# PLANT McDONOUGH-ATKINSON CCR SURFACE IMPOUNDMENTS (CCR UNIT AP-2, COMBINED CCR UNIT AP-3/4) COBB COUNTY, GEORGIA PART A SECTION 8 – POST CLOSURE CARE PLAN

**FOR** 



Revision 01 - November 2020

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# **Table of Contents**

1.0	INTRODUCTION		
2.0	POST CLOSURE PLAN		
	2.1	Facility Contact Information	
	2.2	Post Closure Property Care	
	2.3	Monitoring and Maintenance Activities	1
	2.3.1	Cover System Inspections	1
	2.3.2	Groundwater Monitoring System	2
	2.3.3	AP-2 and AP-3/4 Maintenance	2
	2.4	Planned Use of Property	3
	2.5	Post Closure Operations	4
3.0	POST-	-CLOSURE CARE PERIOD	4
	3.1	Recordkeeping	5
4.0	FINANCIAL ASSURANCE		



#### 1.0 INTRODUCTION

This Post-Closure Care Plan for Georgia Power's Plant McDonough AP-2 and AP-3/4 was prepared in accordance with the State of Georgia Solid Waste Management Rule 391-3-4-.10(9)(c)(5)(v) as well as 40 CFR Part §257, Subpart D and meets the requirements of 40 CFR §257.104.

AP-2 has undergone CCR removal in accordance with §257.102(c). AP-3 and the adjacent AP-4 are currently being consolidated and closed in place as Combined Unit AP-3/4 in accordance with §257.102(c) and §257.102(d), and no longer receive CCR. This plan will be used to guide the post-closure care for the closed AP-2 and Combined AP-3/4 Units.

#### 2.0 POST CLOSURE PLAN

# 2.1 Facility Contact Information

During the post-closure care period, the following person(s) or office can be contacted about the facility:

Georgia Power Company General Manager, Environmental Affairs 241 Ralph McGill Boulevard Atlanta, GA 30308 404-506-6505

# 2.2 Post Closure Property Care

The owner/operator shall complete post closure care for the CCR unit which shall consist of at least:

- 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; and
- Maintaining the groundwater monitoring system and monitoring the groundwater in accordance with the requirements of 40 CFR §257.90 through 40 CFR §257.98.

# 2.3 Monitoring and Maintenance Activities

Throughout the post-closure care period, the site shall be inspected to maintain the structural integrity of the cover system. Inspections will be completed to ensure that all CCR remain properly covered by the final cover system and stormwater control systems are maintained in proper working condition.

Any areas identified during inspections that require repair work shall be noted and scheduled for repairs as quickly as practical. Any repair work on the final cover system shall meet or exceed the design requirements. Final cover inspection and repair protocols will be performed following the manufacturer's guidance for ClosureTurf™ provided by Watershed Geosynthetics, and will be routinely reviewed and updated per current best management practices.

#### 2.3.1 Cover System Inspections

The AP-3/4 cover and stormwater control systems will be periodically inspected to monitor the function and integrity of the systems. Inspections will be completed on a quarterly and annual as listed in Table 1. During each quarterly and annual inspection, the appropriate inspection checklists should be completed, and any areas

in need of repair should be noted on the appropriate checklist and logged in a repair log and maintained in the facility operating record. As all CCR material has been removed from the AP-2 Unit, there is no regulated cover system at AP-2 and post closure cover system inspections of the AP-2 Unit are not required.

Table 1: Routine Inspections for AP-3/4

Frequency	Description
	Slow driving or walking inspection focusing on:
	Obvious signs of damage
Quarterly	<ul> <li>General performance of the cover system and associated structures</li> </ul>
	General housekeeping and site maintenance
	■ Detailed walking inspection of all areas of the Unit, including:
	<ul> <li>Cover systems - turf seams, anchor trenches, infill and armoring conditions, and vegetation where applicable</li> </ul>
	<ul><li>Stormwater systems - outfalls, berms, channels, and culverts</li></ul>
Annually	<ul><li>Slopes, berms, and roads</li></ul>
	Monitoring wells and instrumentation
	<ul> <li>Site security and maintenance</li> </ul>
	<ul> <li>Other structures or areas within the site boundary that may impact the integrity of the closed unit</li> </ul>

### 2.3.2 Groundwater Monitoring System

The groundwater monitoring system required by 391-3-4-.10(6) will be maintained throughout the required post-closure care period. Groundwater monitoring, as required by §257.90 through 257.98 as well as State of Georgia Solid Waste Management Rule 391-3-4-.10(6), will be performed on a semiannual basis during the required post-closure care period. The multi-unit Groundwater Monitoring Plan for AP-2 and AP-3/4 is presented in Section 6 in Part A of this permit application.

#### 2.3.3 AP-2 and AP-3/4 Maintenance

Following closure, maintenance and repairs will be provided on the final cover system for the required postclosure care period so that the integrity and effectiveness of the final cover system will be maintained. Maintenance activities will include, but not be limited to:

- Any needed repairs to the final cover system to correct damages related to settlement, subsidence, erosion, or other events, and will be performed to prevent run-off from eroding or otherwise damaging the final cover.
- Repair of erosion features
- Repairs to any observed synthetic cover system components damage
- Re-establishment of vegetation (where applicable)
- