

POST-CLOSURE PLAN

PLANT WANSLEY COAL COMBUSTION RESIDUALS (CCR) LANDFILL HEARD COUNTY, GEORGIA

FOR



Georgia Power

SEPTEMBER 2022

 **GEORGIA**
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

Approved
Solid Waste Management Program

Approved By: Keith Stevens Digitally signed by Keith Stevens
Date: 2022.10.25 08:59:48 -04'00'



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HHNT
HODGES, HARBIN,
NEWBERRY & TRIBBLE, INC.
Consulting Engineers

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1. GENERAL

The Plant Wansley CCR landfill post-closure plan is prepared to meet the requirements of Rule 391-3-4-.10(7), which requires the owner or operator of an existing CCR landfill that is closed in place to provide for post-closure care of the existing landfill for a period of at least 30 years. Post-closure care includes maintaining the integrity of the final cover system, the liner and leachate collection system, as well as continuing groundwater monitoring in accordance with Rule 391-3-4-.10(6).

Georgia Power prepared, placed in the facility's operating record and uploaded the initial written post-closure plan for the Plant Wansley CCR landfill to the Georgia Power website under Environmental Compliance prior to October 17, 2016, as required by 40 CFR §257.104(d)(2).

Georgia Power will amend the initial and subsequent written post-closure plans whenever:

- There is a change in the facility's operation of the landfill that substantially affects the written post-closure plan in effect; or
- If after post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan.

Georgia Power will amend the written post-closure plan at least 60 days prior to a planned change in the operation of the CCR landfill affecting post-closure care, or no later than 60 days after an unanticipated event requires the need to revise the existing written post-closure plan. If the written post-closure plan is revised after post-closure care activities have commenced, Georgia Power will amend the written post-closure plan no later than 30 days following an unanticipated event that necessitates a revision of the written post-closure plan.

All amendments to the approved post-closure plan will include a certification from a professional engineer licensed to practice in the State of Georgia, that the amended post-closure plan meets the requirements of Rule 391-3-4-.10(7).

The release from the post-closure requirements in this plan must be approved by the Director of the Georgia Environmental Protection Division (EPD).

2. POST-CLOSURE USE OF THE PROPERTY

Post-closure care for the Wansley CCR Landfill will consist of at least:

1. Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover as necessary to correct the effects of settlement, subsidence, erosion, or other events, and preventing run-on and run-off from eroding or otherwise damaging the final cover;
2. Maintaining the integrity and effectiveness of the leachate collection and removal system; and
3. Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of Rule 391-3-4-.10(6).

There is no planned use of this property during the post-closure care period at this time. Prior to any future use, EPD approval is required.

3. GROUNDWATER MONITORING

Groundwater monitoring will continue throughout the post-closure care period as described in the approved Groundwater Monitoring Plan included in Part A of this Permit Application. Following each semi-annual sampling event, results will be provided to EPD for its review. The groundwater monitoring wells will be maintained throughout this period.

The CCR landfill will continue to monitor groundwater according to the Groundwater Monitoring Plan approved for the facility. Georgia Power will be responsible for conducting all monitoring activities. If at any time the monitoring results indicate an exceedance of established standards or indicate a threat to human health or the environment, Georgia Power will notify the Environmental Protection Division and comply with all requirements of Georgia Rule 391-3-4-.10(6).

Georgia Power Company will monitor groundwater semi-annually pursuant to the requirements defined in the Groundwater Monitoring Plan included in the permit. Georgia Power Company proposes to monitor groundwater for a period of at least thirty (30) years following closure of the landfill to confirm that groundwater constituent concentrations are not detected at statistically significant levels above the groundwater protection standards established in State CCR Rule 391-3-4-.10(6)(b), which references 40 CFR 257.104. If at the end of the 30-year post-closure care period the facility is operating under assessment monitoring in accordance with Georgia Rule 391-3-4-.10(6) and 40 CFR 257.95, the owner or operator must continue to conduct post-closure care until the facility returns to detection monitoring. Following the post-closure care period, a qualified groundwater scientist will certify that the site is in Detection Monitoring prior to release from post-closure care. The certification statement will be submitted to EPD for review and concurrence and will include the following language: "I am a qualified groundwater scientist and I hereby certify that the groundwater monitoring program at the CCR landfill is operating under detection monitoring in accordance with 257.94 and Georgia Rules for Solid Waste rule 391-3-4-.10 and monitoring requirements for post-closure care have been met.

4. LEACHATE COLLECTION AND TREATMENT

The leachate collection system will be maintained for a minimum of 30 years or until leachate is no longer produced. These systems will be maintained in good working order throughout the post-closure care period. Leachate, collected during the post-closure care period, will be properly treated in a wastewater treatment plant or circulated back to the plant as scrubber make-up water.

5. ROUTINE INSPECTION OF VEGETATIVE / FINAL COVER / DRAINAGE SYSTEM

Throughout the post-closure care period, Georgia Power will inspect the disposal facility on a quarterly basis to ensure that all CCR disposed of in the facility remains properly covered with the

approved final closure system for the facility. The repair work on the soil cover or synthetic cap liner will meet or exceed the original construction requirements. Any areas noted to have less than the required cover from the effects of erosion, vehicular traffic, etc., will be immediately repaired. All areas lacking proper vegetation will be grassed and maintained according to the vegetation and fertilization plans in this plan. The concrete flumes will be maintained in proper working condition in accordance with the Permit Application. The contact person for post-closure care of the facility is provided below:

Facility Contact: Plant Manager
 Plant Wansley
 1371 Liberty Church Rd.
 Carrollton, GA 30116
Telephone Number: (404) 506-5000

6. SEDIMENT POND MAINTENANCE / CLEAN-OUT

Throughout the post-closure care period, all ditches, diversion berms, culverts, rip-rap, and other drainage structures will be maintained according to the Operations Plan. Sediment ponds will be cleaned upon the accumulation of the designed depth of sediment within the pond. Erosion control structures will be maintained to prevent damage to the final cover.

