

NHDES Waste Management Division 29 Hazen Drive; PO Box 95 Concord, NH 03302-0095



Annual Post-Closure Report 2023 Grove Road Municipal Landfill Grove Road Rve, NH 03870 NHDES Site #: 123456789

> **Project Type: LAND/UNLN Project Number: 0002039**

> > Prepared for:

Town of Rye 10 Central Road Rye, NH 03870 Phone Number (603) 964-5523 **RP Contact Name: Matt Scruton**

RP Contact Email: mscruton@town.rye.nh.us

Prepared by: CMA Engineers, Inc. 35 Bow Street Portsmouth, NH 03801

Phone Number: (603) 817-4716 Contact Name: Jodie Bray Strickland, P.E. Contact Email: jstrickland@cmaengineers.com

Date of Report: March 29, 2024



ANNUAL POST-CLOSURE REPORT

Inactive (Closed) Solid Waste Landfills Reporting Year 2023



Waste Management Division, SWMB

RSA 149-M / Env-Sw 1105.07(b)(2), Env-Sw 1105.14, & Env-Sw 807.05(i)

Complete and return this form by MARCH 31, 2024.

1. Facility Identification		
Facility Name		
Grove Rd Landfill		
Physical Street Address		
Grove Rd		
Municipality	Solid Waste Facility Per	mit Number
Rye	SW-TP-95-003	
2. Permittee Information		
Permittee		
Town of Rye		
Mailing Address		
10 Central Rd		
Town/City	State	ZIP Code
Rye	NH	03870
Email Address	Daytime Phone Numbe	r
3. Contact Person Check this box if this	information has changed from last year.	П
Name	Job Title	
Matt Scruton	Town Administrator	
Affiliation		
Email Address	Daytime Phone Numbe	r
mscruton@town.rye.nh.us	(603) 964-5523	
4 Inspections		
4. Inspections		Data Inspection Beneat Submitted
Date of Inspection	Inspector	Date Inspection Report Submitted

Jodie Bray Strickland, P.E.

Max Huynh, E.I.T.

5/23/2023

11/02/2023

/2023 /2023 to NHDES*

^{*} Inspection reports are due 30 days following the inspection. See <u>Env-Sw 807.05(h)</u>. If you did not submit the inspection reports for this reporting year, attach them and check this box \boxtimes .

	SUMMARY OF INSPECTION FINDINGS							
	A. General Site Condition	Yes	No	N/A	Describe Condition			
1.	Is access to the landfill restricted by use of gates, fences or natural barriers? Ref Env-Sw 807.03(b)(11)	\boxtimes						
2.	Are weather-resistant legible signs posted around the perimeter of the landfill in areas where fencing is not used? Ref Env-Sw 807.03(b)(11)	\boxtimes						
3.	Is the access road(s) properly graded and drained? Ref Env-Sw 806.08(c)	\boxtimes						
4.	Is any portion of the site used for activities other than post- closure monitoring and maintenance? If you answered "yes," list these activities in Section 7 (Additional Information). For each activity, indicate if it is on or off cap/cover. Ref Env-Sw 807.05 (o)		\boxtimes					
5.	Are all groundwater monitoring wells accessible and in good condition? Ref Env-Sw 807.03(b)(8)							
6.	Is the surface water monitoring system functioning and maintained? Ref Env-Sw 807.03(b)(8)							
	B. Stormwater System Condition [Ref Env-Sw 807.03(b)(5)]	Yes	No	N/A	Describe Condition			
1.	Are the sedimentation/detention ponds maintained (e.g., sedimentation removed, no overgrown vegetation)?			\boxtimes				
2.	Are culverts intact and free of obstructions?							
3.	Are perimeter drainage swales/ditches well maintained, unobstructed, and free flowing?							
4.	Do all drainage swales have positive drainage?			\boxtimes				
	Are the methods used to control surface water well maintained (e.g., berms, benches)?							
6.	Are runoff channels protected to prevent scour and erosion that creates sediment?			\boxtimes				
7.	Is there evidence of erosion (e.g., sedimentation in drainage ditches and ponds)?							
8.	Are storm drains in good condition (e.g., frame, grate, wall joints, pumps, sumps, pipes, inlet and outlet stone)?			\boxtimes				
	C. Decomposition Gas Control System [Ref Env-Sw 807.03(b)(9)]	Yes	No	N/A	Describe Condition			
1.	Is the gas management system: Passive OR Active							
2.	If the facility has an active gas management system, are all components of the system in good working order (e.g., blower, flare)? Date the system was last tested:			\boxtimes				
3.	If the facility has a passive gas management system, are all gas vents in good condition and functional (e.g., vent cap, riser pipe)?			\boxtimes				
4.	Are all soil gas probes in good condition and functional?							
5.	Are all indoor air quality monitors in good condition and functional?							
6.	Are there any landfill odors?		\boxtimes					
7.	Is there evidence of stressed (e.g., damaged/weakened) vegetation?							

