

CLOSURE PLAN

PLANT SCHERER - ASH POND 1 (AP-1)
MONROE COUNTY, GEORGIA

FOR



Georgia
Power

November 2018



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Figure B: Planned Plant Scherer Ash Pond 1 (AP-1) Closure Approach/Design..... 2-4

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ACRONYMS AND ABBEVIATIONS

AP-1	Plant Scherer Ash Pond 1
CCR	Coal Combustion Residuals
CFR	Code of Federal Regulations
CQA	Construction Quality Assurance
EPA	Environmental Protection Agency
E&SC	Erosion and Sediment Control
GA	Georgia
GAEPD	Georgia Environmental Protection Division
Georgia Power	Georgia Power Company
GSWCC	Georgia Soil and Water Conservation Commission
NPDES	National Pollutant Discharge Elimination System
USEPA	United States Environmental Protection Agency
WWTS	Waste Water Treatment System

Note : Acronyms and abbreviations not included in the table are defined in the text the first time used.

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1 GENERAL

Georgia Power Company (Georgia Power) will close the Plant Scherer Ash Pond 1 (AP-1) in accordance with the closure requirements specified in Georgia Environmental Protection Division (GAEPD) Coal Combustion Residual (CCR) Rule (391-3-4-.10) and US Environmental Protection Agency CCR Rule (40 CFR 257.102).

1.1 Site Background

Plant Scherer (Plant) is located in Juliette, Georgia, situated at the northeast edge of Monroe County and approximately 30 miles north of Macon and 60 miles southeast of Atlanta. The Plant is located in a fairly rural area and bordered by mainly agricultural and residential properties. The Plant occupies approximately 12,000 acres and is situated on the north banks of the 3,600-acre Lake Juliette, a manmade lake constructed in conjunction with the Plant in the early 1980s. The four coal-fired units at Plant Scherer are capable of producing approximately 3,600 megawatts of electricity.

The four coal-fired units at Plant Scherer include flue gas desulfurization (FGD) equipment ("scrubbers"), selective catalytic reduction systems (SCRs), and baghouses. Coal Combustion Residuals, or CCRs (bottom and fly ash) and other process water generated by the plant are stored in a 550-acre surface impoundment situated on-site, northwest of the main plant. The present inventory of CCR in AP-1 is approximately 16 million cubic yards.

AP-1 was commissioned in 1980 and has been in operation since the plant became commercially operational in 1982. AP-1 has two discharge structures; one is a "morning-glory" standpipe that serves as the principal spillway that normally passes decanted flows to the settling pond (referred herein as the recycle pond), and a second emergency spillway that also discharges to the recycle pond during elevated (storm related) pool levels. AP-1 is operated in conjunction and in series with the recycle pond in a water recirculating mode in which clarified effluent from the AP-1 discharges by gravity to the recycle pond, which then serves as the source of water used by the plant for operations. The recycling pond has a permitted emergency overflow discharge (Outfall 07) to Lake Juliette under the plant's NPDES permit GAD00612796.

The AP-1 perimeter embankment functions as a cross-valley dam. This embankment dike includes a continuous embankment situated on the north and east sides of AP-1 and the AP-1 south dike, situated on the south side of AP-1 and bordering Plant Scherer. The AP-1 dike has a maximum height of approximately 100 feet and the AP-1 southern dike has a maximum height of approximately 30 feet. The minimum crest elevation of the embankment dike is El. 504.1 ft, and the upstream slopes are covered with a grout-filled erosion protection blanket that spans from El. 485 feet to the crest. The crest of the dike is surfaced with grass and a gravel access drive. Downstream slopes are covered with grass, and both upstream and downstream slopes are at a 3H:1V (horizontal to vertical) orientation. The AP-1 dike is regulated by the Georgia Department of Natural Resources Safe Dams Program, and is categorized as "Category 1 High Hazard", with an assigned State ID 102-032-04236.

1.2 Notification

No later than the date Georgia Power initiates closure of AP-1, Georgia Power will notify the GAEPD of the intent to close the unit, providing the date of final CCR receipt. Closure activities will commence no later than 30 days after the known final receipt of waste, either CCR or any CCR waste stream, or Permit approval from GAEPD. Georgia Power will complete all closure activities for AP-1 in accordance with this Closure Plan within the timeframe allowed by 391-3-4-.10 and 40 CFR §257.102(f), as approved by GAEPD.

This notification shall include the certification by a professional engineer registered in the State of Georgia for the design of the final cover system as required in 391-3-4-.10 and 40 CFR 257.102(d)(3)(iii).

Concurrent with the submission of this closure report to the Director, Georgia Power will submit confirmation to the GAEPD Director that a notation on the property deed, inclusive of the AP-1 permit boundary, has been recorded. This recording must in perpetuity notify any potential purchaser of the property that the land has been used as a CCR surface impoundment and that its use is restricted under the post closure care requirements of Georgia Rules of Solid Waste Management 391-3-4.10. Within 30 days of completing this deed notification, Georgia Power will prepare a notification and place it in the facility's Operating Record.

