

August 18, 2023

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

Subject: Refuse Hideaway Landfill

July 2023 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 July 2023.

- July 5, 2023 Gas Probe Monitoring
- July 14, 2023 Bi-weekly Site Inspection
- July 28, 2023 Monthly Site and Cap Inspections

### **Electrical Upgrades**

TRC and Van Ert Electrical Company Inc. (Van Ert) are working to restore electrical service to the Site to allow for system operation. Van Ert is working to procure the necessary equipment for the electrical system repairs/upgrades. Van Ert is waiting on the equipment from the supplier to move forward.

## **Gas Extraction System**

The gas extraction system (GES) was restarted in October 2022 and was operated until December 15, 2022, when an overvoltage fault was observed and the system was shut down until the electrical service to the Site is repaired.

Perimeter gas probe monitoring was conducted at the site on July 5, 2023.

Field data from system and gas probe monitoring is included in Attachment 1.

## **Leachate Extraction System**

The leachate extraction system remained off during the month of July due to the issues with the electrical service to the Site.

The leachate tank level was gauged on July 14 and July 28, 2023, and contained 41.0 inches and 43.5 inches of leachate, respectively.

## **Cap Inspection**

TRC conducted a monthly inspection of the landfill cap and stormwater conveyance features on July 28, 2023. The landfill cap and stormwater conveyance features are operational. TRC will continue

Ms. Cindy Koepke Wisconsin Department of Natural Resources August 18, 2023 Page 2

to observe the condition of the features as the growing season continues. 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.

Sincerely,

**TRC** 

Molly Wagler
Molly Wagler, EIT
Project Engineer

Andrew Stehn, PE Project Manager

andrew M. Stehn

Attachments: 1. July 2023 Monitoring Results

2. Photographic Log

# Attachment 1 July 2023 Monitoring Results

## REFUSE HIDEAWAY LANDFILL GAS PROBE MONITORING FORM

TECHNICIAN(S): <u>J. Roelke</u>

DATE: <u>7/5/2023</u>

START TIME: 7:16 AM

END TIME: 12:30 PM

GAS/INSTRUMENT TYPE: GEM 2000

SERIAL NO.: 11668 WEATHER CONDITIONS: sunny

DATE LAST CALIBRATED: 7/5/2023 TEMPERATURE: 73 °F

METHOD: Standard Calibration Gases BAROMETRIC PRESSURE & TREND: 29.93 in. Hg, steady

PRESS INSTRUMENT : Manometer GROUND CONDITIONS: dry

		PRESSURE	METHANE	METHANE	CARBON DIOXIDE	OXYGEN	
GAS PROBE NAME	Time	(in. WC)	(% LEL)	(%, by vol.)	(%, by vol.)	(%, by vol.)	COMMENTS
GP-1D	7:35	0.04	24	1.2	10.1	5.1	(2)
GP-1S	7:37	0.07	>100	8.3	17.6	0.0	(2)
GP-2D	7:38	0.12	46	2.3	9.3	8.0	(1)
GP-2S	7:40	0.0	80	4.0	15.7	0.0	(1)
GP-3	7:44	0.0	0.0	0.0	3.3	17.1	(1)
GP-4	7:50	0.0	0.0	0.0	3.9	16.6	(1)
GP-5	7:53	0.0	0.0	0.0	3.9	15.4	(2)
GP-6	8:00	0.0	0.0	0.0	3.5	17.0	(1)
GP-7	8:07	0.0	0.0	0.0	2.4	18.3	(2)
GP-8	8:15	0.0	0.0	0.0	3.4	18.1	(2)
GP-9	8:20	0.0	0.0	0.0	2.4	19.1	(1)
GP-10	8:24	0.00	0.0	0.0	4.9	14.2	(1)
GP-11D	8:31	0.03	>100	6.1	15.4	0.0	(2)
GP-11S	8:28	0.0	>100	5.4	14.1	0.0	(2) Stable readings at 2 minutes.
GP-12D	8:35	0.0	>100	12.7	19.1	1.1	(1) Stable readings at 2 minutes.
GP-12S	8:38	0.0	0.0	0.0	4.5	16.0	(1)
GP-13D	8:44	0.08	46.0	2.3	10.5	7.0	(2)
GP-13S	8:46	0.06	0.0	0.0	12.0	1.0	(2)

