



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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VIRGINIA WASTE MANAGEMENT BOARD ORDER BY CONSENT ISSUED TO WASTE MANAGEMENT PARTIES, HOST TERMINALS, INC. and MORAN TOWING CORPORATION

SECTION A: PURPOSE

This is an Order by Consent issued under the authority of Va. Code § 10.1-1402(18), between the Virginia Department of Environmental Quality (“DEQ”), pursuant to authority delegated by the Virginia Waste Management Board, and Waste Management, Inc., Moran Towing Corporation and Host Terminals, Inc., for the purpose of allowing offsite transportation of leachate.

SECTION B: DEFINITIONS

Unless the context indicates otherwise, the following words and terms have the meaning assigned to them below.

1. “Board” means the Virginia Waste Management Board, a permanent citizens’ board of the Commonwealth of Virginia as described in Code §§ 10.1-1401 and 10.1-1184.
2. “Department” or “DEQ” means the Department of Environmental Quality, an agency of the Commonwealth of Virginia as described in Va. Code § 10.1-1183.
3. “Director” means the Director of the Department of Environmental Quality as described in Va. Code § 10.1-1185.

4. “Leachate” means a liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials from such waste. Leachate and any material with which it is mixed is solid waste; except that leachate that is pumped from a collection tank for transportation to disposal in an off-site facility is regulated as septage, leachate discharged into a waste water collection system is regulated as industrial waste water and leachate that has contaminated groundwater is regulated as contaminated groundwater.
5. “Leachate Management Plan” means the plan attached to this Order as Appendix A.
6. “Order” means this document, also known as a “Consent Order” or “Order by Consent”.
7. “Parties” means Waste Management Parties, Moran Towing Corporation and Host Terminals, Inc.
8. “PVSC” means the Passaic Valley Sewage Commission wastewater treatment plant located in Newark, New Jersey.
9. “Regulations” means the Transportation of Solid and Medical Wastes on State Waters 9 VAC 20-170-100 *et. seq.*
10. “Waste Management Parties” means Atlantic Waste Disposal Inc., Waste Management of Virginia, Inc., King George Landfill, Inc., Waste Management Disposal Services of Virginia, Inc. and USA Waste of Virginia Landfill, Inc., collectively, and its affiliates, partners, subsidiaries, and parents. Waste Management parties are certified to do business in Virginia.
11. “Va. Code” means the Code of Virginia (1950), as amended.
12. “Variance” means the variance to the Regulations dated August 31, 2016 issued by the Director.

SECTION C: FINDINGS OF FACT AND CONCLUSIONS OF LAW

1. The Waste Management Parties, which are corporate entities and are part of the Waste Management family of companies, (collectively “Waste Management”), operate six landfills throughout the Commonwealth of Virginia. Five of these facilities have historically used an industrial pre-treatment facility to manage and discharge leachate, a substance within the jurisdiction of the Board, to a waste water treatment plant.

2. Beginning in October, 2015, the industrial pre-treatment facility was no longer able to process leachate for discharge to the treatment plant, leading to an exigency

in leachate management, particularly for the Atlantic landfill (Solid Waste Permit 562). Although short-term measures have been identified and employed by Atlantic, no durable, local option is available in the near future for the excess volume of leachate.

3. Atlantic Waste Disposal, Inc. is constructing a leachate treatment facility at the landfill, currently anticipated to begin operation in 2017. The leachate treatment facility is anticipated to be able to treat leachate from the Waste Management Parties' landfills.

4. For approximately the last year, the Atlantic leachate has been transported via a double hulled, ocean going barge to the PVSC. The PVSC wastewater plant is authorized to receive and treat the leachate. The transportation to PVSC was authorized first under an Emergency Order by Consent, executed December 16, 2015, before being replaced by a Variance.

5. The Variance was developed to distinguish container standards developed for shipping solid waste in water-tight containers that are tested and certified from double hulled A 1, ocean manned barges designed to carry oil that are being used to transport the leachate.