C. Decomposition Gas Control System [Ref Env-Sw 807.03(b)(9)]	Yes	No	N/A	Describe Condition
8. Is the permittee required to monitor methane generation from the landfill? If "no," provide an explanation in Section 7 (Additional Information). If "yes," answer the following questions in this section and attach a summary table of all methane data collected; include data from vents, soil probes, and indoor air quality monitors (as applicable). Evaluate any trends in Section 6 (Summary and Assessment).				
I. For this calendar reporting year, have methane levels exceeded 25% of the LEL inside any on or off-site structures? Ref Env-Sw 806.07(b)(1)			\boxtimes	
II. For this calendar reporting year, have methane levels exceeded 50% of the LEL at the property line within the soil? Ref <u>Env-Sw 806.07(b)(2)</u>				
III. If "yes" to question I. or II. above, did the permittee implement contingency procedures to ensure protection of public health & safety; and notify NHDES immediately?				
D. Cap (Cover) Condition [Ref Env-Sw 807.03(b)(4)]	Yes	No	N/A	Describe Condition
Is cap settlement uniform? (i.e. No visual evidence of depressions, water ponding, cracking, and/or sloughing)	\boxtimes			
2. Is an instrument survey of the cap required? Ref Env-Sw 807.03(b)(10) If "yes," attach a summary table of all survey data collected and provide an evaluation of any trends. Date(s) the survey was conducted this reporting year:				
3. Does cap slope promote runoff?				
4. Is the cap mowed on a regular basis? NHDES recommends that landfills be mowed twice per year. Date(s) the landfill was mowed for this reporting year:		\boxtimes		
5. Is there evidence of erosion (e.g., erosion rills, exposed soil)?		\boxtimes		
6. Is the vegetative layer in good condition?				
7. Is there evidence of damage due to unauthorized access?		\boxtimes		

E. Leachate Collection and Leak Detection Systems [Ref Env-Sw 807.03(b)(6) & Env-Sw 807.03(b)(7)]	Yes	No	N/A	Describe Condition
1. Are there any leachate breakouts or seeps, either on or off the landfill property?				
Does the landfill have a leachate collection and/or leak detection system? If "yes," answer the following:				
I. Are leachate collection and leak detection system appurtenances functioning properly?				
II. Is leachate stored on-site prior to disposal? If "yes," what quantity of leachate is currently stored on-site?				
III. Is leachate properly removed and disposed of on a periodic basis?If "yes," what is the frequency of disposal and the disposal destination?				

5. Action Items Summary

Action Item		Forward 2022?	Date Completed	Date to be Completed	Information Attached?
Tubing for MW-101 extends higher than the metal casing. Cut tubing and resurvey the top of the well.	Yes	⊠ No		2024	\boxtimes
Brush at MW-2D and MW-4. Cut back brush.	Yes	⊠ No		2024	\boxtimes
Remove fallen trees.	Yes	⊠ No		2024	\boxtimes
	Yes	☐ No			
	Yes	☐ No			
	Yes	□No			
	Yes	☐ No			
	Yes	☐ No			

