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PROVISIONAL DECISION - ISSUED 11/1/2017 - FOR COMMENT

Peter Kendrigan
Wheelabrator Saugus, Inc.
100 Salem Turnpike
Saugus, MA 01906

RE: SAUGUS—Solid Waste Management
Wheelabrator Saugus, Inc. Ash Landfill
100 Salem Turnpike
FMF#: 39704
BWP SW11/ Landfills – Major Modification
Transmittal Number: X271439

Revised Final Engineering Plan - Conditional Approval
PROVISIONAL DECISION

Dear Mr. Kendrigan:

The Massachusetts Department of Environmental Protection, Northeast Regional Office, Bureau of Air and Waste, Solid Waste Management Section (“MassDEP”) has reviewed your application, category BWP SW11 Landfills-Major Modification, Transmittal Number: X271439 (the “Application”), for the modification of the Final Engineering Plan for the Wheelabrator Saugus Ash Monofill Landfill (the “Landfill”) located at 100 Salem Turnpike in Saugus, Massachusetts (the “Landfill”). Brown and Caldwell of Taunton, Massachusetts (“B&C”) prepared and submitted the Application on behalf of Wheelabrator Saugus, Inc. (“Wheelabrator” or the “Applicant”). The Application includes an Engineering Design Report titled:

2017 Revisions to the Final Engineering Plan
Saugus Ash Monofill
Prepared for Wheelabrator Saugus
100 Salem Turnpike
Saugus, MA
April 2017
Prepared by Brown and Caldwell

DISCUSSION

As discussed in the Application, Wheelabrator proposes to reduce the final gradient of the Landfill within Phases I and II from five percent (5%) to two percent (2%). As designed, Phases I and II are to be graded as a series of low ridges and valleys. To achieve the reduced gradient, the elevation of the bottom of each valley (Valleys 1 and 2) will be raised while maintaining the previously approved elevation of the ridges. The peak elevation of the completed Landfill will remain at fifty feet mean sea level (50 feet MSL) as previously approved by MassDEP.

Wheelabrator is also proposing the use of a geocomposite gas venting layer in lieu of a 6-inch thick gas venting sand layer in the final landfill cap for the Landfill.

In total, the proposed grading change and use of a geocomposite gas venting layer in Phase I and II will provide an additional estimated 400,000 cubic yards of disposal capacity.

The reduction in the final gradient of Valleys 3, 4 and 5 located in Phases III, IV and V were previously approved by MassDEP in an approval letter dated December 2, 2008.

The Environmental Monitoring Plan was revised by adding, 1) Attachment A: the stormwater monitoring requirements for the Landfill, and 2) Attachment B: the Industrial Wastewater Discharge permit for the Landfill’s leachate.

The existing leaf and yard waste composting operation will continue to operate at the Landfill. When ash disposal activities in Phases IV and V of the Landfill are nearing completion, Wheelabrator expects to relocate the composting operation within the uncapped areas of the Landfill.

The supplemental information provided by Wheelabrator, dated July 6, 2017, includes an anticipated sequence of operation and closure of the Landfill. The sequence of Landfill operation discusses ash placement, relocation of the Ash Staging Area, relocation of the Leaf and Yard Waste Compost Operation, and timing of landfill cap construction for each phase of the Landfill.

The supplemental information provided by Wheelabrator, dated October 17, 2017, provided a status of the barrier wall performance at the Landfill.

An Environmental Notification Form for the proposed project was submitted for Massachusetts Environmental Policy Act (“MEPA”) review with the Secretary of Energy and Environmental Affairs. On August 5, 2016, the Secretary issued a certificate that determined the project adequately and properly complied with MEPA and its implementing regulations and no further MEPA review was required.

Additional details on the Application and proposed project can be found in the Fact Sheet attached hereto as Attachment 1.
PROVISIONAL DECISION

MassDEP has determined that the Application, as conditioned by the attached Provisional Decision and permit, complies with the requirements of 310 CMR 19.000, including but not limited to, the requirements of 310 CMR 19.113, subject to the Applicant’s compliance with the conditions imposed by MassDEP pursuant to 310 CMR 19.043.

