

APPENDIX E

Leachate Control Plan

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LEACHATE CONTROL PLAN

A. INTRODUCTION

This Leachate Plan ("Leachate Plan") is attached as Appendix E to and incorporated by reference into the executed settlement ("Settlement Agreement") between the Commonwealth of Massachusetts and New Ventures Associates LLC ("New Ventures") executed on April 30, 2009 and filed in conjunction with the final judgment in *Commonwealth of Massachusetts v. New Ventures Associates, LLC*, Suffolk Superior Court, Civil Action No. 06-0790 C ("Final Judgment"). This Leachate Plan specifies the measures that New Ventures shall implement for purposes of, without limitation, controlling leachate releases from the Landfill pending completion of the cap and installation of the final leachate controls in compliance with the final approved Corrective Action Design ("Final CAD, attached as Exhibit 2 to the Settlement Agreement") for the closure of the Landfill.

B. PERFORMANCE STANDARD

New Ventures shall implement measures necessary to control, manage, and mitigate leachate releases from the Landfill in compliance with G.L. c. 111 §150A and 310 CMR 19.000 *et seq.* including, without limitation, the requirements of 310 CMR 19.130(30) Leachate Collection, Treatment, and Disposal, and 310 CMR 19.116 Surface and Ground Water Protection. In order to comply with the performance standards in 310 CMR 19.130(30) and 310 CMR 19.116, New Ventures shall implement the actions described in this Appendix E, and those described in Appendix I, Landfill Inspection and Record Keeping Protocol, Appendix C, Landfill Cover Protocol, Appendix F, Interim Storm Water Control Plan, and the Settlement Agreement.

C. PROGRAM COORDINATION

The activities required by this Appendix E shall be performed under the general supervision and direction of the Engineer of Record. All actions taken by New Ventures to mitigate and control the release of leachate from the Landfill, including, without limitation, those performed in accordance with this Appendix E, shall be recorded in the Daily Inspection Summary Report and the Daily Log. The Engineer of Record shall review all such actions as part of his/her weekly inspection of the Landfill required by Appendix I, Landfill Inspection and Record Keeping Protocol, shall note the adequacy of such action(s), and shall recommend any additional action(s) he/she believes are necessary for purposes of compliance with this Appendix E, the Settlement Agreement, and the Final Judgment to control the release of leachate from the Landfill.

D. LEACHATE CONTROL MEASURES

1. Monitoring

During the daily inspections of the Landfill required by Appendix I, Landfill Inspection and Record Keeping Protocol, the Inspector will note leachate breakouts and shall record the location and magnitude of all observed leachate breakouts in the Daily Inspection Summary Report. The Landfill Superintendent or the Inspector shall also record in the Daily Log actions taken in

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response to the leachate breakouts. Ambient air measurements for hydrogen sulfide (“H₂S”) shall also be taken using a Jerome Meter at the location of the leachate breakout to establish whether the leachate breakout is contributing to odor.

If the leachate breakout is persistent or significant (e.g., it impacts a large area, causes significant erosion, or causes moderate or strong odors), the Landfill Superintendent or Inspector shall immediately contact the Engineer of Record to identify what actions should be taken.

2. Grading and Placement of Cover

As required by Appendix F, Interim Storm Water Control Plan, New Ventures shall grade the Landfill surface to shed and minimize the ponding of water and the infiltration of water into the Landfill. New Ventures shall also place and maintain cover on the Landfill in accordance with Appendix C, Landfill Cover Protocol, including, without limitation, placing cover on areas of leachate breakouts.

3. Leachate Collection System

New Ventures shall operate, expand and maintain the existing leachate collection system that consists of leachate tanks 1, 2, 3, and 5 as described herein.

- a. Maintain the level of leachate in leachate collection tanks 1, 2, 3, and 5 at less than 75% of the tanks’ effective capacities by pumping and properly disposing of the leachate off-site.
- b. Measure and record the leachate level of each tank immediately prior to each pumping and the date, time, and volume of leachate recorded for each tank using the Leachate Pumping Record attached hereto as Exhibit 1.
- c. Inspect each leachate tank and determine the leachate level at a minimum in accordance with the requirements of Appendix I, Landfill Inspection and Record Keeping Protocol, and more frequently if necessary to comply with paragraphs 3.a. of this Section.
- d. Expand the leachate collection system and collect the leachate for disposal off-site at locations where the leachate breakout(s) is persistent and located adjacent to a collection system already installed and in other areas where the leachate breakout(s):
 - i. is significant and persistent;
 - ii. results in persistent odors; or
 - iii. results in continuing releases to the wetlands or surface waters.
- e. New Ventures shall not expand the existing leachate collection system without prior notice to and approval by the MassDEP. Within fourteen (14) days of the date of receiving notice from the MassDEP that expansion of the leachate collection system is necessary, New Ventures shall submit to the MassDEP for review and approval a Plan for expanding the leachate collection system. Any notices or submissions required under this paragraph 3.e. may be made in accordance with the notice requirements in paragraph 26 of the Settlement Agreement.

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4. Leachate Tank 4

New Ventures shall conduct an evaluation of Tank 4 in accordance with the requirements of paragraph 12.g. of the Settlement Agreement. In addition, New Ventures shall not modify leachate Tank 4 without prior notice to and approval by the MassDEP.

5. Discharges of Leachate to Surface Water, Wetlands, and Storm Water Basins

- a. In the event discharges of leachate occur to surface waters, wetlands, or storm water basins (including temporary storm water structures), New Ventures shall promptly remove and properly dispose of the leachate.
- b. In the event of overland discharges of leachate to the surface water, wetlands, or storm water basins (including temporary storm water structures), New Ventures shall implement measures to discontinue such discharges including without limitation those described in paragraphs 3 and 6 of this Section.

6. Temporary Leachate Control Measures

New Ventures shall implement such temporary measures as are necessary to control the release of leachate from the Landfill. These measures may include, without limitation, the construction of temporary diversion structures, channels, or ditches to confine the leachate to within the limits of the Landfill mass. In the event that such temporary structures are ineffective and the leachate contributes to persistent odors or releases to surface water or wetlands, New Ventures shall expand the leachate collection system in accordance with the requirements of section 3.d. of this Appendix E. The preceding sentence does not apply to Tank 4.

7. Leachate Disposal

New Ventures shall dispose of all collected leachate off-site in compliance with applicable law including without limitation 310 CMR 19.130(30). New Ventures shall maintain at the Landfill records of the off-site shipment and disposal of the leachate required by as required by Appendix I, Landfill Inspection and Record Keeping Protocol.

EXHIBIT 1

LEACHATE PUMPING RECORD

