



Bureau of Waste Management Services
389 Burns Crossing Road
Severn, Maryland 21144
Phone (410) 222-6108

November 28, 2018

Mr. Bruce W. Harrington, P.E.
Maryland Department of the Environment
Dam Safety Program
Salisbury Regional Office
201 Baptist Street, Suite 22
Salisbury, Maryland 21801

**RE: Millersville Landfill and Resource Recovery Facility
2018 Annual Comprehensive Dam Inspection for Cell 9, Pond 9-2
Dam Safety Permit No. 08-PO-0085R**

Dear Mr. Harrington:

Please find enclosed, the Millersville Landfill and Resource Recovery Facility 2018 Annual Comprehensive Dam Inspection for Cell 9, Pond 9-2, as required by MDE Dam Safety Permit 08-PO-0085.

Please contact Mark Morris or me at (410) 222-6108 if you have any questions or comments concerning this matter.

Sincerely,

A handwritten signature in blue ink that reads "Stephen J. Krajcsik".

Stephen J. Krajcsik, P.E.
Solid Waste Operations Administrator

Enclosure

Millersville Landfill and Resource Recovery Facility
2018 Annual Comprehensive Dam Inspection for Cell 9, Pond 9-2
Dam Safety Permit No. 08-PO-0085R

Reporting Period

December 9, 2017

December 8, 2018

Pond Inspections: See attached dam inspection checklist for each inspection.

The Annual Comprehensive Inspection with photos was completed on November 19, 2018.

There was one significant rain event exceeding three (3) inches of rain in a 24-hour period that occurred on July 24, 2018.

Mowing:

Mowing of the pond embankments were completed in June and November of 2018.

Removal of Woody Vegetation:

No woody vegetation growth was observed on the pond embankments during this reporting period.

Emergency Maintenance:

No emergency maintenance was required during this reporting period.

Review of Downstream Danger Reach:

No new structures exist within the downstream danger reach area.

Operation and Maintenance Summary:

The site experienced one (1) rain event exceeding three (3) inches of rain over a 24-hour period on July 24, 2018. The Maryland Dam Inspection Checklist for that day indicated a rain amount of 8.3 inches. This rain amount covered a period of four (4) days from Saturday (7/21/18) through Tuesday (7/24/18). As required under Condition 21 of the permit, a full inspection of the Dam was conducted after that event and is included as part of this report. In addition, the site experienced a 48-hour rain event that exceeded three (3) inches of rain on May 16-17, 2018. A full inspection of the Dam was conducted on each day of this event. These inspections are also included as part of this report.

This annual comprehensive inspection was completed after an extremely wet month and snow event with over 6 inches of total precipitation.

Dam Pond 9 2 Weather Partly Sunny Date November 19, 2018
 Inspectors Mark Morris Pool Level 114
 Top of Structure Elevation 119

MDE WATERWAY CONSTRUCTION PERMIT # 08-PO-0085

MARYLAND DAM INSPECTION CHECKLIST		Y	N	Monitor or Repair?
1. CREST				
Settlement, Cracking, Misalignment			X	
2. UPSTREAM SLOPE				
Ground cover in good condition	X			
Riprap in good condition	X			
Erosion, Animal burrows, Trees, Shrubs			X	
Settlements, Depressions, Bulges, Cracks			X	
3. DOWNSTREAM SLOPE				
Ground cover in good condition	X			
Erosion, Animal burrows, Trees, Shrubs			X	
Settlements, Depressions, Bulges, Cracks			X	
Seepage _____ gpm (See Note 1)			X	
4. INTERNAL DRAINAGE SYSTEM --- (Filter drain, 4" PVC pipes) Under Water				
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm				
Does seepage contain fines?			X	
5. ABUTMENT CONTACTS				
Trees, Shrubs, Erosion				N/A
Seepage _____ gpm				N/A
6. SPILLWAY/RISER STRUCTURE Concrete or Metal Pipe Concrete				
Spalling, Cracking, Corrosion, Erosion, Scaling, Exposed Reinforcement			X	
Joints: Displacement, Leakage, Loss of joint material			X	
Trash Racks: Operational, Broken, Bent, Rusted Debris Obstructed			X	
Sluice/Drain Gates: Operational, Broken, bent, Corroded, Leaking				N/A
7. SPILLWAY CONDUIT Concrete or Metal Pipe Concrete				
Debris, Cracking, Leakage, Spalling, Exposed Reinforcement			X	
Joints: Displacement, Leakage, Loss of joint material			X	
8. STILLING POOL/BASIN Riprap or Concrete Riprap				
Spalling, Cracking, Erosion, Scalling, Exposed Reinforcement, Joint Deterioration			X	
Undercutting, Eroding			X	
Outlet Channel Condition: (See Note 2)				
Tailwater elevation and flow condition:				N/A
9. EMERGENCY SPILLWAY				
Ground cover in good condition				N/A
Erosion, Trees, Shrubs, Obstructions				N/A
OVERALL CONDITION (circle one): Excellent Good Fair Poor Unsafe				