1.3 Boundary Survey and Legal Description

In accordance with State CCR Rule 391-3-4-.10(9)(b)(3), a sealed boundary survey and legal description of the proposed CCR permit boundary are provided in the permit drawings, titled "Property Boundary Survey". The total area bounded by the proposed CCR permit boundary is approximately 793.92 acres.

2 CLOSURE PLAN

This Closure Plan has been prepared for Georgia Power's AP-1, which is located at Plant Scherer in Monroe County, Georgia. This Closure Plan was prepared in accordance with 391-3-4-.10 and 40 CFR 257.102.

AP-1 will be closed by consolidating the CCR within the 550 acre impoundment to a smaller footprint in accordance with 391-3-4-.10 and 40 CFR 257.102(b)(1)(iii). The proposed closure footprint will consist of two primary regions within the existing AP-1 footprint in the remaining area; a closure-by-removal area located to the north, and the consolidated closure-in-place footprint. The two proposed closure areas will be separated by a new northern embankment berm (referenced herein as the north berm) that will buttress the consolidated CCR materials within the consolidated closure-in-place footprint and form the limit of the final cover. AP-1 will be closed by consolidating the CCR within the exiting 550 acre impoundment area to a smaller 330 acre footprint. The reduced footprint will then be closed-in-place. Figure A below illustrates the proposed closure plan for AP-1.

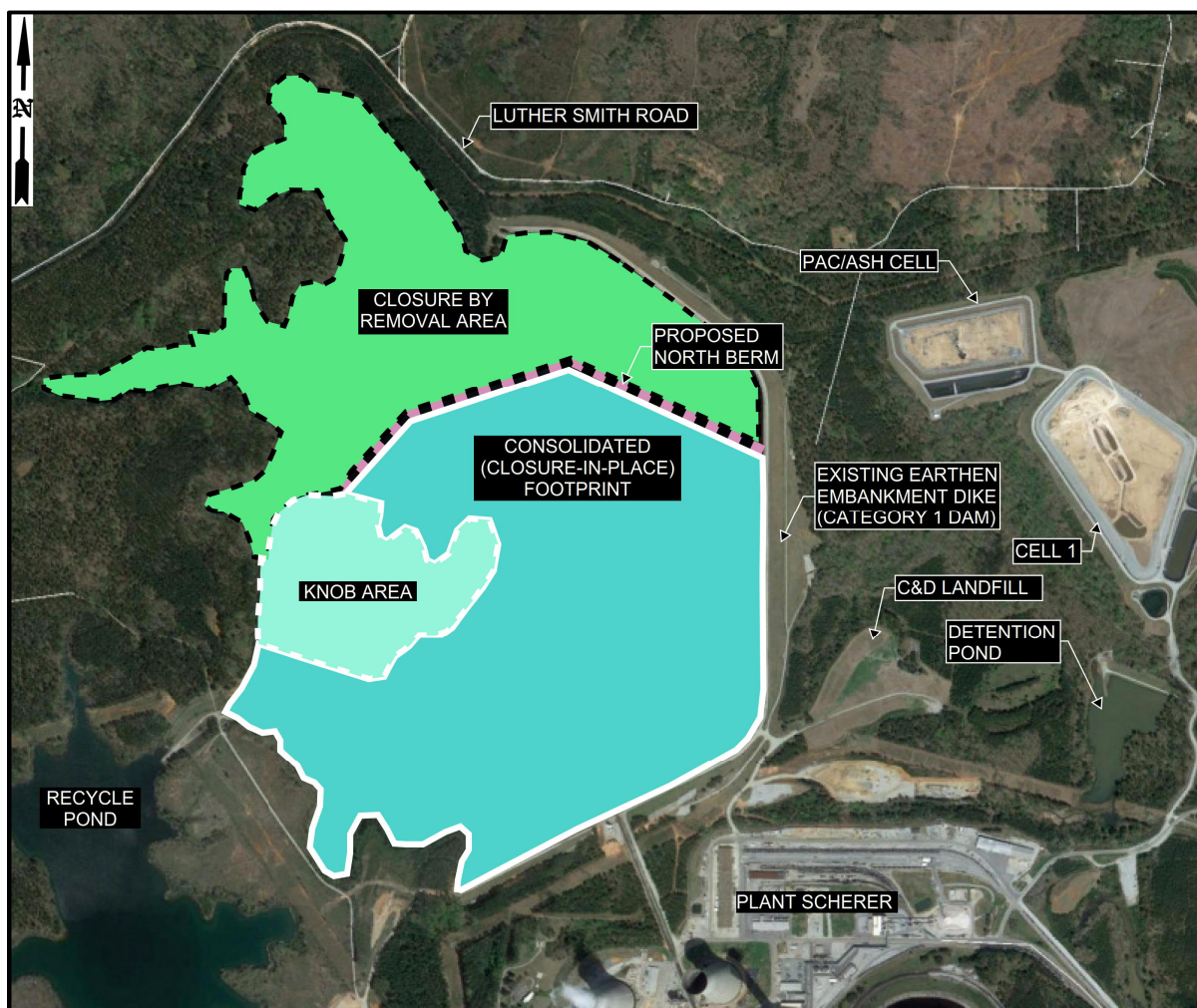


Figure A: AP-1 Closure Plan

2.1 Closure Configuration and Components

The proposed AP-1 closure consists of the following main elements as it pertains to geometry and supporting features:

