

POST-CLOSURE PLAN

PLANT WANSLEY ASH POND 1 (AP-1) CLOSURE

HEARD AND CARROLL COUNTIES, GEORGIA

FOR



Georgia
Power

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Geosyntec 
consultants

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LIST OF ACRONYMS

BMP	best management practice
CCR	coal combustion residuals
CFR	Code of Federal Regulations
GA EPD	Georgia Environmental Protection Division
GPC	Georgia Power Company
NPDES	National Pollutant Discharge Elimination System
PCCP	post-closure care period
P.E.	Professional Engineer

1. INTRODUCTION

This written post-closure plan has been prepared for Georgia Power Company (GPC) pursuant to the Federal Coal Combustion Residuals (CCR) Rule in Title 40 of the Code of Federal Regulations (CFR) §257 (40 CFR §257) and the State CCR Rule in Chapter 391-3-4-.10 of the Georgia Rules for Solid Waste Management for Post-Closure Care of CCR Surface Impoundment Units.

This post-closure plan may be amended by GPC at any time. Moreover, as required by Rule 391-3-4-.10(7)(g) [40 CFR §257.104(d)(3)(ii)], this plan must be amended whenever (i) there is a change in the operation of the CCR unit that would substantially affect the written post-closure plan or (ii) after post-closure activities have commenced, unanticipated events necessitate a revision of the written post-closure plan. The time frames for amendment to the written closure plan will be in accordance with those specified in Rule 391-3-4-.10(7)(g) [40 CFR §257.104(d)(3)(iii)].

2. GENERAL

Once closure is complete (e.g. deemed complete by Georgia Environmental Protection Division [GA EDP]), the Site will begin the post-closure care period (PCCP) and, as such, GPC will implement the requirements of this post-closure plan.

In accordance with Rule 391-3-4-.10(7)(g) [40 CFR §257.104(c)(1)], the PCCP for the Site will be 30 years. As required by Rule 391-3-4-.10(7)(g) [40 CFR §257.104(c)(2)], if at the end of the PCCP the owner or operator of the CCR unit is operating under assessment monitoring in accordance with Rule 391-3-4-.10(6) [40 CFR §257.95], the owner or operator must continue to conduct post-closure care until the unit returns to detection monitoring in accordance with Rule 391-3-4-.10(6) [40 CFR §257.95]. GPC will conduct the following activities for the consolidation area during the PCCP:

- Inspecting the containment structure to check the structural integrity
- Maintaining the integrity and effectiveness of the final cover system, including making repairs to the final cover system as necessary to correct the effects of settlement, subsidence, erosion, animal intrusion, or other natural or man-made events, and preventing run-on and runoff from eroding or otherwise damaging the final cover system
- Maintaining the groundwater monitoring system and monitoring of the groundwater in accordance with the requirements of GA EPD Rule 391-3-4-.10(6)(a) and 40 CFR §257.90 through §257.98
- Monitoring surface water in accordance with the requirements of the Site's National Pollutant Discharge Elimination System (NPDES) discharge permit, which may require modification upon closure and maintenance of the NPDES outfall locations

3. POST-CLOSURE USE OF THE PROPERTY

The primary land use for the Site after closure will be open, undeveloped green space. Additionally, the Closure-by-Removal Area will remain as a NPDES permitted industrial wastewater pond (Permit #0026778) and be used for approved non-CCR waste processes, as needed by Plant Wansley. No post-closure use of the property will be allowed unless approved by the GA EPD Director. GA EPD may approve disturbance if the owner or operator demonstrates that disturbance of the final cover system or other components of the closure system will not create a potential threat to human health or the environment. Further, the final cover of the closure by removal area will be maintained such that woody vegetation and trees will not be allowed to grow. The demonstration must be certified by a qualified Professional Engineer (P.E.) and notification will be provided to GA EPD that the demonstration has been placed in the operating record and on the owner or operator's publicly accessible internet side. Prior to implementing any modifications to the post-closure use of the Site, this Post-Closure Plan will be amended consistent with the requirement of GA EPD 391-3-4-.10(7) and 40 CFR §257.104(d), and GA EPD approval will be obtained.

Plant operations and maintenance may occur within the permit boundary but outside the limits of the closed AP-1 area (e.g. outside the CCR boundary and final cover system). Activities not directly affecting the final cover system, such as those needed to construct, maintain, replace or repair systems for electric power generation or its delivery (such as subsurface piping, electrical appurtenances, transmission structures, etc.) may be conducted at the discretion of GPC. However, should utility operations be required such that the final cover system is disturbed, GPC will prepare a report documenting its repair. The repair documentation will include as-builts, CQA information, and certification from a Professional Engineer registered in Georgia. This documentation will be submitted to GA EPD.

4. MONITORING AND MAINTENANCE ACTIVITIES

4.1 INSPECTION PLAN

The purpose of the post-closure inspection program is to ensure the engineered features of the AP-1 closure system is adequately functioning during the PCCP. A visual inspection of the entire Consolidation Area will be performed at the frequency specified subsequently in this Post-Closure Plan, and a written record will be completed and maintained as part of the facility's operating record. At a minimum, each inspection will document the following information: date and time of inspection, name of inspector, notations of observations made, and nature of any corrective actions to be taken. Items that may be included in the inspection are as follows:

- Site access and security control
- Integrity of site benchmarks
- Containment structure
- Final cover system

- Vegetation
- Surface water management system, including erosion and sediment control features
- Groundwater monitoring system

4.2 INSPECTION FREQUENCY

Inspections will be conducted annually. If any deficiencies are identified during the inspections, an assessment and corrective action plan will be implemented as soon as practical.

4.3 SITE ACCESS AND SECURITY CONTROL

AP-1 is located completely within the property boundary of Plant Wansley, and access is restricted to only authorized personnel. Access is controlled by chain link security fence, locked gates, and full-time security personnel. During the PCCP, security measures will be checked and repaired as necessary.

Access roads will be maintained to provide appropriate access within the facility. Maintenance will include repairing potholes and washouts as well as periodic regrading as necessary.

4.4 INTEGRITY OF SITE BENCHMARKS

Routine inspections will include verifying integrity and accessibility of Site benchmarks. If Site benchmarks are damaged, obstructed due to vegetation, or otherwise inaccessible, proper actions will be taken to restore integrity and access to the benchmarks.

4.5 CONTAINMENT STRUCTURE

During inspections, the integrity of the containment structure will be observed. Both the front facing of the concrete secant piles and top surface/roadway will be inspected for any noticeable settlement, wear, changes, and deficiencies.

4.6 FINAL COVER SYSTEM

Routine inspection will include checking the final cover system for conditions that could impact cover integrity and effectiveness. These conditions include, but are not limited to, excessive erosion, soil sloughing, inadequate vegetation, animal burrowing, and subsidence. If the routine inspection program reveals any areas of unacceptable levels of final cover system settlement, subsidence, erosion, soil sloughing, animal or vehicular disturbance, or other damage, the areas will be repaired to maintain the integrity and effectiveness of the system. Any identified areas of water ponding on the final cover system will likewise be repaired. If an alternative final cover system using ClosureTurf® is used, maintenance and repairs will be performed in accordance with the manufacturer's design and installation manuals. Should an unlikely puncture to the ClosureTurf® cover

system be found, it will be repaired by individuals trained in the repair of geosynthetics within 60-days of discovery.

4.7 VEGETATION

Routine inspections will include checking the condition of vegetation on the final cover system of the Consolidation Area and adjacent features of the closed AP-1 area. Any locations found to lack proper vegetation will be evaluated to determine the problem, then appropriate actions will be taken to address the problem and revegetate and maintain the area. Revegetation and fertilization will be performed as described in Section 7 (Closure Plan) of Part A in this permit application.

Vegetation will be mowed at least twice a year to maintain its health and vegetation, avoid die-out due to shading, eliminate woody-stemmed vegetation, and provide adequate visibility for Site inspections.