NHDES-S-05-057

See attached.	
Additional Information Use additional sheets if necessary.	
	`
S ignature signing below, I affirm that the material and information su	hmitted in this report is correct and complete to the h
my knowledge and belief, and that I am the permittee or a p	·
Mary to	3/29/24
nature of Permittee or Duly Authorized Individual	Date
tt Scruton	Town Administrator
nted Name of Signatory	Title / Permittee Affiliation
s report contains <u>16</u> attached pages.	
rm Submittal Instructions:	
rm Submittal Instructions: case submit the completed form in PDF via email to <u>solidwas</u>	steinfo@des.nh.gov or upload to NHDES' OneStop Da
<u>ovider</u> portal using the universal solid waste management si	
ovider, you may complete a <u>registration form</u> to request a us	sername, pin and password. Please do not submit a p
	submit. If you must submit the PCR in paper form, for

tracking purposes please notify us by email, sent to solidwasteinfo@des.nh.gov, that you have submitted the PCR in paper form.

While not required, NHDES recommends that the permittee keep a copy of the completed PCR.

Section 6 - Summary and Assessment of Environmental Monitoring

Per NHDES guidance, inspections of the Grove Road Landfill occurred twice in 2023 in May and November. Inspections include assessment of monitoring wells and the landfill surface.

The landfill surface shows no signs of erosion.

The landfill surface is not generally mowed. Maintenance of the access road was completed on August 21st. Vegetation is healthy with no sparse areas. All slopes are stable. There is no evidence of differential settling.

Groundwater monitoring wells were observed to be in good condition. Groundwater is monitored once a year in April. The concentration of manganese detected at MW-101 (0.36 mg/L) exceeded the ambient groundwater quality standard (AGQS) of 0.3 mg/L. Per- and polyfluoroalkyl substances (PFAS) were analyzed at eight wells in 2023 in April, July, or during both months. There were concentrations detected that exceeded the AGQS of PFOA and PFOS at multiple wells on site. Additional PFAS sampling was completed at two Rye Water District test wells in July; PFAS were detected at trace concentrations. Sampling for PFAS was also conducted at six private water supply wells within 500' of the groundwater management zone in June of 2023; there were PFAS detected but no AGQS exceedances. Water quality summary tables have been submitted with the groundwater summary and are not provided herein.

The Grove Road Municipal Landfill is registered as a pre-July 10, 1981 landfill through NHDES and therefore was not subject to closure requirements under the NHDES Solid Waste Rules. However, we believe that the landfill is achieving post-closure performance standards, as evidenced by stable groundwater quality, and recommend no adjustments to the current post-closure monitoring and maintenance period.



	FACILITY INSPECTIO	N INFORM	OITAN	N		
Facility Name:	I C' II					
Grove Road Municipal La	natili					
Physical Street Address:						
Grove Road						
Town/City:		Solid Wa	ste Fa	cility	Permit	Number:
Rye		SW-T	P-95	5-00	3	
Inspection Date:	Inspector:				Inspect	tion:
May 23, 2023	Jodie Bray S	tricklan	d P	F	Bian	
ay 20, 2020	Cours Bray C	<u></u>	· · · ·		<u> </u>	
	SUMMARY OF INSPI	ECTION FIN	NDING	S	T	I
A. General Site C	ondition		Yes	No	N/A	Describe Condition
1. Is access to the landfill restricted by	use of gates, fences,	or		П		
natural barriers? Ref Env-Sw 807.03			✓	Ш		
2. Are weather-resistant legible signs p				_		
of the landfill in areas where fencin 807.03(b)(11)	g is not used? Ref <u>Env</u>	<u>/-SW</u>		Ш		
3. Is the access road(s) properly graded	d and drained? Ref En	nv-Sw				
806.08(c)			✓			
4. Is any portion of the site used for ac						
closure monitoring and maintenance				V		
these activities in Section 7 (Additional activity, indicate if it is on or off cap						
5. Are all groundwater monitoring wel						Caa balaw
condition? Ref Env-Sw 807.03(b)(8)			Ш	V		See below.
6. Is the surface water monitoring syst	•				V	
maintained? Ref Env-Sw 807.03(b)(<u>8)</u>		Ш			
B. Stormwater Syste	m Condition					
[Ref Env-Sw 807.			Yes	No	N/A	Describe Condition
1. Are the sedimentation/detention po	. •	,			V	
sedimentation removed, no overgro					+=	
2. Are culverts intact and free of obstr						
3. Are perimeter drainage swales/ditcl unobstructed, and free flowing?	nes well maintained,		Ш	Ш		
4. Do all drainage swales have positive	e drainage?				V	
5. Are the methods used to control su	rface water well main	tained				
(e.g., berms, benches)?				Ш		
6. Are runoff channels protected to pr creates sediment?	event scour and erosi	on that			$\overline{\checkmark}$	
7. Is there evidence of erosion (e.g., se	edimentation in draina	age				
ditches and ponds)?					V	
8. Are storm drains in good condition pumps, sumps, pipes, inlet, and out		all joints,			V	