- AP-1's CCR closure footprint surface will be graded into a ridge and valley "herringbone" design to minimize the quantity of additional fill required to establish suitable final cover grades.
- CCR will be graded to promote positive drainage to the final cover system stormwater feature drainage swales and perimeter ditches. The stormwater drainage swales and ditches will flow and discharge to outlet structures that will convey post-closure surface water runoff from the final cover partly west to the recycle pond and partly east to Berry Creek. In general, the western portion of the consolidated closure footprint has been designed to flow west to the recycle pond, and the eastern and northern portions of the consolidated closure footprint have been designed to flow east to Berry Creek.
- Conveyance of post-closure stormwater flows west to the recycle pond will require modifying the existing "morning glory" principal spillway structure situated at the southwest corner of AP-1.
- Conveyance of post-closure stormwater flows east to Berry Creek will be accomplished by a letdown structure that has been designed into the consolidated closure-in-place cap system to convey flows down a section of the north berm into a planned detention basin. The detention basin will include a stilling basin at the letdown discharge and a primary spillway outlet structure that will discharge into a new outlet channel that has been designed to flow into Berry Creek just east of AP-1.
- The 50-acre high topographic region located adjacent to AP-1, referred to as the knob area, is located outside of the AP-1 limits and does not contain CCR. The knob area will be covered with a low-permeable cover system (either a soil or geosynthetics cover, or a combination of both) that will facilitate a transition from the consolidated closure-in-place footprint final cover system to the knob area cover system. Since the knob area does not contain CCR, it is not subject to closure restrictions.
- Removal of free water from AP-1 will be necessary to perform the closure-by-removal of the north area and also to complete the planned earthwork activities within the consolidated closure-in-place footprint.
- The existing AP-1 CCR delta has scattered high and low spots that will require earthwork and regrading activities to achieve the proposed consolidated closure-in-place footprint final cover grades. Maximum fills (as great as 50 feet) are expected beyond (north of) the existing CCR delta where the north berm will be constructed. Cuts in the CCR delta that extend below the normal pool level of AP-1 (El. 494.5 NAVD88) will require CCR dewatering methods to achieve the proposed final cover grades. Dewatering will be performed in compliance with a dewatering plan approved by the GAEPD Watershed Protection Branch.

**Plant Scherer – Ash Pond 1 (AP-1) Closure
Closure Plan**

- Establishing the north closure-by-removal area will require excavation and removal of CCR within this 200-acre section of AP-1 and relocating the excavated materials south to inside the consolidated closure-in-place footprint. Based on 2016 borings completed in the free water portion of AP-1 by AECOM, thin (<1 foot) deposits of CCR are expected across most of the planned closure-by-removal area. Once CCR is removed from the closure-by-removal area, the remaining subgrade will be graded to sheet flow post-closure stormwater flows south and east to Berry Creek.
- The planned new north berm will be an earthen embankment constructed out of local site soils and founded on the native residual foundation or nearby soils in-place currently beneath AP-1. The embankment will include a drivable access road constructed along its finished crest. The north berm crest elevation will vary along its alignment, but will generally follow the proposed grading of the consolidated final cover grades and contours, and the final cover system stormwater conveyances, with the lowest elevation at the letdown structure planned for the southeast corner of the consolidated closure-in-place footprint. The high section of the new north berm will be at its planned intersection with the existing east AP-1 dike and at the opposite (west) end where the berm will tie-in with the sideslopes of the knob area.

Figure B below shows the planned AP-1 closure approach/design, with each of the above key features indicated on the figure along with the design final cover system grades.

Plant Scherer – Ash Pond 1 (AP-1) Closure
Closure Plan

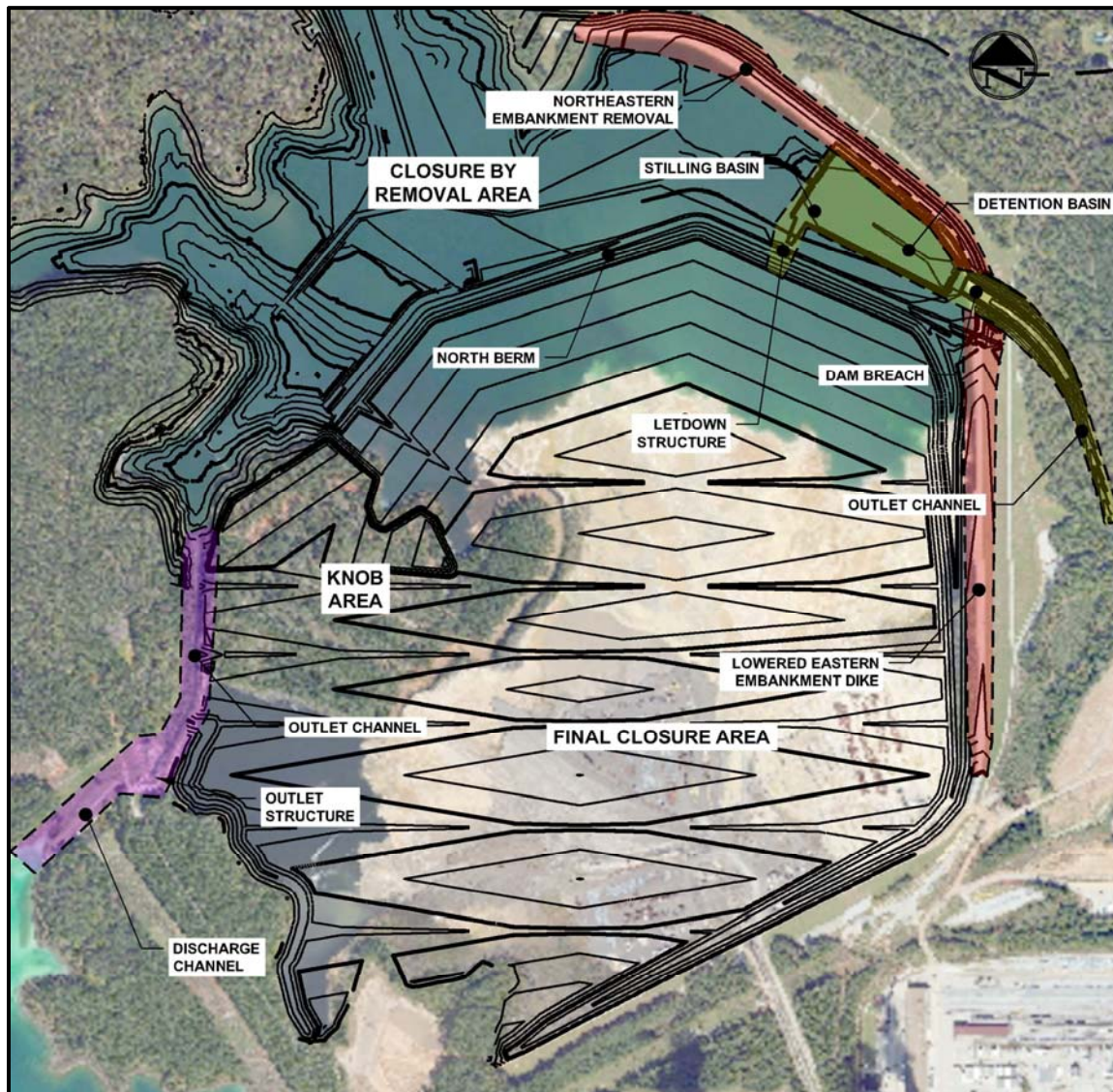


Figure B: Planned Plant Scherer Ash Pond 1 (AP-1) Closure Approach/Design

2.2 Conceptual Closure Sequence

Based on the proposed components associated with implementing the AP-1 closure activities, a conceptual closure sequence is provided below and is shown on the Permit Drawings (Sheets 18 and 19).

- **Stage 1:** This stage includes implementing initial construction activities such as contractor mobilization, initiating closure of AP-1, installation of initial erosion and sediment controls, construction of an onsite treatment facility, clearing and grubbing, diversion of stormwater run-on, and the commencement of dewatering of CCR and free water removal.

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- **Stage 2:** This stage is a continuation of Stage 1 as described above but includes the initial CCR removal process within the closure-by-removal area and the commencement of grading activities within the knob area and the final cover subgrade within the consolidated closure-in-place footprint.
- **Stage 3:** At this stage of closure activities, all free water within AP-1 is removed and the CCR materials within the closure-by-removal area are completely removed. This stage also includes the initial construction activities associated with the north berm construction and the spillway modifications to the western drainage outlet to the recycle pond. A temporary letdown to Berry Creek is also constructed at this stage for stormwater management of non-contact run-off management.
- **Stage 4:** This stage is a continuation of the previous stages by continuing the knob area grading activities and continuing grading and closure activities within the consolidated closure-in-place footprint. At this stage, a portion of the consolidated closure-in-place footprint is under the final cover system and the north berm is completed. Additional stormwater management features associated with post-closure conditions such as the detention basin and outlet channel to Berry Creek will be completed. The AP-1 dike will not be breached at this stage.
- **Stages 5 and 6:** These two stages show the increment process of grading to prepare the final cover within the consolidated closure-in-place footprint and also the progression of the final cover system construction. At Stage 6, the final cover system is completely constructed.
- **Stage 7:** At this stage, the AP-1 dike will be breached to allow stormwater flows from the closure-by-removal area and the final cover area to pass to Berry Creek. Prior to breaching the AP-1 dike, Georgia Power will seek authorization from the Georgia Safe Dams Program to breach the dam in compliance with the Safe Dams rules. Modifications to the AP-1 dike will be performed in accordance with the Georgia Safe Dams rules (Chapter 391-3-8). This stage also includes grading activities associated with removing the northern portion of the AP-1 dike perimeter embankment (north of the dike breach) and the lowering of the eastern portion of the AP-1 dike. Earthwork associated with promoting surface water drainage in the north area towards Berry Creek will be performed during this stage. The dike breach will not be implemented until after acquiring approval from the Georgia Safe Dams Program and until the AP-1 closure has been completed in full in accordance with the closure drawings.
- **Stage 8:** Construction activities cease and closure of AP-1 is complete. The GAEPD director is notified of closure completion and a site inspection and walkover is performed. Post-closure care period commences.

2.3 Directional Informational Signs

Signs shall be posted at the entrance gate and access gates that will notify users of the CCR surface impoundment closure. A telephone number for emergencies shall be printed on the sign.

2.4 Fugitive Dust Control Plan

This section identifies fugitive dust and describes the CCR fugitive dust control measures that Georgia Power will use to minimize CCR from becoming airborne at the facility, including CCR fugitive dust originating from AP-1, roads, and material handling activities. GAEPD State CCR Rule 391-3-4-.10(2)(a) (incorporating 40 CFR § 257.53 by reference) defines “fugitive dust” as “solid airborne particulate matter that contains or is derived from CCR, emitted from any source other than through a stack, or chimney.” Fugitive dust originating from AP-1 and the closure activities will be controlled using water suppression or polymer tackifiers.

The fugitive dust control measures identified and described in this plan were adopted and implemented based upon an evaluation of site-specific conditions and are determined to be applicable and appropriate for the Plant Scherer AP-1 closure. Evaluation included assessing the effectiveness of the fugitive dust control measures for the facility, taking into consideration various factors such as site conditions, weather conditions, and operating conditions.

CCR that is transported via truck to stockpiling prior to final placement will be conditioned to appropriate moisture content to reduce the potential for fugitive dust. Water suppression or polymer tackifiers will be used as needed to control fugitive dust on facility roads used to transport CCR and other CCR management areas. Speed limits will be utilized to reduce the potential for fugitive dust. Trucks used to transport CCR will be filled to or under capacity to reduce the potential for material spillage.

Georgia Power and construction personnel will assess the effectiveness of the control measures by performing visual observations of AP-1 and surrounding areas and implementing appropriate corrective actions for fugitive dust, as necessary. Logs will be used to record the utilization of water-spray equipment.

Any complaint received from a citizen regarding a CCR fugitive dust event at the facility will be documented and investigated. Appropriate steps will be taken, including any corrective action, if needed.

2.5 Inspections

Surface impoundment inspection during closure will continue to be performed as set forth in 391-3-4-.10(5)(iii) and 40 CFR §257.83 until AP-1 closure activities has been completed.

7-day Inspections

Georgia Power currently inspects AP-1 and discharge of all hydraulic structure outlets at intervals not exceeding seven (7) days. The 7-day inspections are made by a Qualified Person and include observation and documentation of any appearance of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the closure activities or the safety of the surface impoundment.

Annual Inspections

As required by Chapter 391-3-4-.10(5)(b), which incorporates the operating criteria listed in 40 CFR 257.83, a Professional Engineer registered in Georgia inspects AP-1 on an annual basis. The inspection includes observation and documentation of any appearance of actual or potential structural weakness and other conditions which are disrupting or have the potential to disrupt the operation or safety of the facility. Additionally, the annual inspection includes a review of the weekly inspection results and available information regarding the status and condition of AP-1. The results of the annual inspection, including noted impounded water volume and depth, are presented in a report that is placed in the facility's operating record and as well as on the Georgia Power website under Environmental Compliance.

If a potential deficiency or release is identified during an inspection, GPC will remedy the deficiency as soon as feasible. If needed, GPC will activate the Emergency Action Plan and follow the appropriate procedures outlined in that Plan. GPC will prepare documentation detailing the corrective measures taken and place it in the facility's operating record at a minimum.

2.6 Organic Materials Management

AP-1 and the adjacent knob area contains a variety of vegetation from trees and underbrush to non-woody plants. Woody vegetation will be removed prior to initiating grading and earthwork activities. Vegetation and wood waste will be managed in the following manner:

1. Trees and logs may be harvested or stockpiled for mulching prior to off-site disposal, chipped for use on-site as a best management practice (BMP) measure, burned through approved methods, or disposed of at a permitted landfill.
2. Large bushes may be stockpiled for mulching prior to disposal, burned through approved methods, or disposed of at a permitted landfill.
3. Stumps and tree roots may be stockpiled for mulching prior to disposal, chipped for use on-site as a BMP measure, burned through approved methods, or disposed of at a permitted landfill.
4. Grass and brush may be stockpiled for mulching prior to disposal, or disposed of at a permitted landfill.

