



Commonwealth of Massachusetts  
Executive Office of Energy & Environmental Affairs

## Department of Environmental Protection

Central Regional Office • 8 New Bond Street, Worcester MA 01606 • 508-792-7650

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July 27, 2018

Mass Composting Group, Inc.  
163 Nashua Road  
Pepperell, MA 01463-1457

Attn: David A. Burton,  
President

RE: Soil Reclamation  
Nashua Road Quarry  
161 Nashua Road  
Pepperell, MA

### **REVIEW OF SOIL MANAGEMENT PLAN**

Dear Mr. Burton:

The Massachusetts Department of Environmental Protection (MassDEP) has completed its review of the draft Soil Management Plan (SMP), titled "Soil Management Plan, Nashua Road Quarry Reclamation Project, 161 Nashua Road, Pepperell, MA 01463", prepared by TERRA Environmental, LLC, and received by MassDEP on June 28, 2018. The draft SMP was submitted to MassDEP in support of executing an Administrative Consent Order (ACO), in accordance with MassDEP's "Interim Policy on the Re-use of Soil for Large Reclamation Projects" (Policy #COMM-15-01), to manage the importation of a large volume of soil and fill materials (the Project). MassDEP's review comments are provided in the attached memorandum, dated July 19, 2018.

In accordance with Policy #COMM-15-01, submittal of documentation demonstrating that the appropriate municipal officials are aware of the project and have been afforded the opportunity for meaningful input is required. MassDEP will not finalize an ACO for the proposed reclamation project unless and until all comments from appropriate local officials on project noise, dust, odor and/or trucks have been adequately addressed. The SMP should also include a plan for communicating with the public and involving interested parties at key points in the implementation of the Project.

Mass Composting Group, LLC  
Review of Soil Management Plan  
Nashua Road Quarry, Pepperell, MA

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MassDEP will resume the review process for this Project once you submit a revised SMP, including all attachments, that addresses the comments listed herein. If you have any questions, please contact me at (508) 767-2803 or Paul Vigeant at (508) 767-2810.

Sincerely,

A handwritten signature in black ink, appearing to read "Mark E. Baldi". The signature is fluid and cursive, with a horizontal line extending from the end.

Mark E. Baldi  
Deputy Regional Director  
Bureau of Waste Site Cleanup

MEB/pdv  
Attachment

cc: Philip Peterson, TERRA Environmental, LLC, 159 Haven St., 2<sup>nd</sup> Fl., Reading, MA 01867  
John Moak, Town Administrator, 1 Main St., Pepperell, MA 01463

## MEMORANDUM

To: File [RTN to be assigned]  
From: Paul Vigeant  
RE: Soil Management Plan  
Nashua Road Quarry Reclamation, Pepperell  
Date: July 19, 2018

On June 28, 2018, MassDEP received a "Soil Management Plan, Nashua Road Quarry Reclamation Project, 161 Nashua Road, Pepperell, MA 01463" (the "SMP") prepared by TERRA Environmental, LLC for Mass Composting Group, Inc. ("MCGI"). The SMP was received by email with a message from Philip Peterson of TERRA Environmental, LLC stating his intent to obtain an Administrative Consent Order for this project in accordance with COMM-15-01. I have reviewed the SMP and offer the following comments:

### Soil Management Plan Comments:

- Page 1 states that the intended fill material will include native deposits of soil, including sand, gravel, organic soils, estuarine deposits, marine sands, glacial till, clay, fill soils, and soil/slurry mixtures from foundation installations. The Proponents should delete the phrase "and soil/slurry mixtures from foundation installations". MassDEP will require that soil/slurry mixtures must contain less than 1% by volume of bentonite or other slurry material to be accepted. The pH of the soil/slurry mix must be tested after the mixing occurs and at a rate of one test per 50 cubic yards.
- Page 4 states that no filling or disturbance will take place within 100 feet of any wetlands, as indicated on the Site Plans, and that the Project does not require a wetlands permit or special permits from NHESP or MESA. I am unable to confirm these statements based on the plans that were submitted with the SMP. The Conceptual Reclamation Study Plan (Construction Drawing Sheet CD001) appears to show fill extending into the 200-ft. Riverfront Area and the Priority Habitat area at the southeastern corner of the fill area and into the 100-ft. wetland buffer zone near the southwestern corner of the Property.
- Page 4 states that the wetlands, NHESP and MESA permitting issues have been addressed by Oxbow Associates, Inc. as detailed in Appendix A. This does not appear to be accurate. In their January 29, 2018 letter to MCGI, Oxbow recommended filing an Information Request with NHESP to determine which species are associated with the area and determine whether NHESP may regulate the entire property under the MA Endangered Species Act. Oxbow also stated that the wetland boundary delineations must be reviewed approved by the Pepperell Conservation Commission to be legally affirmed. The Proponents should provide either an Order of Resource Area Delineation or a Determination of Applicability issued by the local Conservation Commission. The ORAD or RDA should include confirmation of the 100-year flood boundary as well as any bordering vegetated wetlands.
- Page 4 states that a draft Storm Water Pollution Prevention Plan (SWPPP) will be submitted within 30 days of starting land disturbance activities. In accordance with Policy #COMM-15-01, MassDEP will require a detailed Stormwater Management Plan to prevent impacts to sensitive receptors during and post-construction.

