GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Jeffrey W. Cown, Director

Land Protection Branch
4244 International Parkway
Suite 104
Atlanta, Georgia 30354
404-362-2537

Feb 14, 2024

Thomas Lewis
Willow Oak Landfill, LLC
7395 Roosevelt Hwy
Fairburn, Georgia 30213

SUBJECT: Fulton County – Willow Oak C&D Landfill
Proposed Lateral Expansion Draft Site Limitations
Permit Number 060-089D (C&D), Submission ID: 714127

Dear Mr. Lewis:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the revised November 2023, *Site Acceptability Report, Expansion of Waste Limits Within Permit Boundary (Rev.1)* prepared by Promus Engineering. 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's Rules for Solid Waste Management*. A copy of these is attached.

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 March 12, 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.

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
EPD Mountain District-Atlanta
Evan Perry, Promus
Brian Dolihite, Waste Management

Draft Site Limitations
Fulton County- Willow Oak C&D Landfill
Proposed Expansion

1. The area considered for acceptability includes that enclosed by the lines identified as "Current Permitted Limits of Waste" and "Site Acceptability Area" on Promus Engineering Inc's Figure 02, *Current Waste Footprint and Site Acceptability Area*.

2. Waste in the expansion area shall not be placed outside of the area identified as "Approximate Waste Footprint Expansion" on Promus Engineering Inc's Figure 02, *Current Waste Footprint and Site Acceptability Area*.

3. 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) or EPD.

4. 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.

5. The bottom of waste shall be kept a minimum of ten feet above the groundwater elevation contours and a minimum of ten feet above the stream banks of all intermittent and perennial streams shown in the proposed expansion area on Promus Engineering Inc's Figure 07, *Seasonal High Potentiometric Surface Map*, revised 11/17/23.

   Furthermore, a perforated conveyance pipe and stone backfill, or equivalent conveyance system shall be placed in any intermittent and perennial stream channel within the proposed expansion area and a separate underdrain system, extending a minimum of 50 feet on either side of the stream, shall be installed above the conveyance system to prevent groundwater from rising to within five feet of the bottom of the waste above the streams. The outfall(s) of the conveyance and underdrain systems must be incorporated into the groundwater monitoring plan for the site.

6. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells.

7. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries.

8. If during excavation of the site, any springs or seeps are discovered, precautions shall be taken to implement protective designs into the facility's design and operational plans. Also, the spring or seep shall be incorporated into the facility's groundwater monitoring plan.

9. 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 1×10^{-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 1×10^{-5} cm/sec soil and will be placed on a minimum of two (2) feet of structural fill.

10. 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.

11. All erosion control measures and/or diversion ditches shall conform to the *Erosion and Sediment Control Act* and be protective of Bear Creek and all its intermittent and perennial tributaries. All drainage structures must be channeled to permanent sediment control impoundments.

12. 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.

13. This site is located in a seismic impact zone as defined in the Rules for Solid Waste Management (Chapter 391-3-4-.05 (1) (g)). 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 0.12g in 250 years.

14. 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 be filled with hydrated bentonite. The abandonment of all 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

15. Groundwater, surface water, and methane monitoring systems shall be installed at the site. The groundwater monitoring system shall include bedrock monitoring wells constructed in potential lineaments. Sampling parameters, sampling schedules, monitoring well construction, and spacing shall adhere to the guidelines established in the EPD's *Rules for Solid Waste Management, Chapter 391-3-4*. 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.