Remaining wood waste from work within AP-1 will be kept separate from surface-cut wood waste. Wood waste that contains CCR will be managed within AP-1 limits in the following manner:

1. Stumps and tree roots may be mechanically screened to remove CCR, stockpiled for mulching prior to disposal, burned through approved methods, or disposed of at a permitted landfill.
2. Grass and bushes may be mechanically screened to remove CCR, stockpiled for mulching prior to disposal, or disposed of at a permitted landfill.

2.7 Pond Dewatering Process

Dewatering will include removing CCR contact water and legacy wastewater using a variety of methods, including but not limited to passive, gravity-based methods (e.g. rim ditches) and/or active dewatering methods (e.g. pumps and well points) as needed to allow for CCR excavation and transportation. CCR contact water and legacy wastewater from AP-1 will be further treated by an on-site wastewater treatment system (WWTS). Water will be managed and discharged in accordance with the site's approved NPDES Wastewater Discharge Permit.

Prior to beginning the AP-1 dewatering process, a detailed Ash Pond Dewatering Plan ("Dewatering Plan") will be prepared and submitted to GAEPD's Watershed Protection Branch for review and approval. This plan will describe specific treatment processes, monitoring frequency, any planned chemical usage, and best management practices necessary to comply with the NPDES permit limits.

2.8 Stormwater and Contact Water Management

During CCR removal, run-on stormwater and run-off contact water (e.g. stormwater that has come into contact with CCR) will be contained within the AP-1 limits and controlled with best management practices such as channels, diversion berms, and pumps and managed in accordance with the NPDES Construction Storm Water, Industrial Storm Water and Industrial Wastewater Discharge permit(s). Georgia Power will prepare a phased erosion and sediment control plan that will be followed for closure construction activities, as needed.

Stormwater and contact water will be segregated and managed using dikes, berms, and pumping, as the discharge strategy for each source of water differs. Contact water will be contained within the AP-1 limits and pumped and treated at the on-site WWTS prior to discharge. Contact water will be prevented from ponding as much as practicable to facilitate CCR removal. Stormwater does not require treatment by the WWTS and may be discharged directly to receiving water bodies after conveyance through erosion and sediment controls.

Stormwater, or non-contact water runoff will be routed around the CCR excavation and be conveyed (e.g. via pumps or gravity flows) to the existing surface water management system (ditches, channels and drop inlets) until the CCR is removed and AP-1 dike is breached. Temporary berms, diversion ditches, or rain tarps will be utilized between the final restoration areas (e.g., areas with CCR and 6" subgrade soil excavated and/or with restoration grades completed) and active excavation areas to reduce potential for generating contact water.

2.9 NPDES Industrial Wastewater Discharge Permit

Wastewater discharges from Plant Scherer are currently regulated under NPDES Permit No. GA0035564, which defines acceptable discharge limits to Berry Creek, Lake Juliette (via Rum Creek), and Ocmulgee River (Ocmulgee River Basin). The permit includes Plant Final discharge to the Ocmulgee River, combined outfall discharges, cooling tower blowdown for Units 1 through 4 and basin drains, wastewater basins, detention pond (I-Pond) discharges to Berry Creek, and NPDES basin

emergency overflow, emergency overflows from the recycle pond to Lake Juliette, and service water flows to Lake Juliette. The permit establishes effluent limitations and monitoring requirements, which Georgia Power will follow for discharges from the WWTS in accordance with the GAEPD-approved Georgia Power Plant Scherer, NPDES Permit.

2.10 Wastewater Management

An on-site WWTS will treat contact water generated during AP-1 closure activities. Georgia Power will treat the wastewater to meet the NPDES permit effluent discharge requirements. Treatment methods may include physical, chemical, and/or biological processes. The WWTS will not be decommissioned until AP-1 closure is complete and water treatment is no longer needed at the Site.

2.11 Removal of CCR

"CCR removal" refers to the process of verifying and documenting that the CCR has been removed from AP-1. AP-1 is known to contain a mixture of fly ash and bottom ash collectively referred to as CCR. The CCR removal verification is based on removing visible CCR and a minimum of six additional inches of native soil. The documentation of this procedure is presented in Section 2 of the companion Construction Quality Assurance (CQA) Plan.

The closure-by-removal area located in the northern portion of AP-1 will have CCR materials removed and placed within the consolidated closure-in-place footprint. This corresponds to approximately 200 acres of closure-by-removal area that will be free of CCR after closure has been completed.

2.12 Final Cover

Upon closure, all CCR in the surface impoundment will be spread, compacted, and capped with the final cover system of the consolidated closure-in-place footprint of AP-1 as described in this permit application. Final cover soil shall be secured from on-site borrow areas, stockpiles, or other Georgia Power approved borrow source areas as necessary and will be limited to the area of the consolidated closure-in-place footprint. As required by 391-3-4-.10 and 40 CFR 257.102(d)(3)(i), the final cover system will be constructed to meet the criteria in paragraphs (d)(3)(i)(A) through (D).

The final cap system will meet the following standards:

- A. Control, minimize or eliminate, to the maximum extent feasible, post-closure infiltration of liquids into the waste and releases of CCR, leachate, or contaminated run-off to the ground or surface waters or to the atmosphere;
- B. Preclude the probability of future impoundment of water, sediment, or slurry;
- C. Include measures that provide for major slope stability to prevent the sloughing or movement of the final cover system during the closure and post-closure care period;
- D. Minimize the need for further maintenance of the CCR unit; and

Plant Scherer – Ash Pond 1 (AP-1) Closure Closure Plan

- E. Be completed in the shortest amount of time consistent with recognized and generally accepted good engineering practices.

Disruption of the integrity of the final cover system will be minimized through a design that accommodates settling and subsidence.

Figure C below illustrates the proposed Final Cover detail for AP-1.

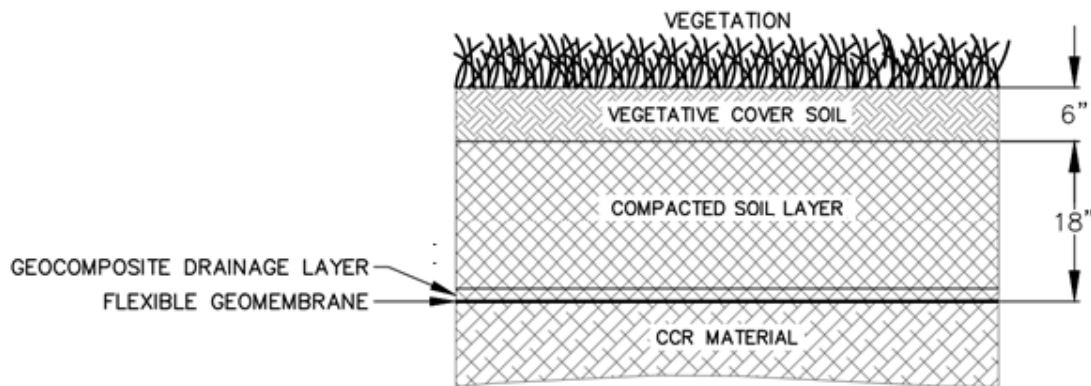


Figure C: AP-1 Final Cover Detail

Georgia Power may elect to utilize an engineered turf system as an alternative cover system. The engineered turf system will be designed and constructed to meet or exceed the requirements specified by the 40 CFR 257.102(d)(3)(i).

2.13 Restoration and Vegetation Plan

The conventional soil and geosynthetic final cover system contain two layers of soil: (i) a protective soil layer (bottom); and (ii) a vegetative cover layer (top). The vegetative cover layer serves as the erosion control layer and is designed to promote vegetative growth while limiting wind and water erosion. To promote growth of vegetation, the vegetative layer of the final cover system and the soil ground surface of disturbed project areas will be seeded, limed, and fertilized within two weeks of the layer's installation. The types of vegetation to be seeded, the applicable planting dates, and the associated seed and fertilizer specifications, application rates, and application methods will comply with the Disturbed Area Stabilization (With Permanent Vegetation) details in the Closure Drawings. The source of these details is the Georgia Water Soil Conservation Commission (GWSCC).

During temporary lapses in construction activity, temporary stabilization measures will be installed on exposed areas within 14 days of disturbance and in accordance with the Disturbed Area Stabilization (With Mulching Only) or Disturbed Area Stabilization (With Temporary Seeding) details in the Closure Drawings. These details are also from GWSCC.

For the alternative final cover system (ClosureTurf®), the system is composed of a geomembrane overlain by an engineered synthetic turf and sand infill material. Vegetation will not be required for areas final covered with ClosureTurf®.

2.14 Site Equipment Needed

Equipment will be provided by the contractor(s) performing specified closure activities. Georgia Power will make adequate equipment available to ensure that closure requirements are executed correctly and efficiently, if specified by Georgia Power. Should said equipment not be available, back up equipment may be obtained from rental companies.

2.15 Sediment Removal

Accumulated sediment will be removed from site stormwater conveyance features such as diversion ditches, channels, letdown channels, swales, basins, and other drainage structures. Accumulated sediment during the closure activities will be disposed of within the AP-1 consolidated closure-in-place footprint or in a permitted off-site landfill.

2.16 Erosion and Sedimentation Control

Upon closure, all ditches, diversion berms, culverts, riprap, and other drainage structures serving disturbed areas, but not already built, will be constructed and placed according to the activities associated with the AP-1 closure.

