

April 19, 2024

Ms. Cindy Koepke Hydrogeologist Wisconsin Department of Natural Resources 3911 Fish Hatchery Road Fitchburg, WI 53711

Subject: Refuse Hideaway Landfill

March 2024 Operation Monitoring and Maintenance Activities

Dear Cindy:

TRC completed the following operation, monitoring, and maintenance activities at the Refuse Hideaway Landfill (the Site) in Middleton, WI in March 2024.

- March 11, 2024 Gas Probe Monitoring
- March 11, 2024 Bi-weekly Site Inspection
- March 26, 2024 Monthly Site Inspections
- March 26, 2024 Cap Inspection

## **Gas Extraction System**

The gas extraction system (GES) was operated through the month of March 2024.

Field data from the gas extraction well and gas probe monitoring conducted in March 2024, are included in Attachment 1.

# **Leachate Extraction System**

The leachate extraction system was restarted on October 25, 2023 following repair of the compressor system. However, based on exterior temperatures the system was kept off during the month of March.

The leachate tank level was gauged during each Site visit and the following measurements were recorded:

- March 11, 2024 34 inches
- March 26, 2024 47.5 Inches

# Cap Inspection

TRC conducted a monthly inspection of the landfill cap and stormwater conveyance features on March 26, 2024. The landfill cap and stormwater conveyance features are operational. TRC will continue to observe the condition of the features. An inspection form with further details is provided in Attachment 1 and a photographic log is provided in Attachment 2.

If you have any questions, please contact Andrew Stehn at astehn@trccompanies.com or 608-807-8112.

Ms. Cindy Koepke Wisconsin Department of Natural Resources April 19, 2024 Page 2

Sincerely,

**TRC** 

Molly Wagler, EIT
Project Engineer

Andrew Stehn, PE Project Manager

Attachments: 1. March 2024 Monitoring Results

2. Photographic Log

# Attachment 1 March 2024 Monitoring Results

# REFUSE HIDEAWAY LANDFILL GAS PROBE MONITORING FORM

TECHNICIAN(S): J. Roelke DATE: 3/11/2024

START TIME: 8:06 AM

END TIME: 1:45 PM

GAS/INSTRUMENT TYPE: **GEM 2000** 

SERIAL NO.: 11668 WEATHER CONDITIONS: sunny

DATE LAST CALIBRATED: 3/11/2024 TEMPERATURE: 38°F

METHOD: Standard Calibration Gases BAROMETRIC PRESSURE & TREND: 30.03 in.Hg., falling

PRESS INSTRUMENT : Manometer GROUND CONDITIONS: moist

		DDECCUDE	METHANIE	METHANIE	CARBON	OVVCEN	
GAS PROBE NAME	Time	PRESSURE (in. WC)	METHANE (% LEL)	METHANE (%, by vol.)	DIOXIDE (%, by vol.)	OXYGEN (%, by vol.)	COMMENTS
GP-1D	8:33	0.01	0.0	0.0	2.2	18.5	(2)
GP-1S	8:35	0.0	0.0	0.0	3.4	17.4	(2)
GP-2D	8:38	0.14	0.0	0.0	0.6	20.3	(1)
GP-2S	8:40	0.0	0.0	0.0	0.9	19.8	(1)
GP-3	8:43	0.0	0.0	0.0	16.6	1.0	(1) Stable readings at 2 minutes.
GP-4	8:47	1.12	NM	NM	NM	NM	(1) Water in probe
GP-5	8:51	0.00	0.0	0.0	1.3	19.5	(2)
GP-6	8:57	0.09	0.0	0.0	0.1	20.8	(1)
GP-7	9:04	0.0	0.0	0.0	2.0	19	(2)
GP-8	9:11	0.0	0.0	0.0	2.3	18.8	(2)
GP-9	9:14	0.0	0.0	0.0	1.7	19.2	(1)
GP-10	9:19	0.0	0.0	0.0	7.1	12.9	(1) Stable readings at 2 minutes.
GP-11D	9:24	0.0	0.0	0.0	0.3	20.5	(2)
GP-11S	9:26	0.0	0.0	0.0	2.3	18.0	(2)
GP-12D	9:29	0.05	>100	15.3	22.2	0.0	(1) Stable readings at 2 minutes.
GP-12S	9:32	0.0	0.0	0.0	0.4	20.3	(1)
GP-13D	9:40	0.0	0.0	0.0	0.6	19.6	(2)
GP-13S	9:42	0.0	0.0	0.0	1.9	18.0	(2)

