



COMMONWEALTH of VIRGINIA

DEPARTMENT OF ENVIRONMENTAL QUALITY

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(804) 698-400
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May 2, 2016

Mr. Mark DeVine
District Manager
USA Waste of Virginia Landfills, Inc.
4 Liberty Lane West
Hampton, NH 03842
(603)929-5436

VIA ELECTRONIC MAIL

RE: **Long Term Stewardship Report**
USA Waste of Virginia Landfills, Inc.
Wheelabrator Corporation Landfill, Bedford, Virginia
EPA ID VAD000063669

Dear Mr. DeVine:

The Department of Environmental Quality, Office of Remediation Programs (Department) has prepared the attached report following the Long Term Stewardship inspection performed on April 6, 2016 at the Wheelabrator Landfill facility located in Bedford, Virginia. The inspection found no outstanding items.

You may contact me to discuss any questions. I can be reached at 804-698-4218 or by email at tara.mason@deq.virginia.gov

Respectfully,

A handwritten signature in blue ink that reads 'Tara D. Mason'.

Tara D. Mason
Corrective Action Project Manager

cc: Brett Fisher, Angela Alonso, DEQ-CO
Andrea Barbieri, Erich Weissbart, EPA Region III (3LC50)
Aziz Farahamand, DEQ-BRO

Attachment



**Long-Term Stewardship Assessment Report
Wheelabrator Corp Landfill, Bedford, Virginia
EPA ID# VAD000063699**

Prepared by: Tara Mason

Date: May 2, 2016

Introduction: Long-term stewardship (LTS) refers to the activities necessary to ensure that engineering controls (ECs) are maintained and that institutional controls (ICs) continue to be observed. The purpose of the EPA Region 3 LTS program is to periodically assess the efficacy of the implemented remedies (i.e, ECs and ICs) and to update the community on the status of the RCRA Corrective Action facilities. The assessment is conducted in two fold, which consists of a record review and a field inspection, to ensure that the remedies are implemented and maintained in accordance to the final decision.

Site Background: The Wheelabrator Corp. Landfill facility is located two miles northwest of the Town of Bedford, Bedford County, Virginia. An unnamed stream, a tributary to Little Otter River, is located along the eastern portion of the landfill site. The facility property has a 2.7 acre landfill that was used for the disposal of furnace dust and furnace slag generated from secondary steel smelting operations conducted at the adjacent Wheelabrator Abrasives foundry. The foundry, located at the south of the landfill, melted scrap metal in an electric furnace to produce steel “shot”. Furnace dust and furnace slag was disposed of in the landfill until 1985. Cadmium, chromium, and lead were present in the dust and slag above regulatory levels causing the waste material to be classified as characteristically hazardous. In addition, melted heat treating operations utilized cyanides and generated quenched waste-water sludges that were discharged into the landfill.

The landfill, which operated for 16 years, was closed with waste in place on December 21, 1988. The VDEQ issued a Hazardous Waste Management Post-Closure Permit (Permit) on September 29, 1992. The Permit was renewed August 16, 2003 with an expiration date of August 15, 2013. The Permit required groundwater monitoring upgradient and downgradient of the closed landfill as well as maintenance of the landfill cap. The Permit established groundwater protection standards for the following constituents of concern: antimony, arsenic, barium, beryllium, cadmium, chromium, lead, mercury, nickel, silver, sulfide, thallium, tin, acetophenone, and cyanide. A review of the groundwater monitoring data from 2001 to 2012



indicated the buried waste in the closed Landfill is secure, and there is no sustained exceedance in groundwater protection standards or impacts from the landfill. A Class 3 permit modification was submitted to VDEQ on March 1, 2013 requesting a reduction of the post closure care period and termination of the post closure permit.

The Property also has two former Solid Waste Management Units (SWMUs); Pond #2 and Pond #3. Both ponds were built to manage contact cooling water discharged from the Wheelabrator Abrasives facility. The constituents of concern in the ponds were low levels of heavy metals. Pond 2 was closed in 1998 under a Virginia Pollution Abatement permit, and Pond 3 was closed in 1988 in accordance with a state waste program closure plan as a non-hazardous waste unit. Both units were closed by removing all the water and sediment in the ponds and then backfilling and seeding with vegetative cover. On September 22, 2010, the VDEQ approved a Class 2 permit modification to support the determination of No Further Action for Pond #2 and Pond #3.

Current Site Status: The Virginia Department of Environmental Quality (DEQ) is the lead agency that provides oversight of RCRA Corrective Action activities at the Wheelabrator landfill site located in Bedford, VA. In September 2010, DEQ issued its final decision regarding corrective action at the facility and completed a permit modification to incorporate the final remedy. The final remedy states that no further actions to clean up soil or groundwater are necessary, given current and reasonably anticipated future land use. However, the final remedy also requires the facility to maintain institutional and engineering controls because waste with hazardous substances will remain in the closed capped landfill. After the facility demonstrated stable groundwater conditions and implemented a restrictive covenant for the property under the Uniform Environmental Covenants Act recorded on August 7, 2013, the facility's hazardous waste management permit was allowed to expire in 2013.

Long-term Stewardship Site Visit: On April 6, 2016, DEQ conducted a long-term stewardship site visit with a Wheelabrator representative and Waste Management's contractor to discuss and assess the status of the implemented remedies at the site. The attendees were:

Name	Organization	Email Address	Phone No.
Tara Mason	VADEQ – Central	tara.mason@deq.virginia.gov	804-698-4218
Ashby Scott	VADEQ – Central	ashby.scott@deq.virginia.gov	804-698-4467
Kim Thompson	VADEQ – Blue Ridge	kim.thompson@deq.virginia.gov	540-562-6819
Lauren Pillow	VADEQ – Blue Ridge	lauren.pillow@deq.virginia.gov	434-582-6238
Erich Weissbart	USEPA	weissbart.erich@epa.gov	410-305-2779
Andy Kassoff	EEE Consulting	akassoff@eee-consulting.com	540-798-7900
Sherwood Martin	EEE Consulting/ Wheelabrator	Not available	540-312-6857



Institutional Controls (ICs):

Groundwater: There are no groundwater controls on the property.

Residential Use: The parcel is used for industrial purposes only as recorded on August 7, 2013 in the UECA covenant. No residential areas have been constructed within Facility boundaries.

Excavation: The property within the landfill boundary cannot be developed in any way which could minimize the integrity and effectiveness of the landfill cover.

Informational and Proprietary Controls: The landfill was closed with waste in place on December 21, 1988. In addition to the UECA, there is a Deed Notice in place with the Bedford County Circuit Clerk's Office, Deed Box 844, Page 767-768, identifying the location of the Facility's closed landfill. The restrictions limit future development/disturbance on the landfill and require maintenance of the landfill cap.

Engineering Controls (ECs):

Access Controls: There is a security fence surrounding the landfill. The security fence was intact and undamaged. Adequate signage was placed around the fence.

Financial Assurance: Financial Assurance is not required at the Facility.

Reporting Requirements/Compliance: Starting in August 7, 2014, the Facility submits to the Agency written documentation stating whether or not the activity and use limitations of the environmental covenant are being observed. The documentation is signed by a qualified and certified professional engineer who has inspected compliance with the environmental covenant. There are no issues of noncompliance in regards to reporting requirements as the facility has submitted this documentation annually.

Mapping: The EPA Facility website figures are accurate and include a geospatial PDF showing the use restriction boundary. The map was field-verified and no issues were noted.

Follow-up Activities: No follow-up by DEQ is required.

Conclusion: The engineering controls selected are implemented and remain intact and undamaged. Also, no EC/IC deficiencies have been identified. The current EC/ICs have been implemented and are functional and maintained as required.

T. Mason

VADEQ - Long Term Stewardship Checklist
 Wheelabrator Landfill, Bedford, VA
 VAD000063669

April 6, 2016

Remedies:

- The property within the landfill boundary cannot be developed in any way which could minimize the integrity and effectiveness of the landfill cover.
- Maintain the integrity and effectiveness of the landfill cover, including making repairs to the cap, as necessary, to correct the effects of settling, subsidence, erosion, or any activity that may potentially compromise the landfill cover.
- Prevent run-on and run-off from eroding or otherwise damaging the landfill cover.
- Maintain the security fence and signage around the closed landfill to prevent unauthorized and unknowing entry of persons or livestock.

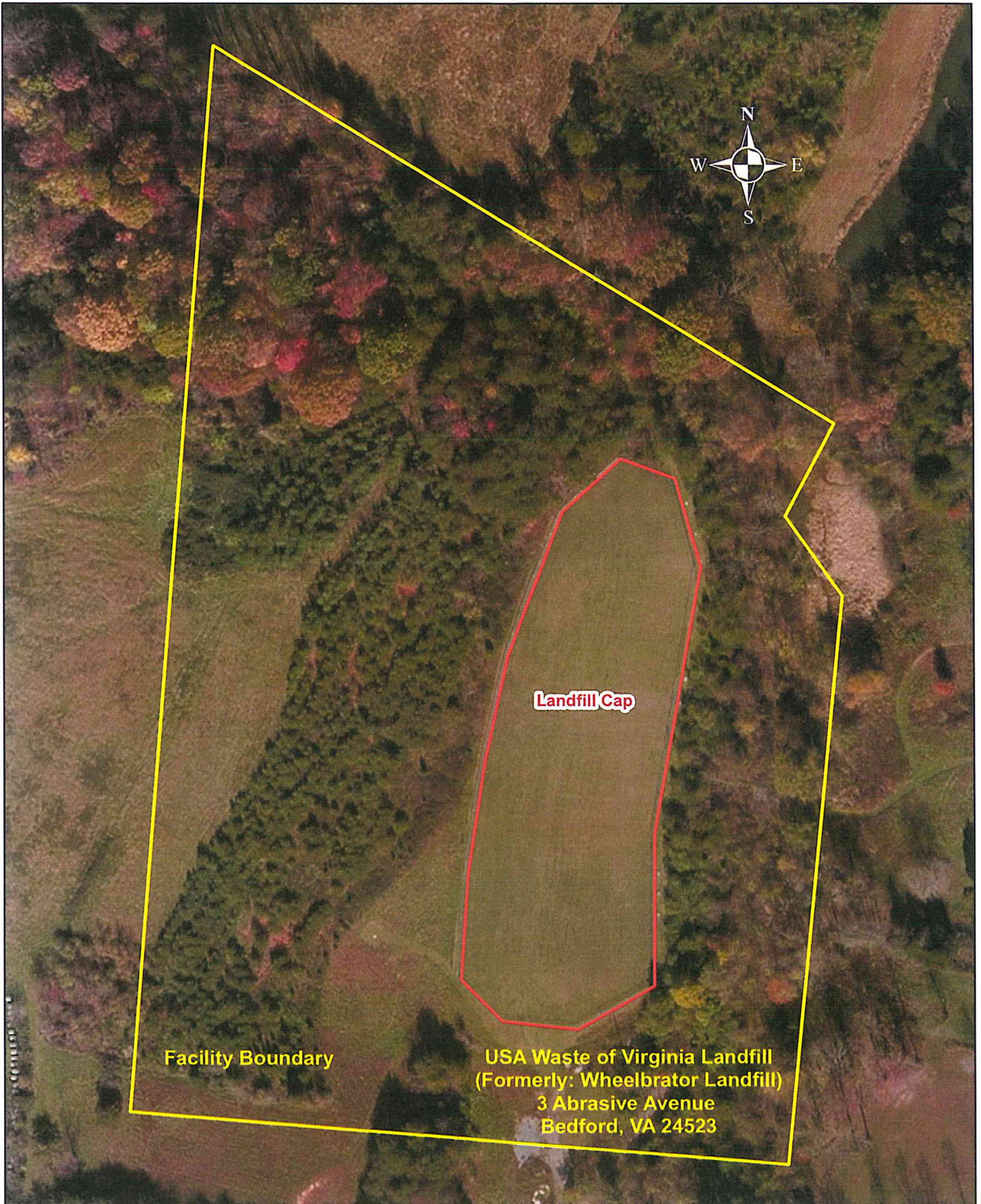
Observed by: Tara Mason, DEQ-CO-RCA CA Project Manager
Also present EPA, EEF, DEQ-PRD, Wheelabrator - see notes.

<u>IC Review and Inspection Questions:</u>	<u>Yes</u>	<u>No</u>	<u>Notes</u>
• Have the ICs specified in the CA remedy been fully implemented in accordance with any applicable schedule?	✓		UECA recorded on 8-7-13 in Bedford Co, VA
• Do the ICs provide control for the entire extent of contamination (entire site or a specific portion)?	✓		precious HW landfill only
• Are the ICs eliminating or reducing exposure of all potential receptors to known contamination?	✓		
• Are the ICs sufficiently meeting the risk goals and applicable standards specified in the CA remedy?	✓		
• Are the ICs effective and reliable for the activities (current and future) at the property to which the controls are applied?	✓		
• Are the ICs suitable for the period/length of time which the controls are intended to be used as specified in the CA remedy?	✓		
• Are the ICs being maintained as required by the CA remedy in order to ensure that the controls remain effective?	✓		
• Are additional ICs necessary to achieve the intended goals of the CA remedy?		✓	
• Are modifications to the ICs needed?		✓	
<u>EC Review and Inspection Questions:</u>			
• Have the ECs specified in the CA remedy been fully implemented and constructed in accordance with any applicable plans and schedule?	✓		Cap maintained and inspected annually fully vegetated and regularly
• Are the ECs fully intact? Any damage visible? Have any	✓		minimal tree clearing needed along fence

IC Review and Inspection Questions:	Yes	No	Notes
repairs been necessary?			
• Do the ECs provide control for the entire extent of contamination (lateral and vertical)?	✓		
• Are the ECs effective at reducing contaminant migration? Is data available to provide supporting evidence?	✓		
• Are the ECs eliminating or mitigating exposures to all potential receptors?	✓		
• Are the ECs sufficiently meeting the risk goals and applicable standards specified in the CA remedy?	✓		
• Are the ECs effective and reliable for the activities (current and future) and climatic conditions at the property to which the controls are applied?	✓		
• Are the ECs reliable during the period/length of time which the controls are used to achieve and maintain applicable standards specified in the CA remedy?	✓		
• Are the ECs being monitored and maintained as required by the O&M plan or agreement developed in accordance with the CA remedy in order to ensure that the controls remain effective?	✓		- Annual report to DEQ is performed as required by VECA - Monitored 3/yr usually
• Are additional ECs necessary to achieve the intended goals of the CA remedy?		✓	
• Are modifications to the ECs needed?		✓	

Notes: Also present

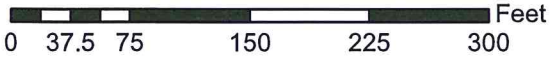
Andy Kassoff 540-798-7900 EEE
Sherwood Martin 540-312-6857 EEC
Enih Weissbart 540-520-7756 EPA
Ashby Scott, DEQ-CO
Kim Thompson, Lauren Pillow - DEQ BRO
DEQ, et al walked the perimeter and transversed the landfill to perform visual inspection of ECs -
Fence, signage, intact, no obvious signs of erosion, burrowing, or disrepair. Minimal tree clearing along fenceline recommended.
- No issues observed. Remedy remains effective.



Landfill Cap

Facility Boundary

**USA Waste of Virginia Landfill
(Formerly: Wheelbrator Landfill)
3 Abrasive Avenue
Bedford, VA 24523**



VDEQ Long Term Stewardship Inspection
Photo by: Tara D. Mason
April 6, 2016

**Wheelabrator Landfill
3 Abrasive Avenue
Bedford, Virginia 24523**

EPA ID: VAD000063669



View of Landfill Eastern Boundary - Facing NE