## Winchendon Landfill Site Observation - December 10, 2021

**To:** Brian Croteau, DPW Director

FROM: Aaron Sabbs, PE, Tighe & Bond

**COPY:** Tracy Murphy, Director of Planning and Development & Acting Planning Agent

Alex Fagnand, PE, Tighe & Bond

**DATE:** January 26, 2021

On December 10, 2021, Aaron Sabbs from Tighe & Bond visited the Winchendon Landfill (hereby referred to as the "Site") to monitor the grading and shaping activities of the Landfill Closure Project. The Site, which is located at 580 River Street, is the former Mabardy Landfill. It is owned and operated by W.L. French Corporation (Operator) as the Winchendon Landfill. As part of the Landfill Closure Project, the Massachusetts Department of Environmental Protection (MassDEP) has permitted the acceptance of up to 415,000 cubic yards of COMM 97-001 material as defined by MassDEP Policy. In accordance with Condition 13 of the Landfill Closure Agreement between the Town and the Operator, the Site was reviewed for compliance with the following documents:

- Corrective Action Design permit approval issued on September 23, 2020 and Corrective Action Design Plans prepared by Langdon Environmental, LLC, dated June 2019 and revised October 2019.
- Initial Operations Plan, by Langdon Environmental, LLC, dated January 2021, revised to include temporary rip rap settling area.

## **Landfill Operations**

General landfill operations appeared to comply with best practices and the Corrective Action Design. While on site, material was placed and spread by bulldozer in the general area of Section B-B of Sheet C-5 of the Corrective Action Design, within the limits designated for initial placement.

## Stormwater and Erosion

Stormwater conveyances have been constructed per the Initial Operations Plan as revised to include a temporary rip rap settling area. This plan was submitted to MassDEP under a Major Permit Modification (BWP SQ 11). A swale, including check dams, has been constructed from the temporary stormwater basin to the temporary settling area. Overflow from the temporary stormwater basin runs to the settling area with a PVC culvert running beneath the access road. The swale from the northern section of the site to the temporary stormwater basin has not yet been constructed.

The swale had previously experienced significant sediment buildup and damage from heavy rainfall. The Operator has rebuilt portions of the swale and check dams, including installing additional rip rap to remedy the damage. The swale will require continued maintenance and cleaning, as sediment is still visible within the swale and settling area.

Erosion control was present along the northern, southern, and western edges of the site. There were no noted deficiencies in the erosion control.

## **Material Accepted**

Tighe & Bond reviewed the attached Net Daily Summary Report received for the month of December, which details the total tonnage and number of loads of material received by the facility. As indicated in Table 1 below, a total of 37,372.65 tons of material was received in December, which results in 484,584.47 tons remaining of the total 788,500 tons permitted. Based on a utilization factor of 1.9 tons per cubic yard of soil, the total volume received in December was 19,669.82 cubic yards, which results in 255,025.51 cubic yards remaining. This represents about 61% of the total permitted volume remaining.

**Table 1 - Cumulative Material Received** 

Month-Year	Material Received (tons)	Material Received (cubic yards)
Before Feb-21	12,764.15	6,717.97
Feb-21	32,224.28	16,960.15
Mar-21	26,702.78	14,054.09
Apr-21	22,376.79	11,777.26
May-21	26,096.58	13,735.04
Jun-21	24,834.48	13,070.78
Jul-21	16,002.93	8,422.59
Aug-21	13,708.12	7,214.80
Sep-21	32,160.64	16,926.65
Oct-21	29,375.34	15,460.71
Nov-21	30,332.79	15,964.63
Dec-21	37,372.65	19,669.82
Total	303,951.53	159,974.49
Remaining	484,548.47	255,025.51

The DEP permit limits the number of loads received to 64 per day without special Town permission. There were no days in December in which the number of loads received was greater than 64.

Enclosed are photographs summarizing the items observed during the site visit.



Photo 1 - Eastern slope and access road.



Photo 2 – Temporary stormwater overflow catch basin.



Photo 3 – Swale and check dams between temporary stormwater basin and temporary rip rap settling area.



Photo 4 - Stormwater culvert under access road.



Photo 5 - Temporary rip rap settling area.



Photo 6 – Material placed and graded in the northern area of the site.



Photo 7 – Material placed and graded in the central area of the site.



Photo 8 - Representative view of erosion control on the western limits of the Site.



Photo 9 – Southwestern slope and erosion control.



Photo 10 - Grading at monitoring well.



Photo 11 – Existing slope and erosion control at the southern limits of the Site.