6. The Parties assert that the barges are protective of human health and are designed and constructed to meet stricter and more appropriate standards than those contained in the Regulations.

7. The Variance continued until December 31, 2016, and was extended pursuant to its terms. The Parties are now seeking longer term authorization to transport leachate via barge through an appropriate, enforceable mechanism capturing the necessary requirements consistent with applicable provisions.

8. An imminent risk of overflow and discharge of leachate is present at the facilities owned by the Waste Management Parties. In order to mitigate the risk and promote the long-term management of excess leachate, Waste Management has currently identified the PVSC wastewater treatment plant in Newark, New Jersey, to manage the leachate. Exercising this management option necessitates the barging of the leachate for transport from the Tidewater Tank Terminals facility in Chesapeake, to PVSC by way of an ocean route. The double hulled barge is chartered from Moran Towing Corporation and will travel from Tidewater Tank Terminals up the Elizabeth River to Norfolk harbor, and then travel northward on the Atlantic Ocean to its current treatment destination on Newark Bay. The method of transport and management of the leachate at PVSC is more particularly described in the Leachate Management and Transportation Plan and incorporated to this Order by reference as Appendix C.

Va. Code § 10.1-1402(18) states that "The Board shall carry out the purposes and provisions of this chapter and compatible provisions of federal acts and is authorized to: ... make separate orders and regulations it deems necessary to meet any emergency to protect public health, natural resources and the environment from the release or imminent threat of release of waste.

SECTION D: AGREEMENT AND ORDER

Accordingly, by virtue of the authority granted it in Va. Code § 10.1-1402, the Board orders the Parties, and the Parties agree:

1. The Waste Management Parties shall perform the actions described in Appendix A of this Order, which supersedes and cancels only paragraph 4 of Appendix A of the Order by Consent entered into by DEQ Atlantic Waste Disposal, Inc. on July 20, 2016 (“July 2016 Order”). Both the Board and the Parties understand and agree that this Order does not alter, modify or amend any other provision of the July 2016 Order and that the unmodified provisions of the Order remain in effect by their own terms and any subsequent agreements between the Parties and DEQ; and
2. The Waste Management Parties shall adhere to the Leachate Management Plan applicable to its landfill as described in Appendix C of this Order.
3. No other solid waste is authorized to be managed via barge other than leachate.
4. Transportation of leachate shall be in compliance with the Leachate Management Plan submitted by the Waste Management Parties. Any substantive changes in the Leachate Management Plan shall be with Department notification and approval.
5. Management of leachate via barge shall only occur at the Tidewater Tank Terminals Facility from a Waste Management Party’s facility that has a Permit or Permit by Rule in accordance with 9 VAC.20-170 *et. seq.*
6. Management of leachate via barge shall only occur in double hulled barges that have been certified by the American Bureau of Shipping as “Maltese Cross, A1 Oil Tank Class” or such other similar American Bureau of Shipping Standard that may exist from time to time, and that carry a current U.S. Coast Guard Certificate of Inspection.
7. This Order shall not relieve the Parties of any compliance with any other applicable local, state, or federal requirements.
8. The Variance and any authorized extensions of the Variance shall expire upon the issuance of this Order.
9. This Order shall cover a period of five years from the date of execution unless otherwise amended or terminated as provided for in the provisions of this Order.

SECTION E: ADMINISTRATIVE PROVISIONS

1. This Order addresses only those actions specifically identified herein. This Order shall not preclude the Board or the Director from taking any action authorized by law, including but not limited to: (1) taking any action authorized by law regarding any subsequent or subsequently discovered violations; (2) seeking subsequent emergency action; or (3) taking subsequent action to enforce the Order.
2. Failure by one or more of the Parties to comply with any of the terms of this Order applicable to it shall constitute a violation of an order of the Board by such Party or Parties who have failed to comply. Nothing herein shall waive the initiation of appropriate enforcement actions or the issuance of additional orders as appropriate by the Board or the Director as a result of such violations. Nothing herein shall affect appropriate enforcement actions by any other federal, state, or local regulatory authority.
3. If any provision of the Order is found to be unenforceable for any reason, the remainder of the Order shall remain in full force and effect.
4. Unless explicitly set forth within, nothing herein shall be construed as altering, modifying, or amending any term or condition contained in any of the Parties' Permits.
5. Each Party shall be responsible for failure to comply with any of the terms and conditions of this Order as it relates to its role, but shall not be jointly liable with the other Parties or severally liable for the compliance with all of the terms and conditions of this Order. Each Party shall notify the DEQ Land Protection Division Director verbally within 24 hours and in writing within three business days when circumstances are anticipated to occur, are occurring, or have occurred that may delay compliance or cause noncompliance with any requirement of the Order as it relates to its role. Such notice shall set forth:
 - a. the reasons for the delay or noncompliance;
 - b. the projected duration of any such delay or noncompliance;
 - c. the measures taken and to be taken to prevent or minimize such delay or noncompliance; and
 - d. the timetable by which such measures will be implemented and the date full compliance will be achieved.
6. This Order shall continue in effect until:
 - a. The Director or his designee terminates the Order after the Parties has completed all of the requirements of the Order;

- b. The Parties or any individual Party, petitions the Director or his designee to terminate the Order after such Party or Parties has completed all of the requirements of the Order or, in the case of Moran Towing Corporation, upon the termination or expiration of its May 17, 2017 Time Charter Party with Host Terminals and the Director or his designee approves the termination of the Order; or
- c. The Director or Board terminates the Order in his or its sole discretion upon 30 days' written notice to the Parties.
- d. The Parties request the Director or his designee to terminate the Order after it notifies the Director that it no longer intends to transport leachate via barge.

Termination of this Order, or any obligation imposed in this Order, shall not operate to relieve the Parties from its obligation to comply with any statute, regulation, permit condition, other order, certificate, certification, standard, or requirement otherwise applicable.

- 7. This Order shall continue in effect until Waste Management requests the Director or his designee to terminate the Order after it notifies the Director that it no longer intends to transport leachate via barge.
- 8. Any plans, reports, schedules or specifications attached hereto or submitted by the Parties and approved by the Department pursuant to this Order are incorporated into this Order. Any non-compliance with such approved documents shall be considered a violation of this Order.
- 9. The undersigned representatives of the Parties certifies that he or she is a responsible official authorized to enter into the terms and conditions of this Order and to execute and legally bind the parties to this document. Any documents to be submitted pursuant to this Order shall also be submitted by a responsible official of the Parties.
- 10. For purposes of this Order and any subsequent actions with respect to this Order, and only during its term, the Parties admit the jurisdictional allegations, findings of fact and conclusions of law contained herein.
- 11. There are no representations, warranties, covenants, terms or conditions agreed upon between the Parties relating to this Order other than those expressed in this Order.
- 12. By their signatures below, the Parties voluntarily agree to the issuance of this Order.
- 13. This Order shall become effective upon signing by the Director of DEQ or his designee.

And it is so ORDERED this 12 day of September, 2019.

Approved by: 
Jefferson Reynolds, Director,
Division of Enforcement
Department of Environmental Quality

The Waste Management Parties, voluntarily agrees to the issuance of this Order.

Date: July 25, 2017 By: [Signature], Director of Disposal Operations
(Person) (Title)
Waste Management Parties

Commonwealth of Virginia
City/County of Sussex

The foregoing document was signed and acknowledged before me this 25 day of July, 2016, by H. Scott Thacker who is Director of Disposal Oper. of the Waste Management Parties, on behalf of the corporation.

[Signature]
Notary Public
7680085
Registration No.

