, Valerie Joosten, Meleesa Johnson, Mark Torresani.

Bluebird Ridge Recycling and Disposal Facility Groundwater Well Exceedance Table
October 2017

Marathon County Solid Waste: Bluebird Ridge Groundwater Monitoring Wells									
Project #	BRRDF Date	Facility #4228 Well #	Exceedances Parameter	Units	Result	PAL	ES	ACL	Comments
289255	October 17&18 2017	R59P	Alkalinity	mg/L	280.00	230.00			well
289255	October 17&18 2017	R59P	Conductivity	umhos@25C	530.00	470.00			well
289255	October 17&18 2017	R59P	Hardness	mg/L	310.00	230.00			well
289255	October 17&18 2017	R59WT	Alkalinity	mg/L	330.00	230.00			well
289255	October 17&18 2017	R59WT	Conductivity	umhos@25C	620.00	470.00			well
289255	October 17&18 2017	R59WT	Hardness	mg/L	360.00	230.00			well
289255	October 17&18 2017	R68P	Hardness	mg/L	260.00	230.00			well

Groundwater hardness can exhibit natural fluctuation over time. In addition, a typical indicator of hard water can be increased levels of calcium. In the past few years, Marathon County has been utilizing liquid Calcium Chloride solution for dust control on main haul roads. It is a possibility that small amounts of Calcium Chloride may have leached into groundwater due to runoff from haul roads. This solution may also contribute to slight increases in conductivity. In addition to the Calcium Chloride application, this particular well is located within 50 feet of a major soil stockpile. During 2016, this stockpile received over 250,000 cubic yards of soil from the 10 acre cell expansion of the Bluebird Ridge Landfill. R59WT and R59P are directly at the toe of the slope of a 500,000+ cubic yard soil stockpile. The stockpile has been properly vegetated; however, the construction activity is likely a contributing factor. This well will continue to be monitored to evaluate the source of the exceedances.

Notice: Personally identifiable information collected will be used for program administration and enforcement purposes. The department may also provide this information to requesters as required under Wisconsin's Open Records law, ss. 19.31 to 19.39, Wis. Stats. When submitting monitoring data, the owner or operator of the facility, practice or activity is required to notify the Department in writing that a groundwater standard or an explosive gas level has been attained or exceeded, as specified in ss. NR 140.24(1)(a); NR 140.26(1)(a); NR 507.30; NR 635.14(9)(a); NR 635.18(20) and NR 507.30, Wis. Adm. Code. Failure to report may result in fines, forfeitures or other penalties resulting from enforcement under ss. 289.97, 291.97 or 299.95, Wis. Stats.

Instructions:

- * Prepare one form for each license or monitoring ID.
- * Please type or print legibly.
- * Attach a notification of any values that attain or exceed groundwater standards (that is, preventive action limits, enforcement standards or alternative concentration limits). The notification must include a preliminary analysis of the cause and significance of each value.
- * Attach a notification of any gas values that attain or exceed explosive gas levels.
- * Send the original signed form, any notification, and Electronic Data Deliverable [EDD] to:

GEMS Data Submittal Contact - WA/5
Wisconsin Department of Natural Resources
P.O. Box 7921
Madison, WI 53707 - 7921

Monitoring Data Submittal Information

Name of entity submitting data (laboratory, consultant, facility owner):

Northern Lake Service, Inc.

Contact for questions about data formatting. Include data preparer's name, telephone number and E-mail address:

Name: Chris Geske

Phone: 715-478-2777

E-mail: lms@nlsfab.com

Facility Name	License No. / Monitoring ID	Facility ID [FID]	Actual sampling dates (e.g., July 2-6, 2003)
Marathon County - BRRDF	04228	337005680	OCTOBER -17-2017 through OCTOBER -18-2017

The enclosed results are for sampling required in the month(s) of: (e.g., June 2003)

OCTOBER -2017

Type of Data Submitted (Check all that apply)

- ☒ Groundwater monitoring data from monitoring wells
☐ Groundwater monitoring data from private water supply wells
☐ Leachate monitoring data
☐ Gas monitoring data
☐ Air monitoring data
☐ Other (specify) _____

Notification attached?

- ☐ No. No groundwater standards or explosive gas limits were exceeded.
☒ Yes, a notification of values exceeding a groundwater standard is attached. It includes a list of monitoring points, dates, sample values, groundwater standard and preliminary analysis of the cause and significance of any concentration.
☐ Yes, a notification of values exceeding an explosive gas limit is attached. It includes the monitoring points, dates, sample values and explosive gas limits.

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. Furthermore, I have attached complete notification of any sampling values meeting or exceeding groundwater standards or explosive gas levels, and a preliminary analysis of the cause and significant of concentrations exceeding groundwater standards.

David Hagenbucher
Facility Representative Name (Print)

Manager
Title

715-551-5864
(Area Code) Telephone No.

David Hagenbucher
Signature

12/12/17
Date

FOR DNR USE ONLY. Check action taken, and record date and your initials. Describe on back side if necessary.

- ☐ Found uploading problems on _____ Initials _____
☐ Notified contact of problems on _____ Uploaded data successfully on _____
EDD format(s): ☐ Diskette ☐ CD (initial submittal and follow-up) ☒ E-mail (follow-up only) Other _____

Marathon County Solid Waste Mgmt Dept
BRRDF
10-01-2017

Lab ID: 721026460
NLS Project: 289255
Collected: 10-01-2017
License: 04228
FID: 337005680

EXCEEDANCES:

Well ID	Parameter	Units	Result	PAL / ACL	ES	Comments
R59P	Alkalinity	mg/L	280	230		well
R59P	Conductivity	umhos@25C	530	470		well
R59P	Hardness	mg/L	310	230		well
R59WT	Alkalinity	mg/L	330	230		well
R59WT	Conductivity	umhos@25C	620	470		well
R59WT	Hardness	mg/L	360	230		well
R68P	Hardness	mg/L	260	250		well