GAS PROBE NAME	Time	PRESSURE (in. WC)	METHANE (% LEL)	METHANE (%, by vol.)	CARBON DIOXIDE (%, by vol.)	OXYGEN (%, by vol.)	COMMENTS
GP-16D	9:09	0.0	0.0	0.0	1.3	19.0	(2)
GP-16S	9:11	0.0	0.0	0.0	2.6	18.8	(2)
GP-17D	9:04	0.0	0.0	0.0	4.3	15.6	(1)
GP-17M	9:06	0.0	0.0	0.0	3.5	17.2	(1)
GP-17S	9:08	0.0	0.0	0.0	3.8	17.9	(1)
GP-18D	9:14	0.0	0.0	0.0	2.2	17.7	(2)
GP-18M	9:16	0.0	0.0	0.0	4.2	16.1	(2)
GP-18S	9:18	0.0	0.0	0.0	5.9	11.8	(2)
GP-19 <sup>85-100</sup>	10:05	0.04	0.0	0.0	0.0	20.8	(1)
GP-19 <sup>50-70</sup>	10:07	0.0	0.0	0.0	0.7	19.9	(1)
GP-19 <sup>25-40</sup>	10:09	0.0	0.0	0.0	0.2	20.5	(1)
GP19 <sup>2-15</sup>	10:11	0.03	0.0	0.0	0.0	20.8	(1)
GP-20 <sup>85-100</sup>	9:56	0.0	0.0	0.0	0.2	20.4	(2)
GP-20 <sup>50-70</sup>	9:58	0.0	0.0	0.0	0.0	20.8	(2)
GP-20 <sup>25-40</sup>	10:00	0.0	0.0	0.0	0.0	20.8	(2)
GP-20 <sup>2-15</sup>	10:02	0.0	0.0	0.0	0.3	20.5	(2)
GP-21 <sup>85-100</sup>	9:46	0.19	0.0	0.0	0.3	20.6	(2)
GP-21 <sup>50-70</sup>	9:48	0.0	0.0	0.0	0.0	20.8	(2)
GP-21 <sup>25-40</sup>	9:50	0.0	0.0	0.0	0.0	20.8	(2)
GP-21 <sup>2-15</sup>	9:52	0.0	0.0	0.0	0.4	20.5	(2)
GP-22 <sup>85-100</sup>	10:17	0.0	0.0	0.0	1.6	19.6	(2)
GP-22 <sup>50-70</sup>	10:19	0.0	0.0	0.0	0.4	20.4	(2)
GP-22 <sup>25-40</sup>	10:21	0.0	0.0	0.0	0.5	20.3	(2)
GP-22 <sup>2-15</sup>	10:23	0.0	0.0	0.0	1.4	19.7	(2)

GAS PROBE NAME	Time	PRESSURE (in. WC)	METHANE (% LEL)	METHANE (%, by vol.)	CARBON DIOXIDE (%, by vol.)	OXYGEN (%, by vol.)	COMMENTS
GP-23 <sup>85-100</sup>	10:28	0.0	0.0	0.0	0.0	20.8	(2)
GP-23 <sup>50-70</sup>	10:30	0.0	0.0	0.0	0.0	20.8	(2)
GP-23 <sup>25-40</sup>	10:32	0.0	0.0	0.0	0.0	20.8	(2)
GP-23 <sup>2-15</sup>	10:34	0.0	0.0	0.0	0.6	20.3	(2)
GP-24 <sup>85-100</sup>	10:37	0.0	0.0	0.0	0.9	19.6	(2)
GP-24 <sup>50-70</sup>	10:39	0.0	0.0	0.0	1.2	19.3	(2)
GP-24 <sup>25-40</sup>	10:41	0.0	0.0	0.0	0.9	19.7	(2)
GP-24 <sup>2-15</sup>	10:43	0.0	0.0	0.0	1.3	19.4	(2)
GPW-1D	12:02	0.10	0.0	0.0	1.8	19.8	(1)
GPW-1M	12:04	0.09	0.0	0.0	0.5	20.4	(1)
GPW-1S	12:06	0.0	0.0	0.0	0.7	20.1	(1)
G-1D	7:28	0.04	79.0	3.9	17.2	0.0	(1)
G-1S	7:30	0.05	>100	17.5	22.1	0.0	(1)
G-2D	8:51	0.0	0	0.0	1.1	19.8	(1)
G-2S	8:53	0.0	>100	7.8	7.7	0.0	(1)
G-5	8:12	0.17	0.0	0.0	5.3	16.4	(1)
G-6	7:21	0.0	0.0	0.0	0.6	20.3	(1)
G-8	9:37	0.0	0.0	0.0	0.4	19.9	(1)
G-9	9:24	0.0	0.0	0.0	0.1	20.7	(1)
G-10	10:53	0.17	0.0	0.0	0.2	20.5	(1)
Speedway Office	7:33	0.0	0.0	0.0	0.0	20.8	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 7/5/2023 Checked by: M. Wagler 7/5/2023