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GAS PROBE NAME	Time	PRESSURE (in. WC)	METHANE (% LEL)	METHANE (%, by vol.)	CARBON DIOXIDE (%, by vol.)	OXYGEN (%, by vol.)	COMMENTS
GP-16D	10:01	0.0	0.0	0.0	0.4	20.3	(2)
GP-16S	10:03	0.0	0.0	0.0	0.2	20.6	(2)
GP-17D	9:54	0.0	0.0	0.0	2.4	17.5	(1)
GP-17M	9:56	0.0	0.0	0.0	0.3	20.3	(1)
GP-17S	9:58	0.0	0.0	0.0	0.2	20.5	(1)
GP-18D	10:04	0.09	0.0	0.0	0.2	20.6	(2)
GP-18M	10:06	0.0	0.0	0.0	0.2	20.7	(2)
GP-18S	10:08	0.0	0.0	0.0	0.1	20.8	(2)
GP-19 <sup>85-100</sup>	10:47	0.0	0.0	0.0	1.0	19.9	(1)
GP-19 <sup>50-70</sup>	10:49	0.0	0.0	0.0	1.3	19.8	(1)
GP-19 <sup>25-40</sup>	10:51	0.0	0.0	0.0	1.2	19.9	(1)
GP19 <sup>2-15</sup>	10:53	0.0	0.0	0.0	0.6	20.4	(1)
GP-20 <sup>85-100</sup>	10:38	0.09	0.0	0.0	0.6	20.4	(2)
GP-20 <sup>50-70</sup>	10:40	0.05	0.0	0.0	0.9	20.0	(2)
GP-20 <sup>25-40</sup>	10:42	0.0	0.0	0.0	1.0	20.1	(2)
GP-20 <sup>2-15</sup>	10:44	0.0	0.0	0.0	1.2	19.8	(2)
GP-21 <sup>85-100</sup>	10:29	0.14	0.0	0.0	0.4	20.4	(2)
GP-21 <sup>50-70</sup>	10:31	0.06	0.0	0.0	2.5	18.0	(2)
GP-21 <sup>25-40</sup>	10:33	0.05	0.0	0.0	1.0	20.0	(2)
GP-21 <sup>2-15</sup>	10:35	0.0	0.0	0.0	0.9	20.3	(2)
GP-22 <sup>85-100</sup>	10:57	0.07	0.0	0.0	1.8	19.7	(2)
GP-22 <sup>50-70</sup>	10:59	0.05	0.0	0.0	0.5	20.5	(2)
GP-22 <sup>25-40</sup>	11:01	0.0	0.0	0.0	1.0	20.1	(2)
GP-22 <sup>2-15</sup>	11:03	0.0	0.0	0.0	1.5	19.7	(2)