C. Decomposition Gas Control System [Ref Env-Sw 807.03(b)(9)]		No	N/A	Describe Condition
1. Is the gas management system: Passive OR Active			7	
If the facility has an active gas management system, are all			 V	
components of the system in good working order (e.g., blower,	П	П		
flare)? Date the system was last tested:		—		
3. If the facility has a passive gas management system, are all gas vents in good condition and functional (e.g., vent cap, riser pipe)?			V	
4. Are all soil gas probes in good condition and functional?			V	
5. Are all indoor air quality monitors in good condition and functional?			<u></u>	
6. Are there any landfill odors?	П	V		
7. Is there evidence of stressed (e.g., damaged/weakened)				
vegetation?	Ш			
8. Is the permittee required to monitor methane generation from				
the landfill?				
If "no," provide an explanation in Section 7 (Additional				
Information).		V		
If "yes," answer the following questions in this section and attach a				
summary table of all methane data collected; include data from vents, soil				
probes, and indoor air quality monitors (as applicable). Evaluate any trends in Section 6 (Summary and Assessment).				
I. For this calendar reporting year, have methane levels				
exceeded 25% of the LEL inside any on or off-site structures?		V		
Ref Env-Sw 806.07(b)(1)	ш			
II. For this calendar reporting year, have methane levels				
exceeded 50% of the LEL at the property line within the soil?		$\overline{\mathbf{V}}$		
Ref <u>Env-Sw 806.07(b)(2)</u>				
III. If "yes" to question I. or II. above, did the permittee				
implement contingency procedures to ensure protection of		\checkmark		
public health & safety; and notify NHDES immediately?				
D. Cap (Cover) Condition				
[Ref Env-Sw 807.03(b)(4)]	Yes	No	N/A	Describe Condition
1. Is cap settlement uniform? (i.e. No visual evidence of				
depressions, water ponding, cracking, and/or sloughing)	$ \mathbf{V} $	Ш		
2. Is an instrument survey of the cap required? Ref Env-Sw				
807.03(b)(10)				
If "yes," attach a summary table of all survey data collected and				
provide an evaluation of any trends.				
Date(s) of the survey conducted this reporting year:				
3. Does cap slope promote runoff?		✓		
4. Is the cap mowed on a regular basis?				
NHDES recommends that landfills be mowed twice per year.				
Date(s) the landfill was mowed for this reporting year:				
5. Is there evidence of erosion (e.g., erosion rills, exposed soil)?		✓		
6. Is the vegetative layer in good condition?	√			
7. Is there evidence of damage due to unauthorized access?		7		
8. Is there evidence of damage due to burrowing animals?				

E. Leachate Collection and Leak Detection Systems [Ref Env-Sw 807.03(b)(6) & Env-Sw 807.03(b)(7)]	Yes	No	N/A	Describe Condition
Are there any leachate breakouts or seeps, either on or off the landfill property?		√		
2. Does the landfill have a leachate collection and/or leak detection system? If "yes," answer the following:		√	V	
I. Are leachate collection and leak detection system appurtenances functioning properly?			V	
II. Is leachate stored on-site prior to disposal? If "yes," what quantity of leachate is currently stored on-site?			✓	
III. Is leachate properly removed and disposed of on a periodic basis? If "yes," what is the frequency of disposal and the disposal destination?			V	
Supplemental Information				
There is brush at MW-2D that should be cut back (Photo #1). The brush on the locating bar for MW-4 should be removed (Photo #2) The tubing for MW-101 is above the casing so the cover to the well dot the possibility of introducing contamination into the well. To permaner top of the well resurveyed. In the interim, an alternative temporary covers to the well resurveyed.	es not ntly fix	it, the	PVC sl	* *



