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January 15, 2018 File: 95-033

Mr. Gregg Townsend
Regional Engineer
New York State Department of Environmental Conservation
Region 6 Headquarters
317 Washington Street
Watertown, New York 13601-3787

RE: Mohawk Valley Landfill Facility No. 22S03 2017 Annual Report

Dear Mr. Townsend:

McMahon & Mann Consulting Engineers, P.C., on behalf of Waste Management of New York, LLC (WMNY), has prepared the 2017 Annual Report for the Mohawk Valley Landfill for your review and approval.

The closure, inspection, maintenance, and environmental monitoring programs are discussed below.

CLOSURE PROGRAM

- The landfill ceased accepting waste on March 31, 1992.
- Final cover installation was completed from 1989 to 1993.
- New York State Department of Environmental Conservation (NYSDEC) Certification of Closure was issued on January 15, 1995.

INSPECTION PROGRAM

Site inspections were conducted by a third party contractor (Smith's Excavating of Holland Patent, NY) in coordination with WMNY's Closed Site Management Group (Mr. Mark DeVine). Site inspections were completed on a quarterly basis. The quarterly Inspection Forms are attached.

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Mohawk Valley Landfill
File: 95-033

January 15, 2018
Page 2

Items under the closed landfill inspection included:

Access Control – Access is controlled by a 6-foot high fence across the front of the facility. Portions of the fence were identified as requiring maintenance (see Maintenance Program below).

Vegetation – As of October 1993, the entire 29-acre landfill was capped per the NYSDEC approved closure plan. The cover was mowed this year.

Erosion – Erosion was observed along the perimeter access roads and across the perimeter berms requiring maintenance (see Maintenance Program below).

Cracking - No cracking of the landfill cover was observed.

Seepage - No leachate seeps were observed.

Slope Stability - No slope failures were observed.

Disturbance Due to Adverse Weather Events – No noticeable disturbances from weather related events were observed.

Subsidence/Settlement - No sinkholes or unusual settlement were observed.

Leachate/Groundwater Collection – Excess vegetation and piping was observed around the leachate and groundwater tank areas requiring maintenance (see Maintenance Program below).

Groundwater Monitoring System - All wells were accessible and secure.

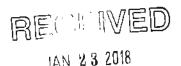
Run-off Control System – Stormwater ponds were functioning properly. Excess vegetation and brush was observed in the perimeter ditches requiring maintenance (see Maintenance Program below). A 30-foot section of culvert pipe was observed to have collapsed requiring maintenance (see Figure 1 for location and Maintenance Program below for more details).

Benchmarks - Original benchmarks for the site are intact.

MAINTENANCE PROGRAM

Condition of Cover – Final cover was placed on the 29-acre landfill from 1989 through 1993 in accordance with the NYSDEC approved Closure Plan and the NYSDEC Part 360 regulations. The 2017 inspection reports note that the cover is in good condition, and the vegetation was mowed.

Erosion – The perimeter berms which showed erosion were repaired in the fall of 2017. The perimeter access roads where erosion was observed were regraded with new stone in the fall of 2017.



REGION 6-UTICA

Mohawk Valley Landfill

File: 95-033

Page 3

Run-off Control — All surface water drainage systems have been installed in compliance with the above-mentioned closure plan. The riser pipes that outlet the stormwater ponds were replaced in 2015 and are functioning well. Excess vegetation was cleared out from the perimeter ditches in the fall of 2017. The collapsed portion of the culvert (see Figure 1) was repaired in the fall of 2017.

Leachate/Groundwater Collection – The constructed wetland treatment system (CWTS) continues to treat the collected leachate and is sampled monthly, as per the State Pollutant Discharge Elimination System (SPDES) discharge permit and submitted under separate cover. Table 1 includes CWTS volumes that were discharged to the Mohawk River. Maintenance work including grubbing and cleaning around the leachate and groundwater tanks was performed in the fall of 2017. The tops of the leachate and groundwater tanks were resealed to prevent surface water from entering the tanks. Additional informational signs were added near the leachate tanks.