4.8 SURFACE WATER MANAGEMENT SYSTEM

The surface water management system is composed of the drainage conveyances located on the final cover system (top deck, benches, and downchutes), as well as the adjacent perimeter channels and features that route surface water away from the Consolidation Area, over the containment structure, and into the Closure-by-Removal Area.

Inspection and maintenance will be performed in accordance with the recommendations contained in the *Best Management Practice Operations & Maintenance Guidance Document*, Appendix E of the *Georgia Stormwater Manual*, Volume 2, 2016 Edition. Inspection and maintenance practices will include (i) removing built up sediment, debris, and trash; (ii) removing debris from the inflow and outflow structures; (iii) improving erosion and sediment control practices where the stabilization is missing or in poor condition; and (iv) inspecting the structural integrity and functionality of the surface water management system components.

During periods when vegetation may not be fully established (e.g., just after completion of closure or just after performing PCCP construction or maintenance activities), temporary erosion and sediment control best management practices (BMPs) will be installed in accordance with recommendations provided in the Georgia Soil and Water Conservation Commission's (GSWCC) *Manual for Erosion and Sediment Control in Georgia*. These temporary BMPs will be maintained until the disturbed areas are stabilized.

4.9 GROUNDWATER MONITORING SYSTEM

As required by GA EPD Rule 391-3-4.10(6) and 40 CFR §257.90(c), groundwater monitoring, sampling, and corrective action (if applicable) will be conducted throughout the PCCP in accordance with the facility Groundwater Monitoring Plan. In accordance to groundwater monitoring and sampling, groundwater monitoring system components,

(including wells, well risers, well pads and seals, casings, caps, locks, and bollards) will be routinely inspected, maintained, and repaired or replaced, as necessary.

5. RESPONSIBLE PERSON

The GPC person or office to contact about the facility during the PCCP is provided below:

Contact: General Manager

Georgia Power Environmental Affairs
Address: 241 Ralph McGill Boulevard NE
Atlanta, Georgia 30308

Phone Number: 404-506-6505

Email Address: gpcenv@southernco.com

6. SITE EQUIPMENT

GPC or its designated contractor will make adequate equipment available (either its own equipment or rental equipment) to execute the post-closure care requirements correctly and efficiently.

7. POST-CLOSURE CARE COST ESTIMATE

Estimates for the cost of post-closure will be provided under separate cover per discussions with GA EPD on May 30, 2019. A narrative has been added to note the acreage the estimate is based on, the year in which estimates were completed, and that costs will be adjusted annually for inflation.

8. NOTIFICATION OF MONITORING STANDARDS EXCEEDED

GPC will be responsible for conducting monitoring activities. If at any time, the monitoring results indicate the exceedance of established standards or a threat to human health or the environment, GPC will promptly notify GA EPD in accordance with the requirements of State CCR Rule 391-3-4-.10(6).

9. NOTIFICATION OF COMPLETION OF POST-CLOSURE CARE PERIOD

No later than 60 days following the completion of the PCCP, GPC will prepare a notification verifying that post-closure care has been completed. The notification will include a certification by a qualified P.E. verifying that post-closure care has been completed in accordance with this Post-Closure Plan. GPC will complete the post-closure process by (i) placing the notification in the facility's operating record, as required by Rule 391-3-4-.10(8) [40 CFR §257.105(i)(13)]; and (ii) providing the notification to the Director of GA EPD. Release of the closed AP-1 from continuing post-closure care requirements will be provided by GA EPD based on the adequacy of the notification.

10. RECORDKEEPING/NOTIFICATION/INTERNET REQUIREMENTS

During post-closure care, recordkeeping, notifications, and internet postings will be performed as required by the following sections of GA EPD Rule 391-3-4-.10(7) and 40 CFR §257:

- Recordkeeping in accordance with Rule 391-3-4-.10(8) [40 CFR §257.105(i)];
- Closure notifications in accordance with Rule 391-3-4-.10(8) [40 CFR §257.106(i)]; and
- Closure internet posting requirements in accordance with Rule 391-3-4-.10(8) [40 CFR 257.107(i)].