Notes:

1. Any seepage observed: None observed.

2. Regenerative Stormwater Conveyance (RSC) system step pools: Good condition.

**ANNUAL COMPREHENSIVE DAM INSPECTION
NOVEMBER 19, 2018**

WEST VIEW OF POND 9 AND WEST FOREBAY



EAST VIEW OF POND 9 AND EAST FOREBAY



VIEW OF INLET TO EAST FOREBAY



VIEW OF POND 9 AND EAST FOREBAY



EAST VIEW OF OUTSIDE EMBANKMENT OF EAST FOREBAY



VIEW OF POND 9 OUTLET



EAST VIEW OF POND 9 AND WEST FOREBAY



VIEW OF INLET TO WEST FOREBAY



EAST VIEW OF OUTSIDE EMBANKMENT OF WEST FOREBAY



WEST VIEW OF OUTSIDE EMBANKMENT OF POND 9



GROUND VIEW OF POND 9 OUTFALL AND STEP POOLS



TOP VIEW OF POND 9 OUTLET AND STEP POOLS



Dam: Pond 9.2 Weather: Cloudy Date: 7/29/18
 Inspectors: Mike G Pool Level: 115
 Rain Amount 9.3 Top of Structure Elevation 119

MDE WATERWAY CONSTRUCTION PERMIT # 08-PO-0085

MARYLAND DAM INSPECTION CHECKLIST			Y	N	Monitor Repair
1. CREST					
Settlement, Cracking, Misalignment					✓
2. UPSTREAM SLOPE					
Ground cover in good condition			✓		
Riprap in good condition			✓		
Erosion, Animal burrows, Trees, Shrubs					✓
Settlements, Depressions, Bulges, Cracks					✓
3. DOWNSTREAM SLOPE					
Ground cover in good condition			✓		
Erosion, Animal burrows, Trees, Shrubs					✓
Settlements, Depressions, Bulges, Cracks					✓
Seepage _____ gpm (See Note 1)					✓
4. INTERNAL DRAINAGE SYSTEM ---- (Filter drain, 4" PVC pipes) <u>under water</u>					
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm					
Does seepage contain fines?					
5. ABUTMENT CONTACTS					
Trees, Shrubs, Erosion					N/A
Seepage _____ gpm					N/A
6. SPILLWAY/RISER STRUCTURE Concrete or Metal Pipe					
Spalling, Cracking, Corrosion, Erosion, Scaling, Exposed Reinforcement					✓
Joints: Displacement, Leakage, Loss of joint material					✓
Trash Racks: Broken, Bent, Rusted Debris Obstructed					✓
Sluice/Drain Gates: Operational, Broken, bent, Corroded, Leaking					N/A
7. SPILLWAY CONDUIT Concrete or Metal Pipe					
Debris, Cracking, Leakage, Spalling, Exposed Reinforcement					✓
Joints: Displacement, Leakage, Loss of joint material					✓
8. STILLING POOL/BASIN Riprap or Concrete					
Spalling, Cracking, Erosion, Scalling, Exposed Reinforcement, Joint Deterioration					✓
Undercutting, Eroding					✓
Outlet Channel Condition: (See Note 2)					
Tailwater elevation and flow condition: <u>Good</u>					N/A
9. EMERGENCY SPILLWAY					
Ground cover in good condition					N/A
Erosion, Trees, Shrubs, Obstructions					N/A
OVERALL CONDITION: Excellent <u>Good</u> Fair Poor Unsafe					

Notes:

1. Any seepage observed:

2. Regenerative Stormwater Conveyance (RSC) system step pools:

Water flowing over spillway

Dam: Pond 9.2 Weather: RAIN Date: 5/17/18
 Inspectors: MIKE G Pool Level: 115
 Rain Amount 1.5 Top of Structure Elevation 119