The facility requested that cleaning of the leachate collection system be eliminated. The NYSDEC granted the request and notified WMNY to modify its closure plan to reflect the update. The Closure Plan dated July 1991 was updated and submitted to the NYSDEC on November 17, 2017. The updated Closure Plan reflects that the leachate collection system be inspected on an annual basis and if accumulation of biological growth or excessive sediment is observed the system will be cleaned.

Groundwater Monitoring – Groundwater monitoring wells MW04AA, MW04BB, MW07A, MW07B, MW10B, MW10C, MW12A, MW12C, MW13AA, MW13B, and MW14 were inspected quarterly in 2017. All wells were accessible and secure.

Surveying - The last topographic survey of the landfill was completed on April 16, 2002.

Access Control – Access to the site has been strictly limited to post-closure activities and is only available through the Southside Road entrance. Sections of the perimeter fence were repaired and the fence curtain was fixed. WMNY is evaluating the need to replace the entire perimeter fence in 2018.

ENVIRONMENTAL MONITORING PROGRAM

Analytical testing was continued during 2017 on samples collected from the groundwater monitoring wells, surface water, stormwater ponds, and leachate sampling locations in the spring and the fall. A 2017 Annual Analytical Testing Data Report was prepared and submitted to Mr. Vincent K. Fay (NYSDEC Albany), dated December 13, 2017. The groundwater monitoring locations are shown on Figure 1.

Gas monitoring probes were monitored quarterly in 2017. Gas monitoring results for 2017 did not indicate any off-site gas migration. Table 2 provides a summary of the gas monitoring results for 2017. The gas probe locations are shown on Figure 1.



Mohawk Valley Landfill File: 95-033

January 15, 2018 Page 4

Should you have any questions or require additional information, please call.

Sincerely yours,

McMAHON & MANN CONSULTING ENGINEERS, P.C.

Kaitlyn M. Murray, P.E.

Shawn W. Logan, P.E.