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		PRESSURE	METHANE	METHANE	CARBON DIOXIDE	OXYGEN			
GAS PROBE NAME	Time	(in. WC)	(% LEL)	(%, by vol.)	(%, by vol.)	(%, by vol.)	COMMENTS		
GP-23 <sup>85-100</sup>	11:08	0.04	0.0	0.0	0.6	20.3	(2)		
GP-23 <sup>50-70</sup>	11:10	0.03	0.0	0.0	0.3	20.6	(2)		
GP-23 <sup>25-40</sup>	11:12	0.03	0.0	0.0	10.3	8.7	(2)		
GP-23 <sup>2-15</sup>	11:14	0.00	0.0	0.0	1.9	18.6	(2)		
GP-24 <sup>85-100</sup>	11:19	0.11	0.0	0.0	9.7	8.9	(2)		
GP-24 <sup>50-70</sup>	11:21	0.07	0.0	0.0	1.6	19.0	(2)		
GP-24 <sup>25-40</sup>	11:23	0.05	0.0	0.0	0.6	20.3	(2)		
GP-24 <sup>2-15</sup>	11:25	0.0	0.0	0.0	2.3	18.5	(2)		
GPW-1D	13:34	0.86	0.0	0.0	1.8	18.9	(1)		
GPW-1M	13:36	0.88	0.0	0.0	1.7	18.3	(1)		
GPW-1S	13:38	0.02	0.0	0.0	1.4	19.6	(1)		
G-1D	8:25	-0.02	0.0	0.0	0.1	20.9	(1)		
G-1S	8:27	0.0	0.0	0.0	2.1	18.8	(1)		
G-2D	9:45	0.0	>100	5.1	0.4	20.6	(1)		
G-2S	9:47	0.0	0.0	0.0	19.4	0.0	(1) Stable readings at 2 minutes.		
G-5	9:08	0.95	0.0	0.0	0.1	20.8	(1)		
G-6	8:19	0.0	0.0	0.0	0.7	20.5	(1)		
G-8	10:24	0.0	0.0	0.0	0.4	20.6	(1)		
G-9	10:15	0.0	0.0	0.0	0.6	19.3	(1)		
G-10	11:29	1.01	0.0	0.0	0.1	20.8	(1)		
Speedway Office	8:30	0.0	0.0	0.0	0.0	20.9	Open to ATM		

## NOTES:

(1); Locked probe casing.

(2): Probe is above casing and cannot be locked.

(3): No cap for probe casing and cannot be locked.

## Key:

Shallow or 2'-15'

Medium or 25'-40'

Deep or 50'-70'

85'-100'

Entered by: J. Roelke 3/11 /2024 Checked by: M. Wagler 4/11/2024

## Bi-weekly - System Inspection Log Landfill Gas Extraction and Leachate Pump System WDNR - Refuse Hideaway Landfill Middleton, Wisconsin

	,		
TRC Operator Name: J. Roelke		_	
Date: 3/11/2024	Arrival Time: 11:46 AM	Departure Time:	12:21 PM
Site Condi	tions		Equipment
Weather Conditions:	sunny	Gas/Instrument Type:	GEMS 2000
Ground Condition:	moist	Serial Number:	11668
Barometric Pressure:	29.96 in Hg	Date Last Calibrated:	3/11/2024
Barometric Pressure Trend:	falling	Method:	standard field calibration gas
Temperature:	54 °F	Pressure Instrument:	Dwyer Manometer