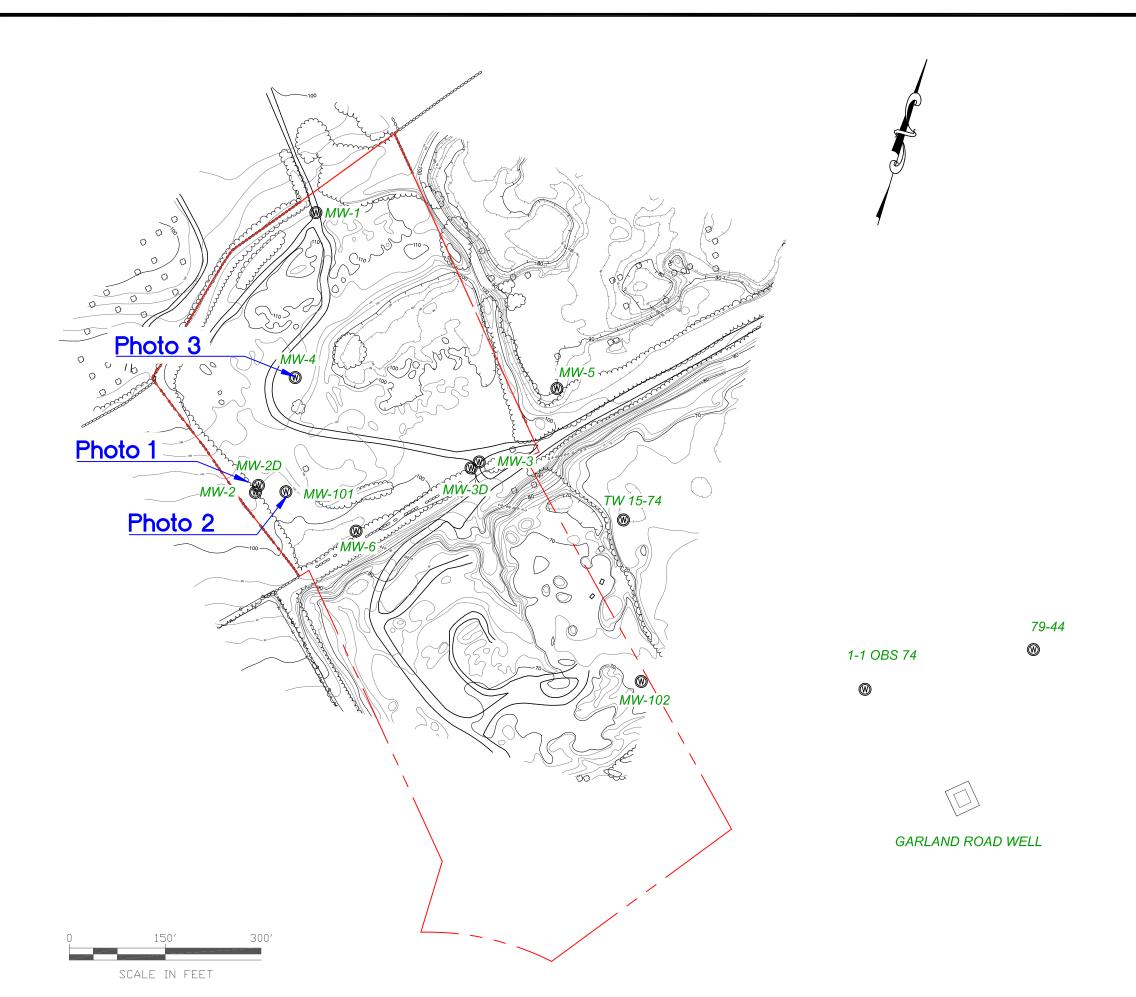
Photo 1: Overgrown brush at MW-2D



Photo 2: PVC riser sticking out of casing MW-101



Photo 3: Growth on locator bar MW-4



Notes:

- 1. Base topography by Eastern Topographics, Inc. and provided by Roy F. Weston, Inc.
- 2. Property line survey based on survey performed by Richard P. Millette and Assoc. Imported onto plan using common monitoring points.
- 3. Groundwater Management Zone (GMZ) from Rye Tax map.

