



Richard E. Dunn, Director

EPD Director's Office
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Atlanta, Georgia 30334
404-656-4713

Nov 10, 2022

Mr. Aaron D. Mitchell
Georgia Power
241 Ralph McGill Blvd. NE
BIN 10221
Atlanta, Georgia 30308

**SUBJECT: Site Suitability Notice for Georgia Power – Plant Arkwright
Proposed CCR Landfill
Macon, Bibb County, Georgia
Submittal ID: 534245**

Dear Mr. Mitchell:

The Solid Waste Management Program of the Environmental Protection Division (EPD) has completed its review of the following:

- *Response to Georgia Environmental Protection Division Comments, Georgia Power Co. Plant Arkwright, CCR Landfill Site Acceptability Study (SAR) submitted by Georgia Power, dated November 28, 2021, April 14, 2022, July 22, 2022, and August 8, 2022.*
- *Southern Company Services/Georgia Power Company, Former Plant Arkwright New CCR Landfill Site Acceptability Report, Final Report for Proposed Landfill, Putnam County, Georgia, prepared by Jacobs Engineering Group, Inc., dated March 2022.*

Based on the data submitted in addition to your application, EPD has determined that the applicable siting standards can be met in accordance with Chapter 391-3-4-.05(1) and Chapter 391-3-4-.10 (3), 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. This letter does not constitute a permit for the proposed solid waste landfill.

Please note that site limitations 4, 5, and 8 have been modified for clarity from the draft site limitations dated September 22, 2022.

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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 Chapter 391-3-4-.07(1) and Chapter 391-3-4-.10(4), must be submitted for consideration by the EPD. After our review and evaluation of the D&O Plan, 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 this date may result in permit denial.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Dunn".

Richard E. Dunn, Director
Environmental Protection Division

Attachment

cc: Jim Guentert, Beverly Tipton, Miranda Anderson - GA EPD
Brian Love, Keith Stevens, William Cook – GA EPD
EPD West Central District, Macon
David Gibbons, Georgia Power

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1. The area considered for acceptability includes only the area delineated by the line “New CCR Landfill Permit Boundary” on Jacobs Engineering Group (Jacobs) Figure 4, *Proposed CCR Landfill* dated April 2022.
2. Waste shall not be placed outside of the area delineated by the line “New CCR Landfill Limit of Waste” on Jacobs’s Figure 4, *Proposed CCR Landfill* dated April 2022.
3. All existing coal combustion residual (CCR) waste shall be removed from the area identified as “Existing Extent of CCR (AP3 landfill)” on Jacobs’s Figure 10, *Seasonal High Potentiometric Surface Map February 2019*, dated April 2022.
4. A composite liner and leachate collection system, as required by 40 CFR 257.70, shall be constructed under all areas proposed for CCR disposal. In the Phase 1 and Phase 2 landfill areas, the bottom of the liner system shall be constructed a minimum of five feet above the groundwater elevation contours shown on Jacobs’s Figure 10, *Seasonal High Potentiometric Surface Map February 2019*, dated April 2022.

Alternatively, in the Phase 2 landfill area, the bottom of the liner system shall be constructed a minimum of five feet above a surface created by adding 20 feet, 15 feet, and 10 feet to the 320-foot, 330-foot and 340-foot elevation contours, respectively, identified as “estimated potentiometric contour” on Jacobs’s Figure 11, *AP3 Landfill Post-Closure Potentiometric Surface Map*, dated April 2022. This option is contingent on constructing an unlined stream channel as shown in Jacobs’s, *Phase 2 Landfill Base Grades, Stream Separation Study*, Sheet 1 of 2, dated August 2022 and Jacobs’s, *Phase 2 Landfill Sections, Stream Separation Study*, Sheet 2 of 2, dated August 2022. After reaching the approved base grade in each cell of the Phase 2 landfill, a demonstration shall be provided for EPD approval confirming a minimum five feet of separation between the bottom of the liner system and the groundwater potentiometric surface at that time.

EPD will consider proposed revisions to the bottom of the liner system elevation if additional groundwater elevation data is submitted.

5. A minimum 500-foot buffer shall be maintained between the waste disposal boundary and any adjacent residential dwellings and/or water supply wells in existence at the time of the permit application.
6. A minimum 200-foot undisturbed buffer shall be maintained between the waste disposal boundary and the permitted property boundaries. Existing waste in the buffer associated with the pre-existing disposal unit may remain, however no additional CCR waste shall be placed in the 200-foot buffer. 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 at the site shall be submitted. This statement shall be signed and stamped by the professional engineer responsible for the Design and Operational (D&O) Plan for the subject site. Wetland areas shall be delineated on the D&O Plan.
 8. A minimum 25-foot undisturbed buffer shall be maintained between the waste disposal area and any existing or constructed onsite springs, intermittent or perennial streams or surface water bodies, except as allowed by EPD.
 9. 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 1×10^{-5} 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 1×10^{-5} 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.
10. All erosion control measures and/or diversion ditches shall conform to the latest edition of the *Manual for Erosion and Sediment Control in Georgia* and be protective of the Ocmulgee River and Beaverdam Creek and their perennial and intermittent tributaries.
 11. 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.
 12. 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-.10*. The system design and monitoring requirements shall be detailed in a groundwater and surface water monitoring plan that are prepared in accordance with applicable parts of the Georgia Manual for

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Groundwater Monitoring and current USEPA Region IV guidance and are approvable by EPD.

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/drinking water 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.