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

TRC Operator Name:	Andrew Stehn		
Date: 7/14/2023	Arrival Time: 2:30 PM	Departure Time: 3:3	0 PM
	Site Conditions		Equipment
Weather Conditions	clear	Gas/Instrument Type:	
Ground Condition:	dry	Serial Number:	
Barometric Pressure	: 29.77	Date Last Calibrated:	Not Applicable
Barometric Pressure Tre	end: rising	Method:	
Temperature:	89 F	Pressure Instrument:	

System	Location	Tag #	Equipment Description	Set Point	Typical Range	Field Reading
System	Locution	rug #	Amperage	Jet i ome	3 - 4 amps	NM
	Remote	<del> </del>	Speed	_	1800 - 1900 rpm	NM
	neote	<del> </del>	Frequency	-	30 - 35 Hz	NM
Blower Motor	HMI	GHS-BLR-301	Amperage	_	3 -4 amps	NM
	HMI	† <b>–</b>	Speed	-	3 4 dilips	NM
	HMI	† <b>–</b>	Hours	_	_	NM
l						
lower Operating	(yes/no). Not	e excessive noise or	rissues observed.			
	HMI	PT-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	NM
	HMI	TE-301	Blower Inlet Temperature	-	50 - 90 °F	NM
	Local	GHS-PI-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	NM
Diaa. Inlat	Local	GHS-TI-301	Blower Inlet Temperature	-	50 - 90 °F	NM
Blower Inlet			Gas Composition - % Methane	-		NM
	Local	Sample Port	Gas Composition - % CO2	-		NM
	LUCAI	Sample Port	Gas Composition - % Oxygen	-		NM
			Gas Composition - % Balance	-		NM
	Local	GHS-PDI-301	Demister Differential Pressure	-	1-2 in w.c	NM
Demister	Local		Slight Glass: Liquid Present	-	-	NM
	HMI	LS-701	Level Indication	-	-	NM
	HMI	PT-302	Blower Outlet Flow Pressure	-	-	NM
	HMI	TE-302	Blower Outlet Temperature	-	50 - 90 °F	NM
Blower Outlet	HMI	PDT-301	Blower Outlet Flow Differential Pressure	-	1-2 in w.c	NM
	HMI	-	Blower Outlet Flow Rate	-	180 - 190 scfm	NM
	Local	GHS-PI-302	Blower Outlet Flow Pressure	-	-	NM
	Local	GHS-TI-302	Blower Outlet Temperature	-	50 - 90 °F	NM
	Local		Gas Composition - % Methane	-		NM
		Commis Dont	Gas Composition - % CO2	-		NM
		Sample Port —	Gas Composition - % Oxygen	-		NM
			Gas Composition - % Balance	-		NM
	Local	North	North Branch Vacuum	-	6 - 7 in w.c.	NM
	Local	North	Valve Position	6 turns open /6	6 turns open	NM
			Gas Composition - % Methane	-		NM
		North Sample	Gas Composition - % CO2	-		NM
	Local	Port	Gas Composition - % Oxygen	-		NM
			Gas Composition - % Balance	-		NM
	Local	Central	Central Branch Vacuum	-	6 - 7 in w.c.	NM
	Local	Central	Valve Position	-	6 turns open	NM
Danash III - I			Gas Composition - % Methane	-		NM
Branch Headers		Central	Gas Composition - % CO2	-		NM
	Local	Sample Port	Gas Composition - % Oxygen	-		NM
		'	Gas Composition - % Balance	-		NM
	Local	South	South Branch Vacuum	-	6 - 7 in w.c.	NM
	Local	South	Valve Position	-	6 turns open	NM
			Gas Composition - % Methane	-		NM
		South Sample	Gas Composition - % CO2	-		NM
	Local	Port	Gas Composition - % Oxygen	-		NM
		· · · ·	Gas Composition - % Balance	-		NM