Enc. Figure

Tables 1 and 2 Inspection Reports

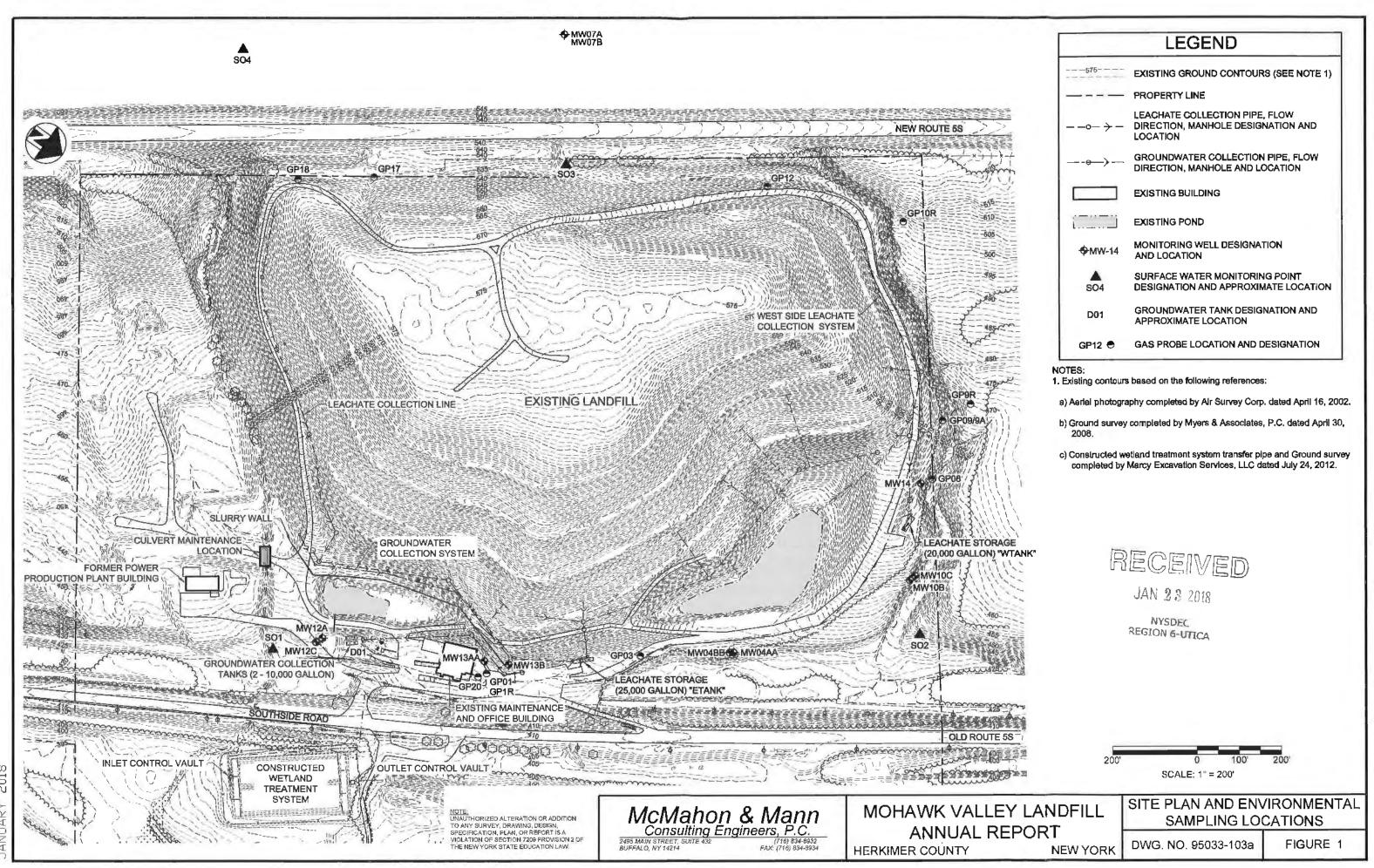
Vincent K. Fay (NYSDEC Albany) Mark P. DeVine (WMNY) (PDF via Email)



FIGURE

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TABLES 1 AND 2

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Table 1 Mohawk Valley Landfill 2017 Monthly Leachate Volume Summary

		Hauled to POTW ⁽¹⁾			POTW	Discharged to Mohawk River ⁽²⁾	
Month GDS ⁽³⁾	GDS ⁽³⁾		WTANK(3)	CWTS(3)	Total Hauled	CWTS ⁽³⁾	Monthly Totals
	(Gallons)	(Gallons)	(Gallons)	(Gallons)	(Gallons)	(Gallons)	(Gallons)
January	0	0	0	0	0	177,666	177,666
February	0	0	0	0	0	153,772	153,772
March	0	0	0	0	0	192,972	192,972
April	0	0	0	0	0	286,451	286,451
May	0	0	0	0	0	224,627	224,627
June	0	0	0	0	0	191,315	191,315
July	0	0	0	0	0	215,170	215,170
August	0	0	0	0	0	118,814	118,814
September	0	0	0	0	0	53,907	53,907
October	0	0	0	0	0	119,324	119,324
November	0	0	0	0	0	166,287	166,287
December	0	0	0	0	0	132,672	132,672
2017 Totals	0	0	0	0	0	2,032,977	2,032,977

Notes:

- 1. Monthly volumes hauled to POTW supplied by Herkimer County Sewer District Wastewater Treatment Plant
- 2. Monthly volumes discharged from the CWTS to the Mohawk River based on SPDES Monthly Discharge Montoring Reports prepared by WMNY.
- 3. GDS = Groundwater dewatering system (designated D01 in the laboratory analytical reports)