- Page 4 states that the Reportable Concentration (RC) category applicable to the Site is RCS-2 for soil. This characterization appears to be inaccurate. The properties to the south and west, across Nashua Street, are zoned Residential. Therefore, the southern and western portions of the Property within 500 feet of these Residential zones should be characterized as RCS-1.
- Page 5 states that groundwater at the Site meets the criteria of groundwater category RCGW-2. A portion of the Zone II for Pepperell's Nashua Road Well #1 extends into the western portion of the Property. This area of the Property should be characterized as RCGW-1. It is not clear from the plans provided whether fill is proposed in the Zone II.
- Page 5 states that a groundwater monitoring plan will be submitted to MassDEP within 90 days of the effective date of the ACO. The Proponents should include a Groundwater Monitoring Plan in their Soil Management Plan, for approval, prior to issuing an ACO, if one is issued. The Plan should include at least one monitoring well couplet (shallow and deep) within the Zone II area of the Property. The analyses should also include pH and amenable cyanide.
- Page 5 states that the Project shall conduct an appropriate risk assessment and mitigation, if necessary, when any adverse impacts have been identified as a result of project activities. The Proponents are advised that an ACO, if one is issued, would not exempt MCGI from the MCP notification requirements for any sudden release of oil or hazardous materials above a reportable quantity, or any release indicated by the presence of oil or hazardous materials in groundwater at concentrations exceeding the applicable reportable concentrations. Such conditions will require notification to MassDEP in accordance with the MCP.
- Page 6 provides a list of Parties Involved. The Proponents should include the contact information, including phone numbers, for the Emergency Contact person who must be available at all times during the duration of the project in case of an emergency.
- Page 7 states that a review of the drilling permits at the Board of Health shows the fill is not within 500 feet of a private water supply well. The Proponents should provide additional documentation to confirm that the airport to the east of the Property is connected to the public water supply.
- Page 7 states that the reclamation area is not within a Current Drinking Water Source Area. It is not clear from the Plans provided whether fill is proposed in the Zone II area of the Property.
- Page 8 states that all batches of soil, represented by a single composite analysis, must meet Soil Acceptance Criteria. The Proponents should clarify this statement.
- Page 8 states that visual inspection of the soil is to be performed at the time of soil borings, test pits, stockpile sampling, at time of excavation and/or upon arrival at the project site. The Proponents should delete the word "or" from and/or in this statement and identify the parties responsible for conducting these visual inspections. The Generator should conduct visual inspection at the site of generation and an MCGI representative will observe off loading and perform visual inspections of soil at the Property.

- Page 9 states that soil mixed with bentonite clay or other slurry material will be accepted on a case by case basis. The Proponents should delete this statement. MassDEP will require that soil/slurry mixtures must contain less than 1% by volume of bentonite or other slurry material to be accepted. The pH of the soil/slurry mix must be tested after the mixing occurs and at a rate of one test per 50 cubic yards.
- Page 9 states that soil will contain no free liquid. The Proponents should include the following language: "Soil shall not contain any free draining liquids. Soils may contain naturally deposited silts and clay with minor amounts of naturally occurring organic material and moisture levels that would be expected to evaporate quickly while it is being worked and spread rather than move through the soil to groundwater. Dredge spoils, slurry, and any material delivered in a tanker or vacuum truck are prohibited."
- Page 9 states that the Property is not located within a mapped Priority Habitat for Rare Species or an Estimated Habitat for Rare Species. The Proponents should revise this statement. According to Oxbow Associates, a portion of the site adjacent to the Nashua River, is mapped within Priority and Estimated Habitat of Rare Species.
- Page 10 states that "Testing is required on soil proposed for acceptance as fill material for sources such as ...". The Proponents should revise this to state that "Testing is required on all soil proposed for acceptance as fill material from all sources."
- Pages 10 and 11 provides a list of analyses required on soil. The Proponents should delete Net Acid Generation from this list. MassDEP will require that the Project may not accept blasted or excavated ledge or bedrock. Similarly, the Proponents should delete Source/Origin Category 6, Rock, from the sampling frequency matrix on Page 12.
- Page 11 states that not testing is required for Category 1, Naturally Deposited soils, under certain conditions. The Proponents should revise the sampling frequency for Category 1 to one test profile per 1,000 cubic yards. All soils accepted for use as fill must be tested. Also, the term Test Profile is not defined. I presume it means the full suite of testing listed on Page 10, but this should be explained.
- Pages 13 and 14 contains a Table of proposed Acceptance Criteria that were reportedly derived from MassDEP Similar Soils Provision Guidance WSC#-13-500. The values listed as Acceptance Criteria are not consistent with the Limiting Soil Concentration values in the policy. The Proponents should revise the table for RCS-2 compatible soils and provide a separate table of Acceptance Criteria for RCS-1 compatible soils. The tables should include Acceptance Criteria for each of the compounds in the EPA Method 8260, 8270, pesticide and herbicide target compound lists. Also, The Proponents should include Acceptance Criteria for amenable cyanide, EPH, asbestos fibers, and PID screening.
- Page 15 states that soil submittal packages must be submitted for review and approval by representatives of Nashua Road. Nashua Road is not a defined entity. The Proponents should clarify this statement.
- Page 15 states that "The Reclamation Soil Sources/Origin is required to provide an LSP Opinion and is required for all shipments that originate from RCS-1 or RCS-2 locations, acknowledging that Pepperell Reclamation Project's Acceptance Criteria are not exceeded, and the LSP Opinion shall demonstrate, pursuant to the provisions of the MCP,

that the proposed soils is exempt from the notification requirements of the MCP and is not otherwise considered Remediation Waste.”

- The term “Reclamation Soil Sources/Origin” is not defined. If this is a form to be used, the Proponents should include it in an appendix.
  - An LSP can only render an LSP Opinion for Waste Site Cleanup Activities. The Proponents should consider revising to Qualified Environmental Professional.
  - The statement implies that soils from out of state sources will be treated differently from soils that originate from in-state. The Proponents should delete the phrase “that originate from RCS-1 or RCS-2 locations”. A QEP opinion should be provided for all locations, including those out of state.
  - The Proponents should clarify or delete the phrase “and the LSP Opinion shall demonstrate, pursuant to the provisions of the MCP, that the proposed soils is exempt from the notification requirements of the MCP and is not otherwise considered Remediation Waste.” The Proponents should be advised that the Acceptance Criteria apply to all soils, including “exempt” soils, and out of state soils that are not subject to MCP regulations.
- Page 15 states that a complete submittal package must contain the following: ...Appropriate shipping papers signed by an LSP/Qualified Environmental Professional and the Generator. The Proponents should specify the use of either MCP Bills of Lading or Material Shipping Records for shipping documentation.
  - Page 16 states that the Project will utilize several best management practices ... including any BMPs that are proposed in the SWPPP and required in the Town of Pepperell Order of Conditions to manage stormwater runoff at the Site. The Proponents should provide a copy of the Order of Conditions issued by the Town. The Proponents should provide a stormwater management plan for review, to include during- and post-construction stormwater management BMPs.
  - Page 16 states that a Health and Safety Plan will be required by the operator. The term “operator” is not defined. This section also has a reference to Appendix B, which was not provided.
  - Page 18 states that a third party consultant will collect a soil sample during off-loading for QA/QC testing and that test parameters will be as required by MassDEP and identified in the Project ACO. The Proponents should revise to state that the soil will be analyzed for all of the test profile parameters listed on Page 10 of the SMP.
  - Page 18 states that the inspector shall “Collect a grab sample of any area or load that appears to be contaminated...If no area or load appears to be contaminated, collect a composite soil sample from a minimum of one load of soil being delivered or that had been delivered to the property since the previous inspection...”. The Proponents should revise this section for consistency with other similar projects. QA/QC samples should be collected from random loads as they arrive, not from material that has already been accepted and placed as fill. If no loads arrive during the inspection, the sampling may be omitted for that month, or postponed to another date that month. A minimum of two samples shall be collected per calendar quarter during the active operation of the Project.

- Page 18 states that if the Generator fails to remove unacceptable soil within 7 days of notification, then Pepperell Reclamation Project Team will remove the soil for proper off-site management or disposal. Page 18 also states that other sampling may be performed by Reclamation Project. The Proponents should replace the terms “Pepperell Reclamation Team” and “Reclamation Project” with “MCGI”.
- Page 18 contains a reference to the Sewell Street Reclamation Project.
- Page 19 discusses Monthly Report submittals to MassDEP. This section should be revised to be exactly the same as what is provided in the ACO, if one is issued. Alternatively, the section may be omitted from the SMP. It is sufficient to state that MCGI shall submit Monthly Reports to MassDEP in compliance with the requirements of the ACO.
- Page 19 also discusses the requirements for the Independent Third Party inspection reports. The Proponents should be advised that these Third Party inspection reports must be submitted separately, and they must be submitted to MassDEP directly by the inspector, not MCGI.

Additional Comments:

- The Proponents should provide documentation of compliance with COMM-15-01 requirement to demonstrate that the appropriate local officials are aware of the project and have been afforded the opportunity for meaningful input.
- The plans provided in the SMP are conceptual and inadequate for construction or enforcement of an ACO. The Proponents should provide engineered plans to the appropriate scale and stamped by a P.E or R.L.S including:
  - Existing Conditions Plan showing topography with spot elevations, wetland resource areas, NHESP Habitat, Zone II and other sensitive receptors, extent of existing disturbance, the delineation of the RCS-1 and RCS-2 areas, etc.
  - Grading Plans showing proposed final elevations and contours, proposed post-construction stormwater management BMPs (swales, basins, etc.), construction phases, if any, etc. The Plans should include details showing slope stabilization, drainage layer and topsoil or other capping material.
  - Erosion and Sedimentation Control Plan showing proposed stormwater management BMPs during construction including erosion controls and temporary sediment basins.