My commission expires: 6/30/2020

Notary seal:



Host Terminals, Inc., voluntarily agrees to the issuance of this Order.

Date: 24 JULY 2017 By: [Signature]
PRESIDENT / CEO (Person) (Title)
HOST TERMINALS Host Terminals, Inc.

Commonwealth of Virginia
City/County of VIRGINIA BEACH

The foregoing document was signed and acknowledged before me this 24TH day of JULY, 2017, by ADAM ANDERSON who is PRESIDENT / CEO of Host Terminals, Inc., on behalf of the corporation.

[Signature]
Notary Public

7597322
Registration No.

My commission expires: 10/31/2018

Notary seal:



Moran Towing Corporation voluntarily agrees to the issuance of this Order.

Date: July 24, 2017 By: Kurt Odell, Litigation Counsel
(Person) (Title)
Moran Towing Corporation

State of Connecticut
~~Commonwealth of Virginia~~
City/County of Fairfield

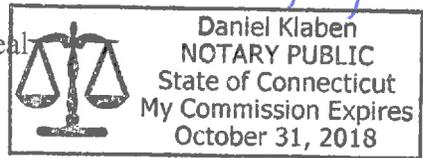
The foregoing document was signed and acknowledged before me this 24th day of July, 2017, by Kurt Odell who is Litigation Counsel of Moran Towing Corporation, on behalf of the corporation.

[Signature]
Notary Public

87588
Registration No.

My commission expires: 10/31/2018

Notary seal



APPENDIX A
SCHEDULE OF COMPLIANCE

1. Upon Atlantic's signing of this Order, Atlantic shall remove no less than 6,600,000 million gallons of Leachate and contaminated stormwater per month. Atlantic shall record Leachate and stormwater data in monthly amounts and keep the records on site for review by Department staff during Landfill inspections.

2. Atlantic may submit a written request to remove less than 6,600,000 million gallons of Leachate and contaminated stormwater per month provided the requests contains sufficient justification for the need for the reduction. This request shall be in writing and specify the revised gallons per month of leachate to be removed. DEQ shall respond to such written request within five working days of the request. Atlantic shall not remove leachate in lesser volumes than specified in paragraph 1 prior to receiving authorization from the DEQ unless the sole reason for not removing the specified volume threshold is a lack of Leachate. This reduction shall be memorialized and incorporated by reference as Appendix B.

APPENDIX B
Minimum Monthly Leachate Removal

Minimum Monthly Leachate Removal (gallons)	Revised Monthly Leachate Removal (gallons)	DEQ Approval Date
12,000,000	6,600,000	[execution Date of this Order]

**APPENDIX C
LEACHATE MANAGEMENT AND TRANSPORTATION PLAN**

LEACHATE MANAGEMENT PLAN



Virginia Landfills

November 2016

**LEACHATE MANAGEMENT PLAN
VIRGINIA LANDFILLS**

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1.0 PURPOSE

The purpose of the Leachate and Management Plan (Plan) is to:

- Describe current landfill management practices
- Describe current leachate disposal outlets
- Describe safe, environmentally sound transportation practices

2.0 BACKGROUND

Waste Management currently operates six (6) solid waste landfills in Virginia. The landfills include:

- Atlantic Waste Disposal – 3474 Atlantic Lane in Waverly (Sussex County), Virginia
- Bethel Landfill – 100 North Park Lane in Hampton, Virginia
- Charles City County Landfill – 8000 Chambers Road in Charles City, Virginia
- King George Landfill – 10376 Bullock Drive in King George, Virginia
- Maplewood Recycling and Waste Disposal Facility – 20221 Maplewood Road in Jetersville (Amelia County), Virginia
- Middle Peninsula Landfill and Recycling Facility – 12885 George Washington Memorial Highway in Glens (Gloucester County), Virginia

3.0 LEACHATE MANAGEMENT

The leachate collection systems are designed in accordance with Virginia Solid Waste Management Regulations 9VAC 20-81-210.A.(1)(c) to ensure that less than 12 inches of leachate would be present above the Resource Conservation and Recovery Act (RCRA) Subtitle D liner at any time.

3.1 ATLANTIC WASTE DISPOSAL

The leachate collection system has been designed using a 24-hour, 25-year storm as required by the regulations to ensure that no more than 12 inches of leachate will be present above the Landfill's RCRA liner at any time. Leachate is removed from the cells by gravity to lift stations where leachate is pumped into a force main system to leachate storage tanks. The leachate collection system was designed and constructed to maintain less than 30 centimeters of leachate head over the RCRA liner system excluding manifold trenches and sumps. Using the existing liner system configuration, the upper most liner is considered the recirculation liner and the underlying liner is considered the RCRA liner. The less than 30-centimeter leachate head limit applies to the RCRA liner system and not the recirculation liner. While no more than 12-inches of leachate head may accumulate over the lower RCRA liner system, head may exceed 12-inches above the upper (recirculation) until the leachate pumps evacuate the liquid off the liner.

3.1.1 LEACHATE STORAGE AND CONTAINMENT

AWD maintains a permanent leachate storage capacity of 2 million gallons. Tanks 1, 2, 3, and 4 each have a capacity of 500,000 gallons. A leachate load out area is located adjacent to Tanks 3 and 4. A second (auxiliary) leachate loadout area is located adjacent to Tank 2. All the leachate tanks are interconnected which allows leachate to be pumped from one tank to another should the need arise. In addition, all the leachate tanks are located within secondary containment areas.

This storage capacity would not be exceeded during continued waste filling operations at the site. Therefore, the existing tanks will meet Virginia Department of Environmental Quality (VDEQ) 7-day storage requirement.

A leachate storage impoundment was constructed in the July 2015; a second impoundment was constructed in August 2015 and additional impoundments have been subsequently added as an addition to the leachate storage system at the facility. Combined, the site maintains a total of eleven (11) impoundments (see Table 1 below) have a design capacity of approximately 114,100,000 gallons with 1 foot of free board and are proposed to be operated as temporary basins until cell construction begins in the area of the respective impoundments.

**Table 1
Leachate Surface Impoundments**

Surface Impoundment	Design Capacity (gallons)	Capacity to Top of Berm (gallons)
#1	5,246,000	6,831,400
#2	4,588,759	5,532,955
#3	10,019,093	10,118,185
#4	14,053,986	15,943,345
#5	10,603,027	11,989,780
#6	5,810,382	6,583,880
#7	7,295,901	8,273,033
#8	14,200,000	15,609,603
#9	13,674,556	15,170,814
#10	14,200,000	15,700,000
#11	14,400,000 (approx.)	15,900,000 (approx.)
Totals	114,100,000	128,000,000

Leachate may be pumped from the storage tank(s) or the impoundments to tanker trucks for transportation and disposal at a Private- or Publicly Owned Treatment Works (POTW).

Temporary leachate storage tanks (frac tanks) may also be used at AWD. These tanks are used when temporary long-term storage of leachate is required and the means of conveying the collected leachate to the permanent tanks does not exist or for long-term persistent seeps.

3.1.2 LEACHATE DISPOSAL

Atlantic Waste Disposal is currently constructing a leachate treatment plant on-site that is designed to treat approximately 400,000 gallons per day. To maximize the plant capacity, AWD will treat approximately 150,000 gallons per day of on-site and will also accept leachate from the other Virginia landfills as described in this document.

In addition, excess leachate not treated onsite is transferred from the storage tanks to tanker trucks, rail cars, and barge via tanker trucks for transportation to an approved offsite treatment and disposal facility. The barge is a double-hulled, ocean going barge that loads from the Tidewater Tank Terminal in Chesapeake, Virginia. At this time, the leachate is taken to a POTW or privately operated wastewater treatment vendors for disposal and characterization samples are taken and analyzed, as needed, for parameters specified by the treatment facility.

3.2 BETHEL LANDFILL

The leachate collection and management systems at the Facility were designed in accordance with VSWMR 9 VAC 20-81-210.A.(1)(c) and industry standards to ensure that less than 12 inches of leachate would be present above the Landfill's RCRA liner at any time.

The landfill was designed in a manner that each of the landfill cells drain to a sump that contains a submersible pump that pumps the collected leachate into the force main system and ultimately to the leachate storage tanks. The pumps in the sumps are equipped with automatic on/off controls and settings for high level alarms. In the event head on the liner in a particular landfill cell exceeds 12-inches, leachate recirculation in the immediate vicinity of that cell will be halted, if applicable. Leachate recirculation in that cell area will not recommence until the leachate head in that cell has been reduced to less than 12-inches. Leachate is removed from the cells by submersible pumps and transported via a force main to the leachate storage tanks.

3.2.1 LEACHATE STORAGE AND CONTAINMENT

Bethel Landfill maintains a permanent leachate storage capacity of 350,000 gallons. Specifically, two leachate storage tanks are located on site, one with 250,000 gallons, the second with 100,000 gallons. From the leachate sumps, the collected leachate, and landfill gas condensate are transported via force mains to the two on-site leachate storage tanks. These tanks have sufficient capacity to meet VDEQ 7-day storage requirement.

The leachate tanks are interconnected which allows leachate to be pumped from one tank to another or isolated using valves should the need arise. In addition, the leachate tanks are located within a secondary containment area.

3.2.2 LEACHATE DISPOSAL

Prior to final disposal the leachate is direct discharged to Hampton Roads Sanitation District (HRSD). Leachate that requires pretreatment to meet the HRSD permit is processed through a Moving Bed Biofilm Bioreactor (MBBR) pretreatment unit and direct discharged to HRSD.

Should leachate flow exceed the HRSD discharge permit, leachate is transferred to tanker trucks for transportation to an approved offsite POTW facility

3.3 CHARLES CITY COUNTY LANDFILL

The leachate collection and management systems at the Facility were designed in accordance with VSWMR 9 VAC 20-81-210.A.(1)(c) and industry standards to ensure that less than 12 inches of leachate would be present above the Landfill's RCRA liner at any time. The landfill was designed in a manner that each of the landfill cells drain to a sump that contains a submersible pump that pumps the collected leachate into the force main system and ultimately to the leachate storage tanks. The pumps in the sumps are equipped with automatic on/off controls and settings for high level alarms. In the event head on the liner in a particular landfill cell exceeds 12-inches, leachate recirculation in the immediate vicinity of that cell will be halted, if applicable. Leachate recirculation in that cell area will not recommence until the leachate head in that cell has been reduced to less than 12-inches. Leachate is removed from the cells by submersible pumps and transported via a force main to the leachate storage tanks.

3.3.1 LEACHATE STORAGE AND CONTAINMENT

Charles City maintains a permanent leachate storage capacity of 550,000 gallons. Specifically, two leachate storage tanks are located on site, each having a capacity of 225,000 gallons. From the leachate sumps, the collected leachate, as well as leak detection fluids, and landfill gas condensate are transported via force mains to the two 225,000-gallon on-site leachate storage tanks. These tanks have sufficient capacity to meet VDEQ 7-day storage requirement.

A leachate load out area is located adjacent to the storage tanks, and is designed to drain any potentially spilled liquids from transfer operations back into the secondary containment area. The leachate tanks are interconnected which allows leachate to be pumped from one tank to another or isolated using valves should the need arise.

3.3.2 LEACHATE DISPOSAL

Leachate is transferred from the storage tanks to tanker trucks for transportation to an approved offsite POTW facility. At this time, the leachate is taken to a POTW or privately operated wastewater treatment vendors for disposal and characterization samples are taken and analyzed, as needed, for parameters specified by the treatment facility.