MassDEP is issuing this decision pursuant to 310 CMR 19.033(4)(a) as a Provisional Decision for the purpose of obtaining comment from the Applicant, the Town of Saugus, other interested parties, and the public on the proposed decision. Comments on the Provisional Decision must be received by MassDEP at the address below on or before 5 PM on December 1, 2017.

Comments must be received at the following address on or before 5 PM on December 1, 2017.

Massachusetts Department of Environmental Protection
Northeast Regional Office
Solid Waste Management Section
Attention: Mark G. Fairbrother, Chief
205B Lowell Street
Wilmington, Massachusetts 01887

Comments also may be submitted by email to MassDEP at the following email address WheelabratorSaugus.MassDEP@state.ma.us on or before 5 PM on December 1, 2017. Please include the Application Transmittal Number: X271439 and FMF Number: 39704 with the comments.

This decision is issued pursuant to 310 CMR 19.033 and is an approval for the modifications of the final grading of Phases I and II and the final cap at the Wheelabrator Saugus Ash Monofill Landfill. This decision is issued pursuant to M.G.L. Chapter 111, § 150A and 310 CMR 19.000, subject to the conditions set forth below. In the event this approval conflicts with all or parts of other prior plan approvals issued pursuant to Chapter 111, § 150A, the terms and conditions of this approval shall supersede the conflicting provisions of the prior plan approvals. This approval does not convey property rights of any sort or any exclusive privilege. This decision does not relieve Wheelabrator, or any other person, of the responsibility to comply with all other applicable federal, state and local statutes, regulations and requirements.

In a separate application for modification of the Landfill, Wheelabrator proposed to establish an area within the active limits of the Landfill to stage ash from the Wheelabrator Saugus Energy-from-Waste (“EfW”) Facility prior to shipment for further processing or disposal (the “Ash Staging Area Project”). In issuing this decision, MassDEP is not approving the Ash Staging Area Project. The Ash Staging Area Project will be the subject of a separate review and decision. The application process will provide opportunity for public review and comment regarding the proposed Ash Staging Area Project.
CONDITIONS

1. This decision is effective upon the date stamped on page one of this permit.

2. Wheelabrator shall comply with this permit and the requirements of 310 CMR 19.000, including, but not limited to, the requirements established at 310 CMR 19.043(5), Standard Conditions.

3. Required Submittals:

   a. Notification of Construction: Not less than seven (7) days prior to commencing construction\(^1\) pursuant to the Application and this decision, Wheelabrator shall notify MassDEP and the Town of Saugus Board of Health (the “BOH”) in writing of the scheduled date of the commencement of construction at the site. In addition, Wheelabrator shall provide to MassDEP and the BOH the following:
      
      i. The projected schedule for completion of the major construction milestones;
      
      ii. The name and contact information of an on-site contact for the construction;
      
      iii. Health and safety plan, for MassDEP’s files, that includes, but is not limited to:
          
          • protocols for monitoring for landfill gas (methane, hydrogen sulfide, etc.), as needed;
          
          • protocols for modifying work practices if landfill gas is detected at levels of concern (action levels);
          
          • instruction and training of all personnel working on the site regarding the potential health and safety hazards at the Landfill including, but not limited to, those associated with landfill gas;
          
          • instruction and training of all personnel in compliance with the conditions of this permit and how to perform authorized activities in a manner that is not hazardous to public health, safety, and the environment.

      iv. The National Pollutant Discharge Elimination System (NPDES) Notice of Intent and Stormwater Pollution Prevention Plan (SWPPP) for the project.

   b. Construction Certification Report: On or before ninety (90) days after the date of completion of each phase of Landfill closure construction, Wheelabrator shall submit for review and approval by MassDEP a construction certification report, as an application category BWP SW43 Landfill Closure Completion, as set forth below. The certification report shall include, but is not limited to:

      i. As-built plans for the final as-constructed improvements, prepared by a Massachusetts Registered Professional Engineer, amended to incorporate all modifications and alterations, if any, made during construction;

      ii. A report, prepared by the Massachusetts Registered Professional Engineer of Record, providing all applicable quality control/quality assurance data and certifying that the closure was completed in conformance with the approved plans and 310 CMR 19.000; and

      iii. Certifications by Wheelabrator and the Engineer of Record pursuant to 310 CMR 19.011.