System	Location	Tag #	Landfill Gas Extraction Syste	Set Point	Typical Range	Field Reading
System	Locution	rug "	Amperage	- Set i Gille	3 - 4 amps	3.19
	Remote		Speed	-	1800 - 1900 rpm	1112.09
			Frequency	_	30 - 35 Hz	18.62
Blower Motor	HMI	GHS-BLR-301	Amperage	<u> </u>	3 -4 amps	3.1
	HMI	┥ ⊢	Speed	<u> </u>	3 -4 amps	23
	HMI	┨	Hours		_	12391
		<del>_</del>		-	-	12391
lower Operating (	YES). Note ex	cessive noise or iss	sues observed.			
	HMI	PT-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	-7.0
	НМІ	TE-301	Blower Inlet Temperature	-	50 - 90 °F	54
	Local	GHS-PI-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	-6.92
	Local	GHS-TI-301	Blower Inlet Temperature	-	50 - 90 °F	48
Blower Inlet			Gas Composition - % Methane	_		9.8
			Gas Composition - % CO2	_		11
	Local	Sample Port	Gas Composition - % Oxygen	-		12.6
			Gas Composition - % Balance	_	<del> </del>	66.6%
	Local	GHS-PDI-301	Demister Differential Pressure	_	1-2 in w.c	0.4
Demister	Local	G115 1 D1 301	Slight Glass: Liquid Present	_	1 2 III W.C	no
Demister	HMI	LS-701	Level Indication	_	-	-
	HMI	PT-302	Blower Outlet Flow Pressure			
	HMI	TE-302	Blower Outlet Temperature	-	50 - 90 °F	63
	HMI	PDT-301	Blower Outlet Flow Differential Pressure	-	1-2 in w.c	0.42
	HMI	-	Blower Outlet Flow Rate	-	180 - 190 scfm	95
		<u> </u>	Blower Outlet Flow Pressure	-	180 - 190 SCIIII	0.02
Blower Outlet	Local Local	GHS-PI-302 GHS-TI-302	Blower Outlet Temperature	-	50 - 90 °F	60
	LUCAI	GH3-11-302		-	30 - 90 F	9.6
			Gas Composition - % Methane	-		
	Local	Sample Port	Gas Composition - % CO2	-		10.8 12.8
			Gas Composition - % Oxygen	-		
			Gas Composition - % Balance	-	6 7.	66.8%
	Local	North	North Branch Vacuum	- '6	6 - 7 in w.c.	-6.65
	Local	North	Valve Position	6 turns open /6	6 turns open	6
		l	Gas Composition - % Methane	-		20.4
	Local	North Sample	Gas Composition - % CO2	-		14.3
		Port	Gas Composition - % Oxygen	-		9.2
		<del>   </del>	Gas Composition - % Balance	-		56.1%
	Local	Central	Central Branch Vacuum	-	6 - 7 in w.c.	-6.6
	Local	Central	Valve Position	-	6 turns open	6
Branch Headers		1	Gas Composition - % Methane	-		3.1
	Local	Central	Gas Composition - % CO2	-		3.3
		Sample Port	Gas Composition - % Oxygen	-		18.3
		1	Gas Composition - % Balance	-		75.3%
	Local	South	South Branch Vacuum	-	6 - 7 in w.c.	-6.63
	Local	South	Valve Position	-	6 turns open	6
		1 L	Gas Composition - % Methane	-		9.2
	Local	South Sample	Gas Composition - % CO2	-		11.3
	Local	Port	Gas Composition - % Oxygen	-		12.5
		Γ	Gas Composition - % Balance	-		67.0%

			Air Compr	essor Syste	m <sup>1,3,4</sup> (Off I	Line)				
		Press	sure Set Poin	oints			Condensate Se	t Points		
Operational Settings	Tank Low (psi)	Tank High (psi)	h Well Field (psi) On (min.) Off (		Off (min.)	Open (sec.)	Closed (min.)	Test Operation		
Air Dryer Syste	Air Dryer System <sup>2</sup> (Off Line)					HMI Heater/Air Conditioner				
System Operation	al:	YES	3-Phas	e Power Indi	cator:	3 of 3	Operational	Yes		
Condensate Drain Oper	rational:	YES	GFI 1 Status:			(Green)	Temperature	68 °F		
Alarm Indictor:		OFF	GFI 2 Status:			(Green)	Filter Cleaned	no		
Condenser Cleane	ed²:	NO	Leachate Tank/Loadout							
Dew Point Ir	ndicator:		Liquid Level (inches):			34	Visual Check:			
			Contact V	DNR if level	is above	71	· Evidence of Tank Overflow: no			
			Leak Dete	ction Test Co	mpleted:	no	·Inspect concret	e pad and storm sewer for		
<i></i>		Indicate which bars are green(G) or red (R) and note (F) if flashing.		Overfill Float Functional <sup>5</sup> :			damage or backup			
	. ca () and note (			Exhaust Stack						
				Drain Stack Sump (vol. removed)			200 ml Stack Condition <sup>4</sup> : good			

<sup>1.</sup> Check all air lines and gas extraction lines for leaks during each site visit. Drain inline air filters and replace as needed.

- 2. Air Dryer Clean the condenser monthly using an air jet (max. 2 bar / 30 psig) inside out. Make sure not to damage the aluminum lamellae of the cooling package.
- 3. On a quarterly basis change the oil and check/clean the air filters and intercoolers for the air compressor.
- 4. Inspect mounting brackets and bolts for the air compressor and effluent stack for tightness.

5. Test overfill float operation on a monthly basis.
Comments/Notes: Heat cable for the header and blower is in working order, warm to the touch. Heat cable for the air compressor tank is off, it is thermostatic set to
thermastatic set to turn off.

Data Entered By: J. Roelke 3/11/2024 Checked By: M. Wagler 4/16/2024

## LANDFILL GAS MONITORING FORM

## REFUSE HIDEAWAY GAS MONITORING PROGRAM (EPA ID: WID980610604, Facility ID: 113112010)

STARTING **ENDING** TECHNICIAN(S): J. Roelke DATE: 3/26/24 3/26/24 GAS/INSTRUMENT TYPE: GEM 2000 TIME: 8:55 AM 10:45 AM BAROMETRIC PRESSURE [25] SERIAL NO.: 11668 29.35 in. Hg 29.36in. Hg DATE LAST CALIBRATED: BAROMETRIC TREND [46381] 3/26/2024 rising rising METHOD: Standard Calibration Gases WEATHER CONDITIONS: cloudy raining PRESSURE INSTRUMENT: Dwyer Digital Manometer TEMPERATURE [21] 51°F 52 °F Project # 459573.0006.000 GROUND CONDITIONS [No DNR ID]: saturated saturated

Well No.	Time	Well Temp. (°F)	Available Header Pressure (in. W.C.)	Applied Well Pressure (in. W.C.)	Differential Pressure (in. W.C.)	Final Well Pressure (in. W.C.)	Final Deferential Pressure (in. W.C.)	Estimated Gas Flow (scfm)	Methane (%, by vol.)	Carbon Dioxide (%, by vol.)	Oxygen (%, by vol.)	Initial Valve Setting (% open)	Final Valve Setting (% open)	Pump Counter
GW-1	9:05	46	-6.68	-1.6	0.27	-1.1	0.07	17.0	8.8	23.5	0.1	0.75 / 12	0.50 / 12	Counter #: NM
GW-2	9:12	46	-6.56	-1.0	0.11	-1.0	0.11	21.4	11.7	8.2	16.2	0.0 / 12	0.0 / 12	Counter #: NM
GW-3	9:20	50	-6.45	-6.0	0.10	-6.0	0.10	20.4	31.9	31.8	0.0	5.0 / 12	5.0 / 12	Counter #: NM
GW-4	9:26	50	-6.50	-2.2	0.04	-2.2	0.04	12.8	22.5	20.3	4.2	0.5 / 12	0.5 / 12	Counter #: NM
GW-5	9:34	48	-6.48	-5.3	0.03	-0.10	0.03	11.1	13.8	9.2	14.9	0.5 / 12	0.25 / 12	Counter #: NM
GW-6	10:35	48	-6.68	-2.2	0.01	-2.2	0.01	6.4	26.6	31.8	0.0	1.0 / 12	1.0 / 12	Counter #: NM
GW-7	10:29	52	-6.67	-6.6	0.02	-6.6	0.02	9.0	36.5	25.1	0.2	7.0 / 12	7.0 / 12	Counter #: NM
GW-8	10:23	52	-6.56	-6.1	0.02	-6.1	0.02	9.0	63.5	21.0	3.1	7.0 / 12	9.0 / 12	Counter #: NM
GW-9	10:17	48	-6.57	-0.2	0.01	-0.2	0.01	6.4	19.5	8.6	7.8	0.125 / 12	0.125 / 12	Counter #: NM
GW-10	10:11	48	-6.45	-1.0	0.03	-1.0	0.03	11.1	29.5	24.4	0.0	0.50 / 12	0.50 / 12	Counter #: NM
GW-11	9:49	52	-6.70	-1.2	0.04	-1.2	0.04	12.8	20.1	7.4	12.4	0.25 / 12	0.25 / 12	Counter #: NM
GW-12	9:52	50	-6.55	-0.9	0.02	-0.9	0.02	9.0	23.1	14.0	11.2	0.25 / 12	0.25 / 12	Counter #: NM
GW-13	10:00	52	-6.35	-1.8	0.03	-1.8	0.03	11.1	26.7	17.4	9.1	0.25 / 12	0.25 / 12	Counter #: NM

Data Entered By: J. Roelke 3/26/2024 Checked By: M. Wagler 4/16/2024

<sup>(1):</sup> Sample port frozen and no measurement taken.

<sup>(2):</sup> Air compressor system was down and no counter numbers were reported.
"NA" = Data Not Available
"NM" = Not Monitored

## Monthly System Inspection Log Landfill Gas Extraction and Leachate Pump System WDNR - Refuse Hideaway Landfill Middleton, Wisconsin

TRC Operator Name: John Roelke
Date: 3/26/2024 Arrival Time: 7:45 AM Departure Time: 11:45 AM

Site Conditions	Initial <sup>1</sup>	Final <sup>2</sup>	Equipment		
Weather Conditions:	light rain	raining	Gas/Instrument Type:	GEMS 2000	
Ground Condition:	saturated	saturated	Serial Number:	11668	
Barometric Pressure:	29.35 in. Hg	29.36 in. Hg	Date Last Calibrated:	3/26/2024	
Barometric Pressure Trend:	rising	rising	Method:	Standard field calibration	
Temperature:	50 °F	52 <sup>0</sup> F	Pressure Instrument:	Dwyer Series 475 Manometer	

			Landfill Gas Extract	ion System <sup>3</sup>			
	Location	Tag #	Equipment Description	Set Point	Typical Range	Initial Field Reading <sup>1</sup>	Final Field Reading <sup>2</sup>
			Amperage	-	3 - 4 amps	3.14	
	Remote		Speed	-	1800 - 1900 rpm	860.49	
Blower Motor		GHS-BLR-301	Frequency	-	30 - 35 Hz	14.37	
Blower Motor	HMI	GU2-PLK-201	Amperage	-	3 -4 amps	3.1	
	HMI		Speed	-		15	
	HMI		Hours	-	-	12747	
Blower Operating (	YES). Note exces	sive noise or issue	s observed.	•			•
	HMI	PT-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	-7	-7
	HMI	TE-301	Blower Inlet Temperature	-	50 - 90 °F	47	50
	Local	GHS-PI-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	-7.03	-7.06
	Local	GHS-TI-301	Blower Inlet Temperature	-	50 - 90 °F	42	42
Blower Inlet			Gas Composition - % Methane	-		17.1	16.5
			Gas Composition - % CO2	-		17.4	16.7
	Local	Sample Port	Gas Composition - % Oxygen	-		8.5	9.1
			Gas Composition - % Balance	-		57%	57.7%
	Local	GHS-PDI-301	Demister Differential Pressure	-	1-2 in w.c	0.2	
Demister	Local	0.15 1 51 501	Slight Glass: Liquid Present	-	-	no	
	HMI LS-701		Level Indication	-	_		
	HMI	PT-302	Blower Outlet Flow Pressure	-	_	0.1	0.1
	HMI	TE-302	Blower Outlet Temperature	-	50 - 90 °F	54	58
	HMI	PDT-301	Blower Outlet Flow Differential Pressure	_	1-2 in w.c	0.17	0.16
	HMI	-	Blower Outlet Flow Rate	_	180 - 190 scfm	61	59
	Local	GHS-PI-302	Blower Outlet Flow Pressure			0.03	0.04
Blower Outlet	Local	GHS-TI-302	Blower Outlet Temperature	-	50 - 90 °F	50	54
		0113 11 302	Gas Composition - % Methane	-	30 30 1	16.8	16.8
			Gas Composition - % CO2	-		17.1	16.9
	Local	Sample Port	Gas Composition - % Oxygen	-		8.8	8.2
			Gas Composition - % Balance	-		57.3%	58.1%
	Local	North	North Branch Vacuum	-	6 - 7 in w.c.	-6.87	-6.81
	Local	North	Valve Position	6 turns open /6	6 turns open	6	6
	Locui	1401111	Gas Composition - % Methane		o turns open	25.8	24.8
		North Sample	Gas Composition - % CO2	-		16.9	16.7
	Local	Port	Gas Composition - % Oxygen	-		7.5	7.7
		1010	Gas Composition - % Balance	-		49.8%	58.8%
	Local	Central	Central Branch Vacuum	_	6 - 7 in w.c.	-6.85	-6.79
	Local	Central	Valve Position	-	6 turns open	-0.83	-6.79
	Local	Central	Gas Composition - % Methane	-	o turns open	10.9	9.1
Branch Headers		Central	Gas Composition - % CO2	-		9.6	8
	Local	Sample Port	Gas Composition - % Oxygen	-		14.1	15
		Sumple 1 of	Gas Composition - % Oxygen  Gas Composition - % Balance	<del>-</del>		65.4%	67.9%
	Local	South South Branch Vacuum		-	6 - 7 in w.c.	-6.89	-6.82
	Local	South	Valve Position	-	6 turns open	-6.89 6	-0.82
	LUCAI	300111	Gas Composition - % Methane	-	o turns open	21.4	22.5
		South Sample	Gas Composition - % CO2	-	1	21.4	24.7
	Local	Port	Gas Composition - % CO2 Gas Composition - % Oxygen	-		3.7	3.7
		FUIL	Gas Composition - % Oxygen  Gas Composition - % Balance	-	-	50.5%	49.1%
			Gas Composition - % balance			30.3%	49.170