Legend:

CMA ENGINEERS

CIVIL/ENVIRONMENTAL/STRUCTURAL

Portsmouth, NH Manchester, NH Portland, ME 603/431-6196 603/627-0708 207/541-4223 c m a e n g i n e e r s . c o m

Town of Rye, NH Grove Road Municipal Landfill Rye, New Hampshire

Site Plan

	FACILITY INSPECTIO	N INFORM	/IATIO	N		
Facility Name: Grove Road Municipal Landfill						
Physical Street Address:						
Grove Road						
Town/City:		Solid Wa	iste Fa	cility	Permit	Number:
Rye		SW-T	P-95	5-00	3	
Inspection Date:	Inspector:				Inspect	tion:
November 2, 2023	Max Huynh, E	.I.T.			Annu	
	SUMMARY OF INSPE	ECTION FIN	NDING	S	1	
A. General Site Co	ondition		Yes	No	N/A	Describe Condition
1. Is access to the landfill restricted by natural barriers? Ref Env-Sw 807.03		or	✓			
2. Are weather-resistant legible signs p		imeter				
of the landfill in areas where fencing 807.03(b)(11)	g is not used? Ref <u>Env</u>	<u>/-Sw</u>	\checkmark			
3. Is the access road(s) properly graded 806.08(c)	l and drained? <u>Ref En</u>	v-Sw_	✓			
4. Is any portion of the site used for acclosure monitoring and maintenance	•					
these activities in Section 7 (Additio				\checkmark		
activity, indicate if it is on or off cap,						
Are all groundwater monitoring well condition? Ref <u>Env-Sw 807.03(b)(8)</u>	s accessible and in go	od		✓		See below.
6. Is the surface water monitoring system					√	
maintained? Ref Env-Sw 807.03(b)(8	<u>3)</u>		Ш	Ш		
B. Stormwater Syster	m Condition					
[Ref Env-Sw 807.			Yes	No	N/A	Describe Condition
Are the sedimentation/detention posedimentation removed, no overgro		,			√	
2. Are culverts intact and free of obstru	uctions?				\checkmark	
Are perimeter drainage swales/ditches well maintained, unobstructed, and free flowing?				✓		
4. Do all drainage swales have positive	drainage?				\checkmark	
5. Are the methods used to control sur (e.g., berms, benches)?	face water well main	tained			✓	
6. Are runoff channels protected to pre creates sediment?	event scour and erosi	on that			✓	
7. Is there evidence of erosion (e.g., se ditches and ponds)?	dimentation in draina	age			✓	
8. Are storm drains in good condition (pumps, sumps, pipes, inlet, and outl		ll joints,			✓	