3.3 KING GEORGE LANDFILL

The leachate collection and management systems at the Facility were designed in accordance with VSWMR 9 VAC 20-81-210.A.(1)(c) and industry standards to ensure that less than 12 inches of leachate would be present above the Landfill's RCRA liner at any time.

The landfill was designed in a manner that each of the landfill cells drain to a sump that contains a submersible pump that pumps the collected leachate into the force main system and ultimately to the leachate storage tanks. The pumps in the sumps are equipped with automatic on/off controls and settings for high level alarms. In the event head on the liner in a particular landfill cell exceeds 12-inches, leachate recirculation in the immediate vicinity of that cell will be halted. Leachate recirculation in that cell area will not recommence until the leachate head in that cell has been reduced to less than 12-inches. Leachate is removed from the cells by submersible pumps and transported via a force main to the leachate storage tanks.

3.3.1 LEACHATE STORAGE AND CONTAINMENT

King George maintains a permanent leachate storage capacity of 1,000,000 gallons. Specifically, four leachate storage tanks are located on site, each having a capacity of 250,000 gallons. From the leachate sumps, the collected leachate, leak detection fluids, and landfill gas condensate are transported via force mains to the four 250,000-gallon on-site leachate storage tanks. These tanks have sufficient capacity to meet VDEQ 7-day storage requirement.

A leachate load out area is located adjacent to the storage tanks, and is designed to drain any potentially spilled liquids from transfer operations back into the secondary containment area. The leachate tanks are interconnected which allows leachate to be pumped from one tank to another or isolated using valves should the need arise. In addition, the leachate tanks are located within a secondary containment area.

3.3.2 LEACHATE DISPOSAL

The primary outlet for leachate at King George is to utilize the two on-site leachate concentrators. Each concentrator has a capacity to treat 30,000 gallons of leachate per day. A third concentrator planned for 2017, would treat an additional 40,000 gallons of leachate per day.

Excess leachate is transferred from the storage tanks to tanker trucks for transportation to an approved offsite treatment and disposal facility. At this time, the leachate is taken to a POTW or privately operated wastewater treatment vendors for disposal and characterization samples are taken and analyzed, as needed, for parameters specified by the treatment facility.

3.4 MAPLEWOOD RECYCLING AND WASTE DISPOSAL FACILITY

The leachate collection and management systems at the Facility were designed in accordance with VSWMR 9 VAC 20-81-210.A.(1)(c) and industry standards to ensure that less than 12 inches of leachate would be present above the Landfill's RCRA liner at any time.

The landfill was designed in a manner that each of the landfill cells drain to a sump that contains a submersible pump that pumps the collected leachate into the force main system and ultimately to the leachate storage tanks. The pumps in the sumps are equipped with automatic on/off controls and settings for high level alarms. In the event head on the liner in a particular landfill cell exceeds 12-inches, leachate recirculation in the immediate vicinity of that cell will be halted,

if applicable. Leachate recirculation in that cell area will not recommence until the leachate head in that cell has been reduced to less than 12-inches. Leachate is removed from the cells by submersible pumps and transported via a force main to the leachate storage tanks.

3.4.1 LEACHATE STORAGE AND CONTAINMENT

Maplewood maintains a permanent leachate storage capacity of 915,000 gallons. Specifically, four leachate storage tanks are located on site. The leachate sumps pump the collected leachate, as well as the leak detection fluids, and landfill gas condensate via force mains to either the two 260,000-gallon, the 295,000 gallon or the 100,000 gallon on-site leachate storage tanks. These tanks have sufficient capacity to meet VDEQ 7-day storage requirement.

A leachate load out area is located adjacent to the storage tanks, and is designed to drain any potentially spilled liquids from transfer operations back into the secondary containment area. The leachate tanks are interconnected which allows leachate to be pumped from one tank to another or isolated using valves should the need arise.