Air Compressor System 1,3,4 Air Compressor System Off Line									
		Pressu	re Set Points				Condensate Set Points		
Organisa al Cattinga	Tank Low	Tank Low Tank High		Well Field On Off		Open	Closed		
Operational Settings	(psi)	(psi)	(psi)	(min.)	(min.)	(sec.)	(min.)	Test Operation	
Air Drye	r System <sup>2</sup>			Elect	rical Status	3	HMI Heat	ter/Air Conditioner	
		NO (Comment							
System Operation	al:	1)	3-Phase Power Indicator:		<u>3</u> of 3	Operational	YES (Comment 2)		
Condensate Drain Oper	ational:	YES	GFI 1 Status:		( <u>Green</u> / Red)	Temperature	95 F		
Alarm Indictor:		OFF	GFI 2 Status:		( <u><b>Green</b></u> / Red)	Filter Cleaned	NO		
Condenser Cleane	ed²:	NO	Lea			Leachate Tank/I	oadout_		
Dew Point	Indicator:		Liquid Level (inches):			41	41 Visual Check:		
			Contact W	DNR if level	is above	71	· Evidence of Tank	Overflow: NO	
				ction Test Co	mpleted:	NO	·Inspect concrete pad and storm sewer		
Indicate which bars are green(G) or red (R)		Overfill Float Functional <sup>5</sup> :			NO (Comment 3) for damage or backup - None observe		ackup - None observed		
	and note	(i / ii iiusiiiig.				Exhaust Sta	Exhaust Stack		
		Drain Stack S		Prain Stack Sump (vol. removed)		Drain Stack Sump (vol. removed) 0		0 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:

NM - Not Measured

- 1. Air Dryer System currently off as air compressor system is not running due to electrical service issue.
- 2. Air conditioner observed to turn on and operational during Site visit.
- 3. The light bulb for the high level indicator for the leachate tank was not functional.

Data Entered By: A. Stehn 07/14/2023 Checked By: M. Wagler 7/17/2023

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

TRC Operator Name: M. Wagler
Date: 7/28/2023 Arrival Time: 10:40 AM Departure Time: 11:45 AM

Site Conditions	Initial <sup>1</sup>	Final <sup>2</sup>	E	quipment
Weather Conditions:	Sunny	NM	Gas/Instrument Type:	NA
Ground Condition:	Dry	NM	Serial Number:	NA
Barometric Pressure:	29.87 in. Hg	NM	Date Last Calibrated:	NA
Barometric Pressure Trend:	Falling	NM	Method:	NA
Temperature:	89	NM	Pressure Instrument:	Dwyer Series 475 Manometer

		1 1	Landfill Gas Extraction System <sup>3</sup> Landf				
System	Location	Tag #	Equipment Description	Set Point	Typical Range	Initial Field Reading <sup>1</sup>	Final Field Reading
			Amperage	-	3 - 4 amps	NM	
	Remote		Speed	-	1800 - 1900 rpm	NM	
Blower Motor		GHS-BLR-301	Frequency	-	30 - 35 Hz	NM	
	HMI	<b>↓</b> ` ` `	Amperage	-	3 -4 amps	NM	
	HMI	<b>↓</b>	Speed	-		NM	
	HMI		Hours	-	-	NM	
ower Operating	(No). Note exc	essive noise or is:	sues observed.				
	HMI	PT-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	NM	NM
	HMI	TE-301	Blower Inlet Temperature	-	50 - 90 °F	NM	NM
	Local	GHS-PI-301	Blower Inlet Vacuum	7 in. w.c.	7 in. w.c.	NM	NM
Blower Inlet	Local	GHS-TI-301	Blower Inlet Temperature	-	50 - 90 °F	NM	NM
Blower Inlet			Gas Composition - % Methane	-		NM	NM
	Land	Communic Don't	Gas Composition - % CO2	-		NM	NM
	Local	Sample Port	Gas Composition - % Oxygen	-		NM	NM
			Gas Composition - % Balance	=		NM	NM
	Local	GHS-PDI-301	Demister Differential Pressure	-	1-2 in w.c	NM	
Demister	Local		Slight Glass: Liquid Present	-	-		
	HMI	LS-701	Level Indication	-	-		
	HMI	PT-302	Blower Outlet Flow Pressure	-	-	NM	NM
	HMI	TE-302	Blower Outlet Temperature	-	50 - 90 °F	NM	NM
	HMI	PDT-301	Blower Outlet Flow Differential Pressure	=	1-2 in w.c	NM	NM
	HMI	-	Blower Outlet Flow Rate	-	180 - 190 scfm	NM	NM
Blower Outlet	Local	GHS-PI-302	Blower Outlet Flow Pressure	-	-	NM	NM
blower outlet	Local	GHS-TI-302	Blower Outlet Temperature	-	50 - 90 °F	NM	NM
		Sample Port	Gas Composition - % Methane	-		NM	NM
	Local		Gas Composition - % CO2	-		NM	NM
			Gas Composition - % Oxygen	-		NM	NM
			Gas Composition - % Balance	-		NM	NM
	Local	North	North Branch Vacuum	-	6 - 7 in w.c.	NM	NM
	Local	North	Valve Position	6 turns open /6	6 turns open	NM	NM
			Gas Composition - % Methane	-		NM	NM
	Local	North Sample	Gas Composition - % CO2	-		NM	NM
		Port	Gas Composition - % Oxygen	-		NM	NM
			Gas Composition - % Balance	-		NM	NM
	Local	Central	Central Branch Vacuum	-	6 - 7 in w.c.	NM	NM
	Local	Central	Valve Position	-	6 turns open	NM	NM
ranch Headers		l	Gas Composition - % Methane	-		NM	NM
	Local	Central	Gas Composition - % CO2	-		NM	NM
		Sample Port	Gas Composition - % Oxygen	-		NM	NM
		<b> </b>	Gas Composition - % Balance	-		NM	NM
	Local	South	South Branch Vacuum	-	6 - 7 in w.c.	NM	NM
	Local	South	Valve Position	-	6 turns open	NM	NM
		Country C	Gas Composition - % Methane	-		NM	NM
	Local	South Sample	Gas Composition - % CO2	-		NM	NM
		Port	Gas Composition - % Oxygen	-		NM	NM