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\(^1\) This includes but is not limited to removal of previously capped areas in Phase I and II and Landfill cap construction.
c. In the event Wheelabrator seeks to relocate the existing Leaf and Yard waste operation to capped areas of the Landfill (i.e., areas of the Landfill that have received final cover), Wheelabrator shall, without limitation, submit to MassDEP an application for modification as specified by MassDEP.

4. All terms and conditions of the Landfill’s approved plans, including, but not limited to, the Facility Engineering Plan (the “FEP”), shall remain in full force and effect as may be modified by this decision.

5. Wheelabrator shall instruct all contractors and employees in the requirements of this decision, as applicable to their work. Wheelabrator shall maintain and make available at the Landfill a copy of this decision and all approved plans, appendices, protocols and attachments for use by Wheelabrator’s contractors and employees. Wheelabrator shall maintain records at the site that all contractors and employees have been instructed pursuant to this condition. Wheelabrator shall ensure that all work performed at the Landfill complies with 310 CMR 19.000 and the applicable requirements of this permit.

6. Wheelabrator shall implement all measures necessary to prevent, minimize and mitigate the generation and emission of dust wherever and whenever necessary at the Landfill and any other areas related to or under control of Wheelabrator to prevent fugitive dust emissions and/or the occurrence of nuisance conditions. Water shall not be used for dust control in amounts that produce excessive infiltration, ponding, runoff or erosion.

7. Wheelabrator shall perform routine monitoring of the Landfill in accordance with the requirements of this Section and the approved plans to ensure compliance with this decision and the approved plans. The routine monitoring shall include, without limitation:

a. Daily inspection and assessment of the status and condition of the Landfill and construction activities. This shall include, but not be limited to, the monitoring of the site for the occurrence of nuisance odors, dust, and noise, and storm water run-off from the site and any necessary corrective actions.

b. Maintenance at the site of a Daily Construction Activity Log that includes, but is not limited to:
   i. A daily summary that describes, without limitation, the principle activities at the Landfill that day such as, site grading, excavation, storm water system maintenance, and notable construction milestones;
   ii. A description of any deviations from the approved plans and this approval.
   iii. A description of corrective actions, maintenance, or repairs taken, or to be taken, to mitigate or correct problems or potential/actual nuisance conditions.
   iv. Documentation of all reporting/notifications made to MassDEP, the Board of Health and other authorities/agencies/emergency responders/facilities, as necessary, in accordance with the Notification Requirements of Condition 10 of this decision.
   v. Documentation of any complaints received by Wheelabrator relative to the activities at the Landfill that includes, but is not limited to the name/identity of Wheelabrator, the date and time of the complaint, the nature of the complaint, and the response to the complaint including any actions taken by Wheelabrator.

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2 This includes but is not limited to structures, equipment, devices, storm water management controls, environmental control systems, paved surfaces, fencing, gates, wheel wash station and other areas.
8. Wheelabrator shall engage the services of an independent Massachusetts registered professional engineer in good standing, qualified and experienced in the design and construction of solid waste management facilities (the “Engineer of Record”) to oversee all construction activities at the Landfill pursuant to this decision. The Engineer of Record or his/her qualified direct employee\(^3\) (the “Inspector”) shall conduct routine inspections of the Landfill, construction activities and project status as set forth below. These inspections are not in lieu of any other inspections, oversight or reporting required or necessary to oversee construction activities at the Landfill.

   a. The Inspector shall have adequate training, knowledge and understanding of all applicable regulations, and the requirements of this decision.

   b. The Inspector shall during each inspection thoroughly evaluate the project status and identify actual or potential deviations from the applicable regulations and the requirements of this decision, including, without limitation, all applicable plans and approvals. These inspections are in addition to those required to direct, monitor, and document the construction activities at the Landfill to prepare the construction certification(s).

   c. During times when activities are taking place to remove the cap in previously capped areas of the Landfill, the Inspector shall prepare written semi-monthly (“bi-weekly”) construction monitoring reports of each inspection, as set forth in this Condition (the “Construction Monitoring Reports”). The bi-weekly inspections required by this Condition shall apply to all work related to the uncapping and preparation of the valley area(s) for the placement of waste, including without limitation, site preparation, removal of vegetative layer and other cover materials. During times when no activities are taking place to remove existing cap or prepare the valley areas for placement of waste, the Landfill shall be inspected in accordance with the requirements set forth below in Condition 9.

   d. Not later than the 15\(^{th}\) day of the following month the Engineer of Record shall submit printed and electronic copies of the Construction Monitoring Report to MassDEP. Copies shall be provided to the Board of Health in such manner as may be prescribed by the Board of Health. A copy of each Construction Monitoring Report shall also be made available at the Facility for review by authorized representatives of MassDEP and the Town, upon request. Each Construction Monitoring Report shall be signed, dated, and certified in accordance with 310 CMR 19.011(1) by the Inspector and the Engineer of Record and shall, without limitation:

      i. Document the conditions and construction activities at the time of the inspection and the project progress since the previous inspection;\(^4\)

      ii. Identify any actual or potential deviations from the applicable regulations, the requirements of this permit, and all applicable plans and approvals; and

      iii. In the event a condition of actual or potential deviation is identified, the Construction Monitoring Report shall:

\(^3\) For purposes of this decision “qualified direct employee” means an individual, qualified and knowledgeable in the construction of solid waste facilities, employed by and directly responsible to the Engineer of Record and not the Permittee.

\(^4\) As examples, depending on the project phase, the Construction Monitoring Report may document: site preparation activities, installation and maintenance of erosion and sediment controls, excavation, foundation/footing installations, drainage and utility installations, building construction work, and site stabilization, grading, and associated paving and landscaping activities, etc.
• describe the deviation/issue;
• identify the action(s) Wheelabrator took or intends to take to correct the deviation/issue and a schedule for taking the action(s); and
• include photographs documenting the condition of the Landfill and construction progress.

e. Wheelabrator shall, within fourteen (14) days of the date of receiving written comments from MassDEP\(^5\) on a Construction Monitoring Report, provide a written response to MassDEP that includes any information that MassDEP reasonably requires. This provision does not limit MassDEP’s right to request information pursuant to 310 CMR 19.000, 310 CMR 40.0000, the Massachusetts Contingency Plan (the “MCP”), and 310 CMR 30.000, the Massachusetts Hazardous Waste Regulations or any other applicable state, federal, or local law or regulation.

9. Except as set forth above in Condition 8, Wheelabrator shall ensure that the Landfill is inspected on a bi-monthly (every two months) frequency by a Third-Party Inspector registered with MassDEP in accordance with 310 CMR 19.018. Pursuant to 310 CMR 19.018(8)(c)1, Wheelabrator shall submit copies of each inspection report to MassDEP and the BOH within thirty (30) days of the date of the inspection.

10. Wheelabrator shall comply with the notifications described in this decision and 310 CMR 19.043(5) (i), Duty to Inform. These notifications are in addition to, and shall not substitute for, any other notification(s) which are required pursuant to 310 CMR 40.0000, the Massachusetts Contingency Plan (the “MCP”), and 310 CMR 30.000, the Massachusetts Hazardous Waste Regulations or any other applicable state, federal, or local law or regulation.

a. Wheelabrator shall notify MassDEP and the BOH within twenty-four (24) hours whenever possible, but in no event later than forty-eight (48) hours of the Engineer of Record, Wheelabrator or contractor(s), becoming aware of:
   i. The occurrence of any conditions or events at the Landfill that result in off-site nuisance conditions or a threat to the public health, safety, welfare or the environment.
   ii. The details of any incidents that resulted in the response of emergency personnel (fire, police, MassDEP Emergency Response personnel, the Occupational Health and Safety Administration, etc.) to the Landfill.
   iii. The receipt by Wheelabrator of any complaint of off-site nuisance conditions attributed to the Landfill.

b. This written notification shall be made by FAX to MassDEP’s Solid Waste Management Section, Northeast Regional Office at (978) 694-3499 or by email to Mark.Fairbrother@state.ma.us. If a FAX or email is not available, the notification may be made by telephone to (978) 694-3298. Such notification by telephone shall be followed up by a certified letter within seven (7) days.

c. This notice shall, at a minimum, include a description of the incident and/or complaint, the impact on the activities authorized by this approval, and a description of any corrective actions Wheelabrator has taken or intends to take to minimize the potential for a recurrence.

\(^5\) MassDEP may at its sole discretion upon request of the Permittee extend the fourteen (14) day time period for responding to MassDEP’s comments.
11. Where the design specifications provide a standard as "minimum" or "maximum" (or other of similar effect) the closure certification shall document that all material accepted and placed for that use either equals the standard, or the material exceeds or is below the standard, respectively. Where materials are received that do not meet one or more standards the closure completion certification report shall clearly document either that the material was rejected and not used, or was modified or otherwise processed, so as to meet the standard(s) as actually used. Where an area must be reworked, repaired or otherwise removed and replaced, confirmatory testing shall be completed and documented showing that the reworked, repaired and/or replaced materials meet specifications. The thickness of the soil/separation layers shall include documentation by direct tabulated measurement that the layer meets the specifications. Testing results and measurements shall not be averaged to determine compliance with the specifications.

12. Wheelabrator is responsible to ensure that all necessary precautions are taken to protect the health and safety of workers and the general public during construction.

13. All disturbance of the Landfill shall be limited to the proposed grading and installations as depicted and described in the Application and the approved plans and this decision. Any additional activities or modifications not described in the Application, Transmittal Number: X271439, may require notification of MassDEP, and the preparation and submittal of a separate application for permit modification. No changes, modifications or alterations shall be made to the approved plans, unless otherwise approved, in writing, by the Department in accordance with 310 CMR 19.000.

14. Maintenance of slopes, berm(s), drainage swales, storm water systems, outlet structures, and appurtenances shall be performed to keep these structures in good working order. The area around the site entrance shall be maintained in a condition which shall prevent tracking of sediment onto the public right-of-way. All sediment spilled, dropped, washed or tracked onto the public right-of-way shall be removed without delay.

15. Wheelabrator shall implement the measures necessary to control and manage storm water at the Property including, without limitation, implementation of a Storm Water Pollution Prevention Plan for the Property that complies with applicable MassDEP regulations and guidelines. In addition, this approval does not relieve Wheelabrator or any other person of the responsibility to comply with the National Pollutant Discharge Elimination System ("NPDES") requirements.

16. Wheelabrator shall apply and maintain intermediate cover in accordance with the FEP. Final landfill cover shall be placed and maintained in accordance with the Landfill’s Closure/Post-Closure Plan, as approved by MassDEP. All areas disturbed during construction shall be stabilized as soon as possible upon completion of construction work in each area.

17. Wheelabrator may stockpile on the Landfill topsoil removed from the existing Landfill final cover in Phases I and II for potential reuse in future final cover construction or operational cover at the Landfill. Prior to reuse in future Landfill final cover construction, Wheelabrator shall test any topsoil removed from the existing landfill cover for conformance with the technical specifications for Soil Suitable to Support Vegetation in the Closure and Post-Closure Plan. The test results shall be documented in the Construction Certification documentation for each phase of landfill closure.

18. The existing Landfill final cover geomembrane liner removed from Phases I and II shall be managed pursuant to applicable state, and federal regulations including, but not limited to the management of
solid waste pursuant to 310 CMR 19.000. Waste liner material shall be recycled or used for energy recovery depending on available diversion opportunities.

19. Wheelabrator shall submit to MassDEP on an annual basis a status update regarding operation and closure activities, including, without limitation, any anticipated modification to the sequence of operation and capping schedule of the Landfill. The updated sequence of operation and closure shall be provided in the Landfill annual progress report.

20. The submittals to MassDEP required by this decision shall be submitted by Wheelabrator in accordance with the applicable fee provisions of 310 CMR 4.00 “Timely Action Schedule and Fee Provisions”. In the event that the MassDEP provides written comments to Wheelabrator on documents submitted pursuant to this paragraph, Wheelabrator shall provide a response and revised document to the MassDEP in accordance with the provisions of 310 CMR 4.00 that corrects any deficiencies reasonably identified by the MassDEP in the document(s) and makes any changes that the MassDEP reasonably requires.

21. MassDEP reserves the right to rescind, suspend or modify this approval based upon a determination that the project causes the development of nuisance conditions, is not being operated safely or in accordance with this approval, or results in a threat to the public health, safety or the environment.

NOTICE OF RIGHT TO APPEAL

[as it would appear in any decision following the provisional comment period]

Appeal. Any person aggrieved by the issuance of this decision, except as provided for under 310 CMR 19.033(4)(b), may file an appeal for judicial review of said decision in accordance with the provisions of M.G.L. c. 111, s. 150A, and M.G.L. c. 30A, sec. 14, not later than thirty (30) days following the receipt of the final decision. The standing of a person to file an appeal and the procedures for filing such appeal shall be governed by the provisions of M.G.L. c. 30A. Unless the person requesting an appeal requests and is granted a stay of the terms and conditions of the decision by a court of competent jurisdiction, the decision shall remain effective.

Notice of Action. Any aggrieved person intending to appeal this decision to the Superior Court shall first provide notice to the Department of their intention to commence such action. Said notice of intention shall include the Department file number and shall identify with particularity the issues and reasons why it is believed the decision was not proper. Such notice shall be provided to the Office of General Counsel of the Department and the Regional Director for the regional office which processed the application. The appropriate addresses to which to send such notices are:

General Counsel
Department of Environmental Protection
One Winter Street - 3rd Floor
Boston, MA 02108

and

6 Such documents include but are not limited to Notice of Administrative or Technical Deficiency issued pursuant to 310 CMR 4.00.
No allegation shall be made in any judicial appeal of this decision unless the matter complained of was raised at the appropriate point in the administrative review procedures established in those regulations, provided that a matter may be raised upon a showing that it is material and that it was not reasonably possible with due diligence to have been raised during such procedures or that matter sought to be raised is of critical importance to the environmental impact of the permitted activity.

If you have any questions in regards to this matter, please contact Richard Spieler at telephone number 978-694-3317.

Sincerely,

PROVISIONAL DECISION - ISSUED 11/1/2017 - FOR COMMENT

Mark G. Fairbrother
Richard J. Spieler
Section Chief
Environmental Engineer
Solid Waste Management
Solid Waste Management

MGF/RJS/rjs

Attachment 1: Application Review Fact Sheet, Transmittal Number: X274714
Communication for Non-English Speaking Parties

cc: Susan Ruch, Deputy Regional Director, MassDEP-NERO, Bureau of Air and Waste
Email: susan.ruch@state.ma.us

Saugus Board of Health
Town Hall
298 Central Street
Saugus, MA 01906

Saugus Conservation Commission
Town Hall Annex
25 Main Street
Saugus, MA 01906

Scott Crabtree, Town Manager
Town Hall
298 Central Street
Saugus, MA 01906

Saugus Board of Selectmen
Town Hall
298 Central St.
Saugus, MA 01906
Revere Board of Health  
City Hall  
281 Broadway  
Revere, MA  02151

James Connolly  
Wheelabrator Technologies, Inc.  
Email: jconnoll@wtienergy.com

Alan R. Kirschner, P.E.  
Brown and Caldwell  
Email: AKirschner@brncald.com
ATTACHMENT 1

Application Review Fact Sheet
Transmittal Number: X271439

November 1, 2017
Facility Identification

Facility: Wheelabrator Saugus, Inc./Ash Monofill Landfill
100 Salem Turnpike
Saugus, MA 01906

Facility Number: 39704
Regulated Object Number: 172913
SWM ID Number: AL0262.995
Permit Number: NESW-LF-055

Location¹: 70° 59’ 0” W Longitude 42° 29’ 19” N Latitude

Current Application

Type: BWP SW11/ Landfill Major Modification
Ash Staging and Transport
Transmittal Number: X271439

Applicant: Wheelabrator Saugus, Inc.
100 Salem Turnpike
Saugus, MA 01906

MEPA: An Environmental Notification Form for the proposed project was submitted for Massachusetts Environmental Policy Act (MEPA) review with the Secretary of Energy and Environmental Affairs. The Secretary’s Certificate, issued on August 5, 2016, determined that the project adequately and properly complied with MEPA and its implementing regulations and no further MEPA review was required.

Submittals relative to this application:

Report and plans: Wheelabrator Saugus, Inc.
2017 Revision to the Final Engineering Plan
Major Permit Modification
Saugus Ash Monofill
April 2017
Prepared by Brown and Caldwell

¹ For reference only. Estimated from MassGIS.
Supplemental Information:
Wheelabrator Saugus, Inc.
2017 Revisions to the Final Engineering Plan
Supplemental Information
Saugus Ash Monofill
July 6, 2017
Prepared by Brown and Caldwell

Wheelabrator Saugus, Inc.
2017 Revisions to the Final Engineering Plan
Supplemental Information
Saugus Ash Monofill
Barrier Wall Performance
October 17, 2017
Prepared by Wheelabrator Saugus, Inc.

Discussion

As discussed in the Application, Wheelabrator proposes to reduce the final gradient of the Landfill within Phases I and II from five percent (5%) to two percent (2%). As designed, Phases I and II are to be graded as a series of low ridges and valleys. To achieve the reduced gradient, the elevation of the bottom of each valley (Valleys 1 and 2) will be raised while maintaining the previously approved elevation of the ridges. The peak elevation of the completed Landfill will remain at fifty feet mean sea level (50 feet MSL) as previously approved by MassDEP.

Wheelabrator is also proposing the use of a geocomposite gas venting layer in lieu of a 6-inch thick gas venting sand layer in the final landfill cap for the Landfill.

In total, the proposed grading change and use of a geocomposite gas venting layer in Phase I and II will provide an additional estimated 400,000 cubic yards of disposal capacity.

The reduction in the final gradient of Valleys 3, 4 and 5 located in Phases III, IV and V were previously approved by MassDEP in an approval letter dated December 2, 2008.

The Environmental Monitoring Plan was revised by adding, 1) Attachment A: the stormwater monitoring requirements for the Landfill, and 2) Attachment B: the Industrial Wastewater Discharge permit for the Landfill’s leachate.

The existing leaf and yard waste composting operation will continue to operate at the Landfill. When ash disposal activities in Phases IV and V of the Landfill are nearing completion, Wheelabrator expects to relocate the composting operation within the uncapped areas of the Landfill. Condition 3.c of the Provisional Decision requires submittal of an application for modification in the event that Wheelabrator seeks to relocate the existing leaf and yard waste operation to capped areas of the Landfill.
The supplemental information provided by Wheelabrator, dated July 6, 2017, includes an anticipated sequence of operation and closure of the Landfill. The sequence of Landfill operation discusses ash placement, relocation of the Ash Staging Area, relocation of the Leaf and Yard Waste Compost Operation, and timing of landfill cap construction for each phase of the Landfill.