Temporary and permanent seeding of the exposed final cover system will occur as soon as practicable. Temporary best management practices over disturbed areas of the Site will be used prior to final grading or in a season not suitable for planting the desired species of grasses, as prescribed in the most recent edition of the Manual of Erosion and Sediment Control in Georgia.

Permanent seeding will occur prior to the completion of closure activities. Permanent vegetation will be established and maintained to provide long-term erosion control and prevent sediment from leaving the Site. Preparation of a vegetative cover shall include seeding, mulching, and any necessary fertilization at a minimum, and may include additional activities such as sodding of steeper slopes and drainage ways if necessary. Application rates for seeding and fertilizing of vegetation will be adjusted appropriately. Temporary erosion control blankets may be used if necessary to provide seedbed protection and prevent wash-out of seed and fertilizer during vegetation establishment. No deep rooted vegetation capable of growth below the 6-inch erosion layer shall be used.

2.17 Closure Drawings

Permit drawings, titled "Plant Scherer CCR Closure Permit Drawings" have been prepared depicting existing and final conditions associated with the AP-1 closure construction. The Existing Site Conditions drawing (Sheet 4) shows the current topography and site features, and the Groundwater Monitoring Locations (Sheet 5) shows the existing groundwater monitoring well locations. The proposed closure-by-removal area anticipated CCR excavation plan (Sheet 7) and north berm construction plan (Sheet 9) portrays interim conditions showing the expected CCR excavation grades and separation north berm to be constructed as part of the closure. The north closure-by-removal area grading plan (Sheet 12), final cover grading plans (Sheet 13 and 14), and southwest outlet channel plan

(Sheet 17) show the proposed post-closure conditions of AP-1. The drawings also identify select infrastructure remaining or to be demolished at the interim and final conditions.

2.18 Cost of Closure and Financial Assurance

In compliance with applicable securities laws and regulations, Georgia Power will provide specific cost estimates for closure and post-closure care during the permit application review process as estimates are developed and finalized. It is anticipated these estimates will be available to GAEPD in the first half of 2019. Georgia Power will provide a demonstration of financial assurance upon approval of closure and post-closure care cost estimates by GAEPD.

2.19 Closure Schedule

Once AP-1 closure construction activities have been initiated by Georgia Power, it is estimated that the activities to satisfy the applicable regulatory closure criteria will have an approximate 10 year duration. Closure will be conducted in phases as discussed previously, but it should be recognized that not all activities on the closure schedule will occur on a continuous basis throughout their scheduled durations, consistent with the previously-described sequence of closure steps. A list of closure activities/milestones and schedule with estimated approximate timeframes is provided below. The closure schedule and milestones are based on estimates of the approximate timeframes to implement each specific closure activity.

- A. Notify the GAEPD of final closure within 30 days of final receipt of waste, CCR and non-CCR waste stream.
- B. Remove CCR contact water and legacy wastewater.
- C. Excavate CCR from closure-by-removal areas.
- D. Place, grade and compact CCR within consolidated closure-in-place footprint
- E. Complete final grading and install final cover system.
- F. Initiate vegetative plan.
- G. Prepare accurate boundary survey and legal description of final CCR management boundary.
- H. Provide the Closure Construction Report to the GAEPD Director. The report shall be prepared by a professional engineer registered in the State of Georgia. Concurrent with the submission of this closure construction report, Georgia Power will submit confirmation to the GAEPD Director that a notation on the property deed, inclusive of the AP-1 permit boundary, has been recorded.
- I. Submit to the Director of GAEPD confirmation that the information required in closure schedule Item K above has been notified on the property deed.

2.20 Recordkeeping/Notification/Internet Requirements

Georgia Power will comply with all recordkeeping requirements of 391-3-4-.10(8) and 40 CFR 257.105(i), closure notification requirements specified in 391-3-4-.10(8) and 40 CFR 257.106(i) and closure internet requirements in 391-3-4-.10(8) and 40 CFR 257.107(i).

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3 REFERENCES

Georgia Power Company 2016a, Initial Written Closure Plan for a CCR Surface Impoundment or Landfill, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016b, History of Construction, Plant Scherer Ash Pond (AP-1)

Georgia Power Company 2016c, Initial Hazard Potential Classification Assessment, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016d, Initial Inflow Design Flood Control System Plan, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016e, Liner Design Criteria, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016f, Initial Post-Closure Care Plan, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016g, Initial Safety Factor Assessment, Plant Scherer Ash Pond (AP-1), October 17, 2016.

Georgia Power Company 2016h, Initial Structural Stability Assessment, Plant Scherer Ash Pond (AP-1), October 17, 2016.

GDNR 2006. Plant Scherer NPDES Permit No. GA0035564, Georgia Department of Natural Resources, Environmental Protection Division. November 29, 2006.

Golder Associates (2018). Geologic and Hydrogeologic Summary Report, Plant Scherer Ash Pond 1. November, 2018.

Golder Associates, 2018. Groundwater Monitoring Plan, Plant Scherer Ash Pond 1. November 2018.

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