			Air Compre	ssor Systen	1 <sup>3,5,6</sup> (Off Lin	ie)				
		Pres	sure Set Poin	ts			Condensate Se	t Points		
Operational Settings	Tank Low (psi)	Tank High (psi)	Well Field (psi) On (min.) Off (min.)		Open (sec.)	Closed (min.)	Test	Operation		
								(у	es/ <b>no</b> )	
Air Dryer System		Electi	rical Status		HMI Hea	ter/Air Cond	itioner			
System Operationa	System Operational: YES			3-Phase Power Indicator:			Operational		Yes	
Condensate Drain Opera	tional:	Yes	GFI 1 Status:			GREEN	Temperature	emperature 53 °F		
Alarm Indictor:		YES	GFI 2 Status:		GREEN	Filter Cleaned	NO			
Condenser Cleaned	2:	NO	Leachate Tank/Loadout							
Dew Point Inc	licator:		Liquid Level (inches):			47.5	47.5 Visual Check:			
			Contact V	VDNR if leve	l is above	71 inches	· Evidence of Tank Overflow: No		No	
			Leak Dete	ection Test Co	ompleted:	no	· Inspect concrete pad and storm sewer for			
	Indicate which bars		Overfil	Overfill Float Functional <sup>7</sup>			damage or backup. Good			
니니나니니니니니니니	rea (iv) and note	red (R) and note (F) if flashing.		Exhaust Stack						
111111			Drain Stac	Drain Stack Sump (vol. removed)			Stack Condition <sup>6</sup> : good			

<sup>1.</sup> Initial site conditions represents readings collected upon arrival to the site and initial field readings are collected prior to the landfill balancing.

- 2. Final site conditions represents readings collected upon departure from the site and final field readings are collected following the landfill balancing.
- 3. Check all air lines and gas extraction lines for leaks during each site visit. Drain inline air filters and replace as needed.
- 4. Air Dryer Clean the condenser monthly using an air jet (max. 2 bar / 30 psig) inside out. Make sure not to damage the aluminum lamellae of the cooling package.
- 5. On a quarterly basis change the oil and check/clean the air filters and intercoolers for the air compressor.
- 6. Inspect mounting brackets and bolts for the air compressor and effluent stack for tightness.

7. Test overful float operation on a monthly basis.
Comments/Notes: Heat tape is warm to the touch. Cap inspection was completed.

Data Entered By: J. Roelke 3/26/2024 Checked By: M. Wagler 4/16/2024

## Cap Inspection

Note: Photograph all issues encountered during inspection

Note: Keep vehicle traffic to gravel roadways, avoid driving on the landfill surface

Is the landfill surface covered in snow (Y/N)? No

## Inspect the landfill surface when not covered in snow. Describe the condition and any issues observed for each category below:

#### Cap integrity:

- Cap integrity is acceptable

Fencing around GW-1 and GW-2 is damaged but still provides well protection from mowing operations (see photo #6).