			Air C	ompressor	System <sup>3,5,6</sup>				
		Pres	sure Set Poin				Condensate Set Points		
Operational Settings	Tank Low (psi)	Tank High (psi)	Well Field (psi) On (min.) Off (min.		Off (min.)	Open (sec.)	Closed (min.)	Test (	Operation
				NOT OPER	RATING			(ye	es/no)
Air Dryer S	ystem <sup>4</sup>			Electr	ical Status		HMI Hea	ter/Air Cond	itioner
System Operation	al:	NA	3-Phas	e Power Indi	cator:	<u>3</u> of 3	Operational Yes		Yes
Condensate Drain Oper	ational:	NA		GFI 1 Status:		GREEN	Temperature	92/88	
Alarm Indictor:		NA		GFI 2 Status:		GREEN	Filter Cleaned	No	
Condenser Cleane	ed <sup>2</sup> :	No				Leachate Tank	/Loadout		
Dew Point Ir	ndicator:		Liquid Level (inches):		43.5 Visu		isual Check:		
			Contact V	/DNR if level	is above	71 inches	· Evidence of Tank	Overflow:	No
	-5777		Leak Dete	Leak Detection Test Completed:		No	·Inspect concrete pad and storm sewer for		orm sewer for
		Indicate which bars are green(G) or red (R) and note (F) if flashing.		Overfill Float Functional <sup>7</sup>			No* damage or backu		
	. ca () and note	(1 / 11 1103/IIIIg.				Exhaust S	tack		
			Drain Stac	k Sump (vol.	removed)	0	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 overfill float operation on a monthly basis.

Comments/Notes:
Conducted cap inspection
NM - Not Measured
* Overflow alarm light not working

Created By: M. Wagler 8/1/2023 Checked By: T. Perkins 8/14/2023

#### 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).
- 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 (see photo #6).

#### Condition of drainage ways:

West Drainage Ditch - During the July inspection, areas of vegetation die off were observed at the drainage path to the north. This area was previously identified as having less positive slope than its surrounding and was regraded during 2020-2021 grading work at the site. The final post construction survey showed positive slope. 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. Various areas were reseeded and ground cover was applied in the fall of 2022. Various areas that were previously reseeded show evidence of little to no regrowth and may require additional reseeding. (see photo #3 and #4).

#### 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 regrowth in 2023. (see photo #1 and #5).

#### 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 starting to from (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

## Attachment 2 Photographic Log



Client Name: Wisconsin Department of Natural Resources (WDNR) Site Location: Refuse Hideaway Landfill Middleton, WI **Project No.:** TRC # 457573

Photo No. Date
1 7/28/2023

Description

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



 Photo No.
 Date

 2
 7/28/2023

**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 starting to form.





Client Name:
Wisconsin Department of Natural
Resources (WDNR)

Site Location: Refuse Hideaway Landfill Middleton, WI **Project No.:** TRC # 457573

Photo No. Date 7/28/2023

## 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.



Photo No.	Date
4	7/28/2023

### 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)

Site Location: Refuse Hideaway Landfill Middleton, WI **Project No.:** TRC # 457573

Photo No. Date 5 7/28/2023

Description

Southern/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
6	7/28/2023

#### 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 7/28/2023

Description

Northern Landfill Extents: Cap remains in good condition with full vegetation cover.