The proposed sequence of activities is estimated and will be adjusted based on landfill filling rates. Wheelabrator will provide an update of the schedule in the annual report for the Ash Monofill. Wheelabrator’s anticipated schedule and sequence of operation are provided below.

- Ash placement will continue in Phase IV through the winter of 2017-2018 to create a suitable plateau for the relocation of the leaf and yard waste composting operation. A staging area for any off-site ash transportation will be constructed on the newly created plateau as well.
- In the spring of 2018, a new pad for the leaf and yard waste composting operation will be constructed in the southern area of the Phase IV plateau. The new pad is expected to begin receiving incoming leaf and yard wastes in mid-2018.
- Leaf and yard wastes received prior to that time will be received and composted at the existing pad. The materials composted at the existing pad will be relocated to the existing stockpile area in Phase III during the late-summer of 2018.
- During the late-summer of 2018, ash disposal activities will then commence in the area of the existing composting pad. No appreciable amount of ash has ever been placed in the area of the existing pad. As such, this area needs to be preloaded to minimize subsurface settlement that could occur after final cover construction.
- Following a period of preloading, construction of roughly 5 to 8 acres of final cover in Phase V is projected for the summer of 2019.
- During the second half of 2019, the existing final cover soils in the lower reaches of Phase II, Valley 2 will be removed and stockpiled for future use. If possible, some of these soils may be used in the final cover construction in Phase V.
  - In early 2020, the geomembrane later will be removed from the area and all contact and non-contact water control features will be constructed.
  - Ash placement in the lower reaches of Phase II, Valley 2 will commence at that time.
- In late 2020, the existing final cover soils in the upper reaches of Phase I, Valley 2 will be removed and stockpiled for future use.
  - In early 2021, the geomembrane layer will be removed from this area and all contact and non-contact water control features will be constructed.
  - Ash placement in the upper reaches of Phase II, Valley 2 will commence at that time.
  - Materials used for preloading in Phase III and IV may be used to fill in the areas of Phase II, Valley 2.
- In late 2021, the existing final cover soils in the lower reaches of Phase II, Valley 1 will be removed and stockpiled for future use.

2 In a separate application for modification of the Landfill (Transmittal Number: X274714), Wheelabrator proposed to establish an area within the active limits of the Landfill to stage ash from the Wheelabrator Saugus Energy-from-Waste (“EfW”) Facility prior to shipment for further processing or disposal (the “Ash Staging Area Project”).
- In early 2022, the geomembrane layer will be removed, all contact and non-contact water control features will be constructed.
- Ash placement in the lower reaches of Phase II, Valley 1 will commence.
- Materials used for preloading in Phases III and IV may be used to fill in the areas of Phase II, Valley 1.

- In late 2022, the existing final cover soils in the upper reaches of Phase I, Valley 1 will be removed and stockpiled for future use.
- In early 2023, the geomembrane layer will be removed and all contact water containment features will be constructed.
- Ash placement in the upper reaches of Phase I, Valley 1 will commence.
- At this time (2023), the leaf and yard waste composting operation in Phase IV will be discontinued, unless the operation was discontinued earlier due to other factors.
- Materials used for preloading in Phases III and IV may be used to fill in the areas of Phase II, Valley 1.

- 2024: Final cover installed in Phases I and II, Valley 1 (approx. 14 acres)
- 2025: Final cover installed in Phases I and II, Valley 2 (approx. 15 acres)
- Spring 2026 to Fall 2027: Final cover will constructed in Phases II and IV (approx. 50 acres) in two stages of construction.

Condition 19 of the Provisional Decision requires the submittal of an annual status update regarding operation and closure activities, including, without limitation, any anticipated modification to the sequence of operation and capping schedule of the Landfill.

The supplemental information provided by Wheelabrator, dated October 17, 2017, provided a memorandum on the performance of the environmental protection systems at the Landfill, including the status of the barrier wall performance and leachate collection system.