ETANK = East leachate collection system storage tank

WTANK = West leachate collection system storage tank

CWTS = Constructed wetland treatment system outlet structure

POTW = Herkimer County Sewer District Wastewater Treatment Plant

Table 2
Mohawk Valley Landfill
2017 Gas Monitoring Probe Results

Gas Probe	3/30/2017(1)	6/6/2017 ⁽¹⁾	9/29/2017 ⁽¹⁾	11/22/2017(1)
Designation	(% Methane)	(% Methane)	(% Methane)	(% Methane)
GP01 ⁽²⁾	0	0	0	0
GP1R	0	0	0	0
GP03	0	0	0	0
GP08	0	0	0	0
GP09	0	0	0	0
GP9A	0	0	0	0
GP9R	0	0	0	0
GP10R	0	0	0	0
GP12	0	0	0	0
GP17	0	0	0	0
GP18	0	0	0	0
GP20	0	0	0	0
Gas Plant	0	0	0	0
Shop/Office	0	0	0	0

Notes: 1. Gas Probe results obtained from Mr. Jim Smith (third party contractor).



In their letter dated April 27, 2011, NYSDEC approved the proposed gas monitoring modifications
as described in MMCE's letter dated August 6, 2010, but requested that WMNY continue to
monitor GP01 for information only.

INSPECTION REPORTS

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Mohawk Valley Landfill Rd #2, Box 38a, Old Rte 5a Frankfort, New York 13340 Closed Landfill Environmental Inspection Form

Date 3-30-2017 Temp 45 Inspector Jim Smith				
Weather Conditions Overcast				
	Y N NA			
SECURITY & ACCESS				
1) Access controlled by perimeter fencing?	\square			
2) "No Trespassing" signs posted?				
3) No evidence of trespassing?	$\boxtimes \sqcup \sqcup$			
COVER & VEGETATION				
4) Final cover in acceptable condition?				
5) Top/side slope acceptable condition?				
6) Good drainage, minimal erosion?				
7) Acceptable vegetation (quality & density)?				
8) No exposed waste?	$\boxtimes \sqcup \sqcup$			
<u>DRAINAGE</u>				
9) Appropriate runoff controls in place?				
10) Slope drains in acceptable condition?				
11) Perimeter ditches in acceptable condition?				
12) Retention ponds in acceptable condition?				
13) Outlet structures in acceptable condition?	\square			
14) Facility is void of standing water?	$\boxtimes \sqcup \sqcup$			
LEACHATE & GAS CONTROL SYSTEMS				
15) Collection manholes secure & acceptable condition?				
16) Riser & cleanouts secure & acceptable condition?	$\boxtimes \sqcup \sqcup$			
17) Approved leachate management plan?	$\boxtimes \sqcup \sqcup$			
18) Storage tanks in acceptable condition & operating in	$\boxtimes \sqcup \sqcup$			
compliance with requirements?				
19) Gas wells secure and in good condition?				
20) No oder migration off site?				
21) No gas migration off site?	$\bowtie \sqcup \sqcup$			
22) Probes/detection system calibrated and good working				
condition?				
<u>COMMENTS</u>				
Item # #1 wooden fence needs repair in two areas				
#13 ditches need cleaning and remove brush	11 1			
Item # #16 leachate tanks area with brush and piping, risers covers	need bolts			
T. " To 1				
Item # Roadway erosion				

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Mohawk Valley Landfill Rd #2, Box 38a, Old Rte 5a Frankfort, New York 13340