3.4.2 LEACHATE DISPOSAL

Leachate is transferred from the storage tanks to tanker trucks for transportation to an approved offsite POTW facility. At this time, the leachate is taken to a POTW or privately operated wastewater treatment vendors for disposal and characterization samples are taken and analyzed, as needed, for parameters specified by the treatment facility.

3.5 MIDDLE PENINSULA LANDFILL AND RECYCLING FACILITY

The leachate collection and management systems at the Facility were designed in accordance with VSWMR 9 VAC 20-81-210.A.(1)(c) and industry standards to ensure that less than 12 inches of leachate would be present above the Landfill's RCRA liner at any time. The landfill was designed in a manner that each of the landfill cells drain to a sump that contains a submersible pump that pumps the collected leachate into the force main system and ultimately to the leachate storage tanks. The pumps in the sumps are equipped with automatic on/off controls and settings for high level alarms. In the event head on the liner in a particular landfill cell exceeds 12-inches, leachate recirculation in the immediate vicinity of that cell will be halted, if applicable. Leachate recirculation in that cell area will not recommence until the leachate head in that cell has been reduced to less than 12-inches. Leachate is removed from the cells by submersible pumps and transported via a force main to the leachate storage tanks.

3.5.1 LEACHATE STORAGE AND CONTAINMENT

Middle Peninsula maintains a permanent leachate storage capacity of 1,500,000 gallons. Specifically, three leachate storage tanks are located on site, each having a capacity of 500,000 gallons. From the leachate sumps, the collected leachate and landfill gas condensate are

transported via force mains to the three 500,000-gallon on-site leachate storage tanks. These tanks have sufficient capacity to meet VDEQ 7-day storage requirement.

A leachate load out area is located adjacent to the storage tanks, and is designed to drain any potentially spilled liquids from transfer operations back into the secondary containment area. The leachate tanks are interconnected which allows leachate to be pumped from one tank to another or isolated using valves should the need arise.

3.5.2 LEACHATE DISPOSAL

Leachate is transferred from the storage tanks to tanker trucks for transportation to an approved offsite POTW facility. At this time, the leachate is taken to a POTW or privately operated wastewater treatment vendors for disposal and characterization samples are taken and analyzed, as needed, for parameters specified by the treatment facility.

4.0 HAULER REQUIREMENTS

4.1 TRUCKING

All Waste Management sites use leachate haulers that are Department of Transportation certified, insured and permitted to haul leachate to the disposal facilities. Waste Management is listed as additionally insured on all insurance policies.

4.2 RAIL

Rail tank cars are inspected and certified using Federal Railroad Administration (FRA) guidelines for carrying liquid cargos. Railway companies are required to satisfy all Waste Management safety and insurance requirements.

4.3 BARGE

Barges used for transport of leachate are double-hulled, A1 ocean manned barges that are U.S. Coast Guard inspected and under conditions or requirements established by the U.S. Coast Guard or pursuant to its authority.

5.0 SPILL RESPONSE

In the event of an environmental incident while transporting leachate, Waste Management sites and haulers will contact one of the following local emergency response providers:

Oakley Environmental Services
5115 Prince George Drive
Prince George, Virginia 23875
Office Phone: (800) 948-7157
24-hour spill response: (804) 712-4534

Clean Harbors Environmental Services
17465 Eltham Road
West Point, VA 23181
Office Phone: (757) 603-7493
24-hour spill response: (800) 645-8265

In addition, Waste Management will notify VDEQ immediately of any environmental issues associated with the incident. The local VDEQ spill response coordinator is listed below:

Jeremy Kazio - DEQ-PRO Pollution Response Coordinator
4949-A Cox Rd., Glen Allen VA 23060
(804) 527-5042 (office)
(804) 382-0925 (mobile)