		C. Decomposition Ga [Ref Env-Sw 80	-			No	N/A	Describe Condition
ĺ	1.	Is the gas management system:	Passive OR	Active			V	
	2.	If the facility has an active gas ma components of the system in good flare)? Date the system was last to	d working order (e				✓	
	3.	If the facility has a passive gas ma vents in good condition and funct					✓	
ĺ	4.	Are all soil gas probes in good con	dition and function	nal?			√	
	5.	Are all indoor air quality monitors functional?	in good condition	and			✓	
	6.	Are there any landfill odors?				\checkmark		
	7.	Is there evidence of stressed (e.g. vegetation?	, damaged/weaker	ned)		✓		
		Is the permittee required to monithe landfill? If "no," provide an explanation in Information). If "yes," answer the following question summary table of all methane data continues.	n Section 7 (Additions in this section and	onal d attach a		✓		
		probes, and indoor air quality monito trends in Section 6 (Summary and Ass	sessment).	·				
		 For this calendar reporting year exceeded 25% of the LEL inside Ref Env-Sw 806.07(b)(1) 				✓		
		II. For this calendar reporting year exceeded 50% of the LEL at the Ref Env-Sw 806.07(b)(2)				✓		
		III. If "yes" to question I. or II. ab implement contingency proced public health & safety; and no	dures to ensure pro	otection of		✓		
ſ		D. C /C	O Int.				1	
		D. Cap (Cover) [Ref Env-Sw 80	7.03(b)(4)]		Yes	No	N/A	Describe Condition
	1.	Is cap settlement uniform? (i.e. N o depressions, water ponding, crack			√			
	2.	Is an instrument survey of the cap 807.03(b)(10) If "yes," attach a summary table of provide an evaluation of any tren Date(s) of the survey conducted the	of all survey data co			✓		
	3.	Does cap slope promote runoff?				✓		
	4.	Is the cap mowed on a regular bas NHDES recommends that landfills Date(s) the landfill was mowed fo	be mowed twice p			√		MW-101's PVC tubing extends higher than the metal casing which makes the cap unable to be put on correctly. There is the possibility this can introduce containnation into the well. The PVC should be cut down and the top of the well resurveyed. In the interim, an alternative cover could be used. MW-2D is naccessible due to brush from a fallen tree. This should be cut back.
	5.	Is there evidence of erosion (e.g.,	erosion rills, expos	sed soil)?		√		
	6.	Is the vegetative layer in good cor	ndition?		✓			
ĺ	7.	Is there evidence of damage due t	to unauthorized ac	cess?		√		
	8.	Is there evidence of damage due t	to burrowing anima	als?		✓		

E. Leachate Collection and Leak Detection Systems [Ref Env-Sw 807.03(b)(6) & Env-Sw 807.03(b)(7)]	Yes	No	N/A	Describe Condition
1. Are there any leachate breakouts or seeps, either on or off the landfill property?		√		
2. Does the landfill have a leachate collection and/or leak detection system? If "yes," answer the following:		√	√	
I. Are leachate collection and leak detection system appurtenances functioning properly?			✓	
II. Is leachate stored on-site prior to disposal? If "yes," what quantity of leachate is currently stored on-site?			√	
III. Is leachate properly removed and disposed of on a periodic basis? If "yes," what is the frequency of disposal and the disposal destination?			✓	
Supplemental Information				
MW-101's PVC tubing extends higher than the metal casing on correctly. There is the possibility this can introduce conta be cut down and the top of the well resurveyed. In the interir	mina	tion ir	nto the	well. The PVC should
MW-2D is inaccessible due to brush from a fallen tree. This	shou	ld be	cut ba	ack.
MW-4 is overgrown but accessible. The brush should be cut	back	ζ.		
There were multiple downed trees over the landfill most noti to MW-1.	ceab	ly aro	und th	ne access road leading



Photo 1: PVC riser sticking out of casing MW-101



Photo 2: MW-2D is inaccessible due to a downed tree



Photo 3: Growth on and around locator bar at MW-4

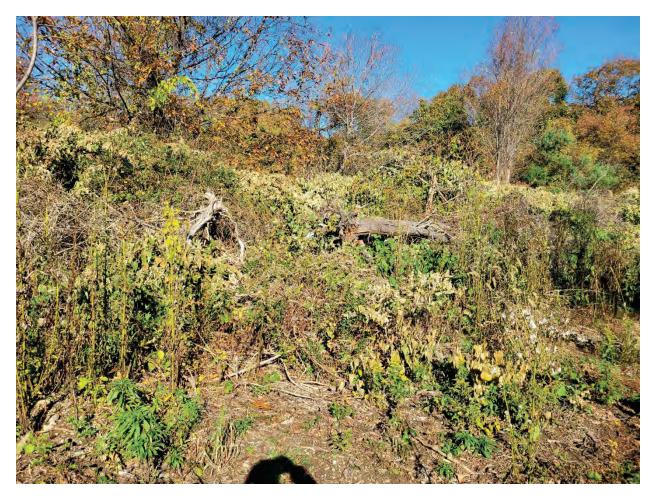


Photo 4: Downed tree near access road



Photo 5: Downed tree near access road