Closed Landfill Environmental Inspection Form

Date 6-6-2017 Temp 55 Inspector Jim Smith	
Weather Conditions Overcast- rain	
	Y N NA
SECURITY & ACCESS	
 Access controlled by perimeter fencing? 	\square
2) "No Trespassing" signs posted?	
3) No evidence of trespassing?	$\boxtimes \sqcup \sqcup$
COVER & VEGETATION	
4) Final cover in acceptable condition?	AHH
5) Top/side slope acceptable condition?	#HH
6) Good drainage, minimal erosion?	#HH
7) Acceptable vegetation (quality & density)?	#HH
8) No exposed waste? DRAINAGE	
9) Appropriate runoff controls in place?	\square
10) Slope drains in acceptable condition?	
11) Perimeter ditches in acceptable condition?	
12) Retention ponds in acceptable condition?	
13) Outlet structures in acceptable condition?	岗面面
14) Facility is void of standing water?	
LEACHATE & GAS CONTROL SYSTEMS	
15) Collection manholes secure & acceptable condition?	
16) Riser & cleanouts secure & acceptable condition?	
17) Approved leachate management plan?	
18) Storage tanks in acceptable condition & operating in	$\boxtimes \sqcup \sqcup$
compliance with requirements?	
19) Gas wells secure and in good condition?	
20) No oder migration off site?	#HH
21) No gas migration off site?	
22) Probes/detection system calibrated and good working condition?	
condition:	
COMMENTS	
Item # #1 wooden fence needs repair in two areas	
#13 ditches need cleaning and remove brush	
Item # #16 leachate tanks area with brush and piping, risers covers	need bolts
T	
Item # Roadway erosion	

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Mohawk Valley Landfill Rd #2, Box 38a, Old Rte 5a Frankfort, New York 13340

Closed Landfill Environmental Inspection Form

Date 9-29	9-2017	Temp	63	Inspector	Jim Smith	
Weather Co	onditions	sunny				
						Y N NA
45				RITY & ACC	<u>CESS</u>	
•		-	perimeter 1	fencing?		XHH
	_		ns posted?			ÄHH
3) No	evidence (oi trespa		& VEGETA	ATION	
4) Fina	al cover in	accenta	ible conditi		111011	$\boxtimes \Box \Box$
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	exposed v	-	``	• /		
•	-		<u>r</u>	<u>PRAINAGE</u>		
9) App	orop <mark>r</mark> iate r	unoff co	ntrols in p	lace?		
			table condi			
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14) Fac	ility is vo		nding wate			$\boxtimes \sqcup \sqcup$
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Item#	#1 woo	den fenc		pair in two a	-	
Item#			<u>-</u>	_		
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Item #						
7000	<u> </u>					

Mohawk Valley Landfill Rd #2, Box 38a, Old Rte 5a Frankfort, New York 13340

Closed Landfill Environmental Inspection Form

Date 11-22-2017 Temp 47 Inspector Jim Smith	
Weather Conditions sunny	
	Y N NA
SECURITY & ACCESS	
1) Access controlled by perimeter fencing?	AHH
2) "No Trespassing" signs posted?	ÄHH
3) No evidence of trespassing? <u>COVER & VEGETATION</u>	
4) Final cover in acceptable condition?	\square \square \square
5) Top/side slope acceptable condition?	ĦĦĦ
6) Good drainage, minimal erosion?	
7) Acceptable vegetation (quality & density)?	
8) No exposed waste?	
DRAINAGE	
9) Appropriate runoff controls in place?	$\boxtimes \square \square$
10) Slope drains in acceptable condition?	$\boxtimes \square \square$
11) Perimeter ditches in acceptable condition?	$\boxtimes \square \square$
12) Retention ponds in acceptable condition?	
13) Outlet structures in acceptable condition?	\square
14) Facility is void of standing water?	$\boxtimes \sqcup \sqcup$
LEACHATE & GAS CONTROL SYSTEMS	
15) Collection manholes secure & acceptable condition?	ÄHH
16) Riser & cleanouts secure & acceptable condition?	HH
17) Approved leachate management plan? 18) Storage tanks in acceptable condition & operating in	HH
compliance with requirements?	
19) Gas wells secure and in good condition?	\square \square \square
20) No oder migration off site?	ĦH
21) No gas migration off site?	ĦĦ
22) Probes/detection system calibrated and good working	
condition?	
<u>COMMENTS</u>	
Item # #1 wooden fence needs repair in two areas	
Item#	
Item#	

Edward Collins