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Jun 18, 2024

Jennifer McNelly Vice President Environmental Affairs Georgia Power Company 241 Ralph McGill Blvd NE Atlanta, Georgia 30308

SUBJECT: Draft Site Limitations for Georgia Power, Plant Wansley

Proposed CCR Landfill Expansion - Cell 4

Heard County, Georgia Submittal ID: 738258

Dear Ms. McNelly:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the January 2024, *Site Acceptability Report for Proposed CCR Landfill Expansion, Plant Wansley Company* prepared by Geosyntec Consultants and an August 23, 2023 and January 31, 2024 response letter from Georgia Power.

These documents can be accessed on the EPD web page at:

- https://epd.georgia.gov/public-announcements-0/land-protection-branch-public-announcements
- https://epd.georgia.gov/ccr-draft-site-limitations

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 July 24, 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

Attachment

cc: Jim Guentert, Keith Stevens, Beverly Tipton, GA EPD Tammy Buchli, William Cook, GA EPD David Gibbons, Bret McClellan, Georgia Power

### **Draft Site Limitations**

## Georgia Power- Plant Wansley Proposed CCR Landfill Expansion – Cell 4

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- 1. The area considered for acceptability includes only the area delineated by the line "Existing Landfill Permit Boundary" on Geosyntec Consultants Figure 2-7, *Potentiometric Surface* 24 *March 2022* dated January 2024.
- 2. Waste in the proposed Cell 4 expansion area shall not be placed outside of the area delineated by the line "Approx. Limit of Proposed Cell 4 Development" on Geosyntec's Figure 2-7, *Potentiometric Surface* 24 March 2022 dated January 2024.
- 3. Site Limitations listed on pages 16 and 17 of the facility's Operations Plan, September 2022 revision, approved October 25, 2022 shall remain in effect for areas previously constructed and approved to receive waste.
- 4. A composite liner and leachate collection system, as required by *Georgia's Rules for Solid Waste Management*, shall be constructed under all areas proposed for CCR disposal. The bottom of the liner system shall be constructed a minimum of five feet above the top of bedrock elevation contours shown on Geosyntec's Figure 2-6, *Elevation of Bedrock*, dated January 2024, a minimum of ten feet above the groundwater elevation contours and a minimum of ten feet above the intermittent and perennial streams within the area delineated by the line "Approx. Limit of Proposed Cell 4 Development" on Geosyntec's Figure 2-7, *Potentiometric Surface 24 March 2022* dated January 2024.

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) 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 stream. The outfall(s) of underdrain systems must be incorporated into the surface water monitoring plan for the site.

- 5. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residences and/or water supply wells in existence at the time of permitting.
- 6. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries. The 200-foot buffer may be disturbed if approved by the EPD.

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- 7. 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 as a result of construction activities shall be incorporated in all applicable permit drawings. Prior to the initial receipt of waste, a certification statement shall be submitted to the operating record demonstrating that the requirements of 40 CFR 257.61 have been met. These statements shall be signed and sealed by the professional engineer responsible for the permit drawings and Operation Plan for the subject site. Wetland areas shall be delineated on the permit drawings.
- 8. A minimum 25-foot undisturbed buffer shall be maintained between the waste disposal area and any onsite springs, intermittent or perennial streams or surface water bodies, except as allowed by EPD.
- 9. 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.
- 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. If non-rippable rock (bedrock) is encountered at an elevation above the approved base of the liner system, 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 liner system. The engineered layer shall include:
  - i. 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
  - ii. 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.

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.

### **Draft Site Limitations**

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- 12. 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 EPD approved Construction Quality Assurance Plan.
- 13. All erosion control measures and/or diversion ditches must conform to the latest edition of the *Manual for Erosion and Sediment Control in Georgia* and be protective of the Chattahoochee River and its perennial and intermittent tributaries. All drainage structures must be routed to a permanent sediment control impoundment.
- 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) and 391-3-4.10(3)(a)). 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 Permit Drawings 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 0.17g in 250 years.

- 15. Groundwater and surface water 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 that are prepared in accordance with the applicable parts of the 1991 *Georgia Manual for Groundwater Monitoring* and current USEPA Region IV guidance and are approvable by EPD. The groundwater monitoring system shall include some monitoring wells installed in the bedrock. Foliation and joint orientation and lineament analysis shall be considered in determining bedrock monitoring well locations.
- 16. 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.