7. LIMITED ACCESS

Access to the disposal facility will be controlled by fencing, gates, buffers, and natural barriers.

8. POST-CLOSURE SUPERVISION

Post-closure care of the disposal facility will be under the supervision of the Plant Manager. Contact information for this person will be provided to EPD at time of closure.

9. SITE EQUIPMENT

Georgia Power will make adequate equipment available to ensure that post-closure care requirements are executed correctly and efficiently. Rental equipment will be utilized in the event that equipment dedicated to the CCR landfill should break down during post-closure care procedures.

10. REMOVAL OF CCR

If Georgia Power wishes to remove CCR or CCR residue from the disposal area, Georgia Power will request and receive written approval from EPD, prior to conducting any such activity.

11. POST-CLOSURE CARE COST AND FINANCIAL ASSURANCE

The post-closure care cost estimate is provided in Table 1 at the end of this document. In compliance with applicable securities laws and regulations, GPC will provide unredacted cost estimates for post-closure care to GA EPD under separate cover. The post-closure care cost includes all items necessary for a third-party to conduct post-closure care maintenance and

monitoring in accordance with the Post-Closure Plan as set forth herein. The cost estimate is generated in current dollars and will be adjusted annually for inflation. GPC will provide a demonstration of financial assurance upon approval of closure and post-closure care cost estimates by GA EPD.

12. NOTIFICATION

No later than 60 days following the completion of the post-closure care period, Georgia Power must prepare a notification verifying that post-closure care has been completed. The notification must include the certification by a qualified professional engineer verifying that post-closure care has been completed in accordance with this plan. Georgia Power has completed the notification when it has been placed in the facility's operating record as required by Rule 391-3-4-.10(7) and provided to EPD. The release of the landfill from post-closure care must be approved by EPD.

These notifications will be posted to the Georgia Power website under Environmental Compliance.

13. RECORDKEEPING/NOTIFICATION/INTERNET REQUIREMENTS

The requirements set forth in this Post Closure Plan comply with the recordkeeping requirements of Rule 391-3-4-.10(8), closure and post-closure notification requirements specified in Rule 391-3-4-.10(8) and internet requirements in Rule 391-3-4-.10(8). A summary of the specific recordkeeping, notification and internet posting requirements for post-closure care are listed below:

Recordkeeping Requirements

Georgia Power will maintain these documents in the facility's operating record as soon as the required document/information is available or applicable and approved by EPD:

- (a) The written post-closure plan, and any amendment made to the initial plan, will be kept in the Plant Wansley CCR landfill facility's operating record. Georgia Power may elect to maintain only the most recent post-closure plan approved by EPD in the facility's operating record.
- (b) The notification of completion of post-closure care period as required by Rule 391-3-4-.10(8) will be added to the Plant Wansley CCR landfill facility's operating record.

Notification Requirements

The requirements for notification consist of informing EPD when information has been placed in the facility's operating record and on the Georgia Power website under Environmental Compliance. EPD reviews and approves the post-closure plan and is also the regulatory agency responsible for releasing the Plant Wansley CCR landfill from post-closure care, therefore the requirements specified in Rule 391-3-4-.10(8) are met during the State's CCR landfill permitting process.

Publicly Accessible Internet Site Requirements

Georgia Power will post the information required by Rule 391-3-4-.10(8) for the Plant Wansley CCR landfill within 30 days of review and approval by EPD. The information required to be posted on the Georgia Power website under Environmental Compliance will remain available at least five (5) years following the date on which Georgia Power first posts the information.

The following information related to post-closure will be posted on the Georgia Power website under Environmental Compliance:

- (a) The most recent post-closure plan, and any amendment made to the initial plan,
- (b) The notification of completion of post-closure care period.

14. CERTIFICATION

This post-closure plan meets the requirements of Rule 391-3-4-.10(7).

Table 1 - Wansley Landfill Cells 1,2&3 Post-Closure Cost Estimate

Item Description	Quantity	Unit	Unit Cost	Cost
Post Closure Cost				
Maintenance - Grass/Turf ¹				
Road and Maintenance				
Water Treatment				
Environmental Monitoring				
Groundwater Monitoring & Reporting ²				
Sampling				
Reporting				
Laboratory Analysis				
Groundwater Well Maintenance and Abandonment				
Well Maintenance & Replacement ³				
Well Abandonment ⁴				
			Subtotal	
			Contingency	
			30 Year Post Closure Cost Estimate	
			Total Financial Assurance Required (Closure Cost + 30 Year Post Closure Care Cost)	

Notes:

- Maintenance - Grass includes cost for mowing the site five times per year. Acreage includes the entire permit area.
- Assumes 35 wells + 9 QA/QC samples = 44 samples collected 2 times/year for 30 years. Includes cost for additional analyses for Alternate Source Demonstrations, resamples, and rush analysis. Assumes semi-annual reporting for 30 years.
- Assumes 5% of miscellaneous costs in post-closure care are associated with well maintenance and replacement. Assumes, no additional wells will be installed during post-closure care since the site is in Assessment Monitoring.
- Well abandonment includes 53 wells completed above the ground.