-GW-2 GW-3, and GW-4 on the south side have wildlife burrowing inside the fencing. GW-13 on the north side has burrowing

outside the fence. (see photo #5)

- Snow fencing was installed to protect the airlines for the Gas Extraction Wells during mowing events at GW-2, GW-4, GW-7, GW-8, GW-9,

GW-10, GW-11, GW-12, GW-13. Protective fencing remains in place.

#### Condition of drainage ways:

West Drainage Ditch - During the May inspection, areas of vegetation die off were observed at the drainage path to the north.

This area was previously regraded during the 2020-2021 grading work at the site. Currently, the area showed improvement but will still be monitored moving forward.

East Drainage Ditch - Drainage ways are acceptable with minimal to no changes form previous conditions aside from those described below.

#### Extent of vegetation cover:

Vegetation cover is acceptable over the majority of the site (see photo #7). Various areas were reseeded and ground cover was applied in the fall of 2022.

Some bare spots were observed (see photo #3 and #4).

Per discussion with the WDNR, TRC will evaluate the areas in Spring of 2024 and apply seed as needed at that time.

#### Significant erosion:

No evidence if significant erosion was observed at the site.

#### Repeated erosion:

No evidence if significant erosion was observed at the site.

#### Vegetation die-off:

Areas at the west drainage ditch and east drainage ditch previously showed signs of vegetation die-off and were reseeded in the

fall of 2022. Ground cover in these areas remains and TRC will continue to monitor and apply seed as needed in 2024. (see photo #1).

#### Maintain surface water conveyances and the sedimentation basin by completing the following:

#### Inspect drainage ditches for erosion, blockages, and vegetation, describe and note any issues:

Evidence of erosion at the eastern drainage ditch above the sediment basin was observed. Vegetation is in place,

but ruts are present (See photo #2). TRC will continue to monitor the area.

### Inspect sedimentation basin banks and outfalls for erosion, describe and note any issues:

No erosion or other issues at sedimentation basin banks or outfalls.

Measure the distance between the invert of the sedimentation basin outlet and the top of the sediments accumulated in the basin (June Only!): NM

Data Entered By: J. Roelke 3/26/2024

Checked By: M. Wagler 4/16/2024

# Attachment 2 Photographic Log



Client Name:

Wisconsin Department of Natural Resources (WDNR)

Date

Site Location: Refuse Hideaway Landfill Middleton, WI Project No.:

TRC # 457573

Photo No.

3/26/2024

Description

Eastern Drainage Ditch:
Bare spots are present to the north, above the drainage way and will likely require reseeding.



Photo No. Date

2 3/26/2024

**Description** 

Eastern Drainage Ditch:

Evidence of erosion starting to occur was observed at the north portion of the eastern drainage ditch leading to the sediment basin. Vegetation is still intact but ruts are present.





**Client Name:** 

Wisconsin Department of Natural Resources (WDNR)

3/26/2024

Site Location: Refuse Hideaway Landfill Middleton, WI Project No.:

TRC # 457573

Photo No. Date

Description

3

Eastern Landfill Extents
Reseeding and ground cover
was previously applied in the
Fall of 2022. Some bare spots
remain and will likely require
reseeding.



Photo No. Date
4 3/26/2024

Description

Eastern Landfill Extents
Reseeding and ground cover
was previously applied in the
Fall of 2022. Some bare spots
remain and will likely require
reseeding.





**Client Name:** 

Wisconsin Department of Natural Resources (WDNR)

3/26/2024

Site Location: Refuse Hideaway Landfill Middleton, WI Project No.:

TRC # 457573

Photo No. Date

Description

5

Southern Landfill Extents
GW-2, GW-3 and GW-4 have
burrowing from wildlife inside
fencing. GW-13 has burrowing
from wildlife outside fencing.



Photo No. Date
6 3/26/2024

**Description** 

Southern Landfill Extents: GW-2 protective fencing is falling apart. Fencing still provides protection during mowing operations. GW-1 protective fencing is in the same condition as GW-2.





Client Name:
Wisconsin Department of Natural
Resources (WDNR)

Site Location: Refuse Hideaway Landfill Middleton, WI Project No.:

TRC # 457573

Photo No. Date

7 3/26/2024

Description

Northern Landfill Extents:

Cap remains in good condition with full vegetation cover.

