

**ENVIRONMENTAL PROTECTION DIVISION** 

Jeffrey W. Cown, Director

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

Jul 08, 2024

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

## SUBJECT: Site Suitability Notice for Fulton County – Willow Oak C&D Landfill Proposed Lateral Expansion 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)* and March 11, 2024, and May 9, 2024 response letters prepared by Promus Engineering.

Based on the data submitted in addition to your application, EPD has determined that the applicable siting standards can be met in accordance with Georgia Comprehensive Rules and Regulations, Rule (Rule or Rules) 391-3-4-.05(1), provided the attached Site Limitations are met. This determination is based on information provided to date for EPD review and is subject to revision prior to permit issuance should errors be found in the submitted information or new information be provided relevant to this determination. This letter denotes only the demonstration of the ability to comply with siting standards for the proposed site and does not constitute approval to begin construction or operation of the disposal site. <u>This letter does not constitute a permit for the proposed solid waste landfill.</u>

Before a permit may be issued for the proposed solid waste disposal site, a Design and Operational Plan (D&O Plan), prepared in accordance with Rule 391-3-4-.07, must be submitted for consideration by the EPD.

Additionally, the appropriate governing authority must hold a public hearing regarding the proposed landfill no less than two weeks prior to the issuance of any permit. At least 30 days prior to the public hearing, notices of the public hearing must be posted at the proposed site and advertised in the legal organ of the county or counties in which the proposed solid waste disposal facility will be located. A transcript of the public hearing proceedings and a reaffirmation of zoning consistency must be submitted to EPD prior to a final decision regarding the issuance of a permit for the proposed solid waste disposal facility.

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After our review and evaluation of the D&O Plan and the other required submittals, a Solid Waste Handling Permit will be either issued or denied. This Site Suitability Notice shall terminate upon a final decision to issue or deny the requested permit. Failure to submit to EPD an approvable Design and Operational Plan within one year from the date of this Notice may result in permit denial or termination of the permit application.

Sincerely,

Jeffrey W. Cown,

Jeffrey W. Cown, Director Georgia Environmental Protection Division

Attachment

cc: Keith Stevens, Beverly Tipton, William Cook, GA EPD EPD Mountain District-Atlanta Evan Perry, Chanc Moore, Promus Engineering Brian Dolihite, Matthew Lawrence, Waste Management

## <u>Site Limitations</u> Fulton County- Willow Oak C&D Landfill Proposed Expansion Page 1 of 3

- 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 "Site Acceptability Area" 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 05/07/24.

An underdrain system shall be installed in any intermittent or perennial stream channel within the limits of waste within the proposed expansion area. Underdrain systems shall be designed to maintain a ten-foot separation between the stream channels and the proposed bottom of the composite liner. Underdrain systems in perennial stream channels shall consist, at a minimum, of two elements: (a) a perforated conveyance pipe and stone backfill, or equivalent conveyance system placed in the streambed and (b) a separate underdrain component, installed above the conveyance system to prevent groundwater from rising to within five feet of the bottom of the liner system above the perennial streams. The underdrain system shall be designed by a Georgia registered professional engineer and demonstrate that the system is designed to carry the baseflow of the perennial or intermittent streams. The outfall(s) of underdrain systems must be incorporated into the surface water 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.

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- 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  $1 \ge 10^{-5}$  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  $1 \times 10^{-5}$  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 shall conform to the *Erosion and Sediment Control Act*, the Rules for Solid Waste Management, and be protective of Bear 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. 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 Rule 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:

## Site Limitations Fulton County- Willow Oak C&D Landfill Proposed Expansion Page 3 of 3

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.