

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

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

07/27/2021

Mr. Dirk Verhoeff, Executive Director Dalton-Whitfield Solid Waste Authority 587 Gazaway Road Dalton, Georgia 30721

SUBJECT: Whitfield County – Dalton-Whitfield Solid Waste Management Authority Baled Carpet Waste Landfill Proposed Expansion Permit Number 155-048D(LI), Submission ID: 544436

Dear Mr. Verheoff:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the *Site Acceptability Baled Carpet Waste Landfill, Permit Number 155-048(LI)Report, Whitfield County, Georgia* report (revised June 2021) and a June 17, 2021, response letter prepared by Atlantic Coast Consultants (ACC). 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 September 3, 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 470-251-2592 if you have any questions.

Sincerely,

GAUL

Charles J. Mueller, Chief Land Protection Branch

Enclosure

cc: Keith Stevens, John Sayer, Jim Guentert, William Cook, GA EPD EPD Mountain District, Cartersville Charles Adams, ACC

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- 1. The area considered for acceptability includes only that identified as "Limits of Site Acceptability" shown on Atlantic Coast Consulting (ACC), *Seasonal High Water Table Map*, Figure 9C, dated June 2021.
- 2. Waste shall not be placed outside of the area identified as "Proposed Limits of Waste" shown on ACC's *Seasonal High Water Table Map*, Figure 9C, dated June 2021.
- 3. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries.
- 4. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells.
- 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 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. The bottom of the waste shall be kept a minimum of ten feet above the groundwater contours shown on ACC's *Seasonal High Water Table Map*, Figure 9C, dated June 2021. Alternatively, an underdrain system can be installed beneath all areas of waste and connected to the existing underdrain system to maintain a five-foot separation between the waste and the water table. The project engineer shall make periodic quality control inspections while the underdrain system is under construction and shall certify that it has been properly designed and installed to prevent groundwater from coming to within five feet of the bottom of the waste.

A perforated conveyance pipe and stone backfill or equivalent conveyance system shall be placed in the intermittent stream channel within the proposed expansion area and an underdrain system shall be installed above the conveyance system to prevent groundwater from rising to within five feet of the bottom of the waste. The outfall(s) of the underdrain system must be incorporated into the groundwater monitoring plan for the site.

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- 8. No blasting of bedrock shall be conducted. 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 1×10^{-5} cm/sec soil and will be placed on a minimum of two (2) feet of structural fill.
- 9. If, during excavation of the site, any springs or seeps are detected, EPD shall be notified immediately, and protective designs shall be incorporated into the facility's design and operational plans, such that sampling of the spring or seep can be incorporated into the groundwater monitoring plan.
- 10. All erosion control measures and/or diversion ditches shall conform to the *Erosion and Sediment Control Act* and be protective of the Conasauga River and its perennial and intermittent tributaries.
- 11. Structural fill shall be required to fill the existing sediment pond and raise the surface grade so that it is a minimum of ten feet above the seasonal high potentiometric surface shown on ACC's *Seasonal High Water Table Map*, Figure 9C, dated June 2021. This structural fill must meet requirements presented in the construction quality assurance plan of the Design and Operational (D&O) Plan.
- 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.

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- 13. 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.
- 14. This site is 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 0.22g in 250 years.

15. Groundwater, surface water, and methane monitoring systems shall be installed at the site. 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.