#### Richard E. Dunn, Director

#### **Land Protection Branch**

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

01/28/2021

Josh Hawkins, County Manager Oglethorpe County Government P.O. Box 261 Lexington, Georgia 30648

SUBJECT: Draft Site Limitations for Oglethorpe County - Athens Rd Construction and

Demolition (C&D), Phase II Landfill - Proposed Expansion Permit Number 109-003D(C&D), Submittal ID: 450896

Dear Mr. Hawkins:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the *Site Suitability Report for Vertical Expansion Oglethorpe County* – *Athens Road Construction and Demolition (C&D) Landfill, Phase II, Permit No. 109-003D (C&D), Addendum 2* prepared by Atlas Technical Consultants (Atlas), dated December 18, 2020. 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 on or prior to March 1, 2021. 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 John Sayer at 404-362-2559 if you have any questions.

Sincerely,

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Charles J. Mueller, Chief Land Protection Branch

Enclosure

cc: Jim Guentert, Keith Stevens, John Sayer, William Cook, Susan Wood GA EPD Russell Small, Atlas

**EPD NE District - Athens** 

#### **Draft Site Limitations**

## Oglethorpe County- Athens Rd C&D, Phase II Landfill Proposed Expansion January 27, 2021 Page 1 of 3

- 1. Waste shall not be placed outside of the area created by the combination of the lines identified as "existing limit of waste C&D Phase II Landfill" and "footprint of the proposed C&D Phase II vertical expansion area" as shown on Atlas Technical Consultant's (Atlas), Figure 2, titled *Grading Concept Plan* dated 10-22-20.
- 2. The bottom of waste shall be kept a minimum of 15 feet above the groundwater elevation contours shown on Atlas's Appendix 8, *Oglethorpe County Phase II Landfill, Potentiometric Surface Map, May 2020*, dated 10-23-20.
- 3. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells.
- 4. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries.
- 5. A minimum 75-foot undisturbed buffer shall be maintained between the waste disposal boundaries and the tributary to Grove Creek located along the southern boundary of the C&D Phase II Landfill as shown on Atlas Figure 2, *Grading Concept Plan* dated 10-22-20.
- 6. 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<sup>-5</sup> 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<sup>-5</sup> cm/sec soil and will be placed on a minimum of two (2) feet of structural fill.
- 7. 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.

#### **Draft Site Limitations**

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- 8. 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.
- 9. All erosion control measures and/or diversion ditches shall conform to the *Erosion and Sediment Control Act* and be protective of Grove Creek and all its intermittent and perennial tributaries.
- 10. 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.
- 11. 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.

12. All soil borings, monitoring wells and piezometers that have been completed/installed at this site, shall be plugged, and abandoned 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.

### **Draft Site Limitations**

# Oglethorpe County- Athens Rd C&D, Phase II Landfill Proposed Expansion January 27, 2021 Page 3 of 3

13. Groundwater, surface water, and methane monitoring systems shall be installed at the site. The groundwater monitoring system shall include bedrock wells to monitor possible fracture zones and lineaments. Sampling parameters, sampling schedules, monitoring well construction and spacing shall adhere to the guidelines established in the EPD's *Rules of 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 Georgia Manual for Groundwater Monitoring, EPD's September 2015 document, "Methane Monitoring at Solid Waste Facilities" and current USEPA Region IV guidance and are approvable by EPD.