MDE WATERWAY CONSTRUCTION PERMIT # 08-PO-0085

MARYLAND DAM INSPECTION CHECKLIST		Y	N	Monitor Repair
1. CREST				
Settlement, Cracking, Misalignment			✓	
2. UPSTREAM SLOPE				
Ground cover in good condition		✓		
Riprap in good condition		✓		
Erosion, Animal burrows, Trees, Shrubs			✓	
Settlements, Depressions, Bulges, Cracks			✓	
3. DOWNSTREAM SLOPE				
Ground cover in good condition		✓		
Erosion, Animal burrows, Trees, Shrubs			✓	
Settlements, Depressions, Bulges, Cracks			✓	
Seepage _____ gpm (See Note 1)			✓	
4. INTERNAL DRAINAGE SYSTEM ----- (Filter drain, 4" PVC pipes)				
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm			✓	
Does seepage contain fines?			✓	
5. ABUTMENT CONTACTS				
Trees, Shrubs, Erosion				N/A
Seepage _____ gpm				N/A
6. SPILLWAY/RISER STRUCTURE Concrete or Metal Pipe				
Spalling, Cracking, Corrosion, Erosion, Scaling, Exposed Reinforcement			✓	
Joints: Displacement, Leakage, Loss of joint material			✓	
Trash Racks: Broken, Bent, Rusted Debris Obstructed			✓	
Sluice/Drain Gates: Operational, Broken, bent, Corroded, Leaking				N/A
7. SPILLWAY CONDUIT Concrete or Metal Pipe				
Debris, Cracking, Leakage, Spalling, Exposed Reinforcement			✓	
Joints: Displacement, Leakage, Loss of joint material			✓	
8. STILLING POOL/BASIN Riprap or Concrete				
Spalling, Cracking, Erosion, Scaling, Exposed Reinforcement, Joint Deterioration			✓	
Undercutting, Eroding			✓	
Outlet Channel Condition: (See Note 2) <u>Good</u>				
Tailwater elevation and flow condition:				N/A
9. EMERGENCY SPILLWAY				
Ground cover in good condition				N/A
Erosion, Trees, Shrubs, Obstructions				N/A
OVERALL CONDITION: Excellent <u>Good</u> Fair Poor Unsafe				

Notes:

1. Any seepage observed:
2. Regenerative Stormwater Conveyance (RSC) system step pools:

Dam: Pond 9.2 Weather: cloudy Date: 5/16/18
 Inspectors: mike G Pool Level: 114

Rain Amount 1.8

Top of Structure Elevation 119

MDE WATERWAY CONSTRUCTION PERMIT # 08-PO-0085

MARYLAND DAM INSPECTION CHECKLIST			Y	N	Monitor Repair
1. CREST					
Settlement, Cracking, Misalignment					✓
2. UPSTREAM SLOPE					
Ground cover in good condition			✓		
Riprap in good condition			✓		
Erosion, Animal burrows, Trees, Shrubs					✓
Settlements, Depressions, Bulges, Cracks					✓
3. DOWNSTREAM SLOPE					
Ground cover in good condition			✓		
Erosion, Animal burrows, Trees, Shrubs					✓
Settlements, Depressions, Bulges, Cracks					✓
Seepage _____ gpm (See Note 1)					✓
4. INTERNAL DRAINAGE SYSTEM ----- (Filter drain, 4" PVC pipes)					
Seepage/drain flow: Left _____ gpm Right _____ gpm Other _____ gpm					✓
Does seepage contain fines?					✓
5. ABUTMENT CONTACTS					
Trees, Shrubs, Erosion					N/A
Seepage _____ gpm					N/A
6. SPILLWAY/RISER STRUCTURE Concrete or Metal Pipe					
Spalling, Cracking, Corrosion, Erosion, Scaling, Exposed Reinforcement					✓
Joints: Displacement, Leakage, Loss of joint material					✓
Trash Racks: Broken, Bent, Rusted Debris Obstructed					✓
Sluice/Drain Gates: Operational, Broken, bent, Corroded, Leaking					N/A
7. SPILLWAY CONDUIT Concrete or Metal Pipe					
Debris, Cracking, Leakage, Spalling, Exposed Reinforcement					✓
Joints: Displacement, Leakage, Loss of joint material					✓
8. STILLING POOL/BASIN Riprap or Concrete					
Spalling, Cracking, Erosion, Scaling, Exposed Reinforcement, Joint Deterioration					✓
Undercutting, Eroding					✓
Outlet Channel Condition: (See Note 2) <u>Good</u>					
Tailwater elevation and flow condition:					N/A
9. EMERGENCY SPILLWAY					
Ground cover in good condition					N/A
Erosion, Trees, Shrubs, Obstructions					N/A
OVERALL CONDITION: Excellent <u>Good</u> Fair Poor Unsafe					

Notes:

1. Any seepage observed:

2. Regenerative Stormwater Conveyance (RSC) system step pools: