

Land Protection Branch 4244 International Parkway

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08/20/2024

Nathan Dunn, P.E. Vice President, Post Collection Operations Matter Management Enterprises, LLC P.O. Box 86 West Point, GA 31833

SUBJECT: Pickens County – Whitestone Valley C&D Landfill

Proposed Vertical and Horizontal Expansion Draft Site Limitations

Permit Number 112-008D (C&D), Submission ID: 537459

Dear Mr. Dunn:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the following documents:

- October 19, 2023, Landfill Location Siting Restrictions Update Report for Proposed Horizontal Expansion, Whitestone Valley C&D Landfill, Pickens County, Georgia, dated revised April 21, 2023 and prepared by Bunnell-Lammons Engineering, Inc.
- April 26, 2023 and November 21, 2023 response letters from Hodges, Harbin, Newberry & Tribble, Inc.

Based on the data submitted, EPD has drafted "Site Limitations" which would form the basis for design of the proposed landfill in a manner that complies with Georgia Comprehensive Rules and Regulations Subject 391-3-4, Solid Waste Management (Rules). These rules can be accessed online at https://rules.sos.state.ga.us/GAC/391-3-4.

Comments on the proposed facility's site suitability report and the draft "Site Limitations" are welcome. However, if EPD is to consider such comments prior to determining if a Site Suitability Notice is warranted for this facility, they must be received prior to September 21, 2024. Please note that issuance of a Site Suitability Notice by EPD does not constitute a permitting decision for the proposed facility and comments regarding siting issues may be considered up to the time a final permitting decision is made.

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Please feel free to contact Beverly Tipton at 470-524-5790 if you have any questions.

Sincerely,

Charles J. Mueller, Chief Land Protection Branch

Enclosure

cc: Keith Stevens, Beverly Tipton, Claudia Montero, William Cook, GA EPD GA EPD Mountain District - Cartersville Kevin Berry P.E., Hodges, Harbin, Newberry & Tribble, Inc.

<u>Draft Site Limitations</u> Pickens County – Whitestone Valley C&D Landfill Proposed Expansion Page 1 of 3

- 1. The area considered for acceptability includes that enclosed by the lines identified as "Property Boundary" on Bunnell Lammons Engineering (BLE) Figure 2, *Site Topography & Boring Location Plan*, dated 11-10-23.
- 2. Waste shall not be placed outside of the area defined by the lines identified as "Initially Permitted Cell Boundaries" and "Proposed Expansion Area" on BLE's Figure 2, *Site Topography & Boring Location Plan*, dated 11-10-23.
- 3. The bottom of waste shall be kept a minimum of 15 feet above the groundwater elevation contours and a minimum of 15 feet above the streams in the proposed waste areas shown on BLE's Figure 11, Seasonal High Groundwater Elevation Contour Map March to May 2004, dated 11-10-23.

As an alternative to placing the waste a minimum of 15 feet above the groundwater contours referenced above, an underdrain system may be constructed beneath all areas proposed for waste disposal. The design engineer shall make periodic inspections of the underdrain system during construction and shall certify that the underdrain system is designed to prevent groundwater elevations from rising to within five feet of the bottom-of-waste elevations at any point between the drain lines.

- 4. An underdrain system shall be installed in each drainage ravine containing a stream within the proposed waste areas and shall be designed to maintain the water table, within the drainage ravines, at an elevation no higher than depicted on BLE's Figure 11, Seasonal High Groundwater Elevation Contour Map March to May 2004, dated 11-10-23. The outfall of the underdrain systems must be incorporated into the groundwater monitoring plan for the site.
- 5. A minimum 25-foot undisturbed buffer shall be maintained between the waste disposal area and any on-site springs, intermittent or perennial streams or surface water bodies except as permitted by the United States Army Corps of Engineers (USACE) and allowed by EPD.
- 6. A minimum 50-foot undisturbed buffer shall be maintained between the waste disposal boundaries and all wetlands, except as permitted by the United States Army Corps of Engineers (USACE) and allowed by EPD. A statement certifying that wetlands will not be impacted because of construction activities at the site shall be submitted. This statement shall be signed and stamped by the professional engineer responsible for the Design and Operational Plan for the subject site. Wetland areas shall be delineated on the Design and Operational Plan.
- 7. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells.

Draft Site Limitations

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- 8. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries.
- 9. If during excavation of the site, any springs or seeps are discovered, precautions should be taken to implement protective designs into the facility's design and operational plans. Also, the spring or seep should be incorporated into the facility's groundwater monitoring plan.
- 10. If non-rippable rock (bedrock) is encountered at an elevation above the approved base of the waste unit, or if non-rippable rock is removed during excavation, at least five (5) feet of clean, compacted, rubble-free fill shall be placed above the non-rippable rock. Alternatively, an engineered layer (soil or a combination of soils and geosynthetics) shall be placed and compacted between the non-rippable rock and the base of the waste unit. The engineered layer shall include:
 - a. One (1) foot of soil with a hydraulic conductivity equal or lower than 1 x 10⁻⁵ cm/sec constructed over one (1) foot of structural fill, or
 - b. If a geosynthetic is used, the geosynthetic will have a hydraulic conductivity equivalent to or less than one (1) of 1 x 10⁻⁵ cm/sec soil and will be placed on a minimum of two (2) feet of structural fill.

Installation of an alternative engineered layer over rock shall be documented and certified by a Professional Engineer or Professional Geologist registered in the State of Georgia and shall be included in the CQA report for the cell being constructed.

- 11. All erosion control measures shall conform to the Erosion and Sediment Control Act, the Georgia Comprehensive Rules and Regulations Subject 391-3-4, Solid Waste Management (Rules) and be protective of Talona Creek and all its intermittent and perennial tributaries. Runoff from the entire facility must be routed at all times, either directly or via properly designed conveyance systems, to permanent sediment control impoundments.
- 12. This site is in a seismic impact zone as defined in the Georgia Comprehensive Rules and Regulations Subject 391-3-4, Solid Waste Management (Rules). The design engineer must certify that all containment structures are designed to resist the maximum horizontal ground acceleration for the site. Therefore, the registered professional engineer preparing the design and operational plan must stamp and sign each engineering drawing with the accompanying notation:

I have reviewed the information presented in this drawing, and in my professional opinion, all containment structures are designed to resist a maximum horizontal ground acceleration of 0.22g in 250 years.

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- 13. Structural fill shall be required in some portions of the expansion area to achieve the required base grade elevations. Structural fill shall meet the requirements of the Construction Quality Assurance Plan within the EPD approved Design & Operational Plan.
- 14. The facility shall not restrict the flow of the 100-year flood, reduce the temporary water storage capacity of the floodplain, or result in a washout of solid waste or material to pose a hazard to human health and the environment.
- 15. All soil borings, monitoring wells and piezometers that have been completed/installed at this site, shall be plugged, and abandoned, except for those locations that will be used as monitoring wells for the proposed landfill. Abandonments shall be performed in accordance with the Water Well Standards Act. Additionally, all soil borings, monitoring wells and piezometers located within the proposed waste footprint shall be abandoned by overdrilling and filling with a non-shrinking cement/bentonite grout mixture via tremie pipe from the bottom to within 10 feet of the base of the landfill. The remaining borehole shall filled with hydrated bentonite. The abandonment borings/piezometers/monitoring wells shall be supervised by a professional geologist (PG) or professional engineer (PE) registered to practice in the State of Georgia. A report documenting the abandonment shall be submitted to EPD prior to cell construction. This documentation shall be signed and stamped by the responsible professional geologist or engineer registered to practice in the State of Georgia
- 16. Groundwater, surface water, and methane monitoring systems shall be installed at the site. The groundwater monitoring system shall include some monitoring wells completed in the bedrock. Foliation and joint orientation and lineament analysis shall be considered in determining bedrock monitoring well locations. Sampling parameters, sampling schedules, monitoring well construction, and spacing shall adhere to the guidelines established in Georgia Comprehensive Rules and Regulations Subject 391-3-4, Solid Waste Management (Rules). The system design and monitoring requirements shall be detailed in a groundwater and surface water monitoring plan and methane monitoring plan that are prepared in accordance with the 1991 Georgia Manual for Groundwater Monitoring, the September 2021 EPD document, Monitoring of Surface Water and Underdrain Systems at Solid Waste Facilities, the September 2015 EPD document, Methane Monitoring at Solid Waste Disposal Facilities and current USEPA Region IV guidance and are approvable by EPD.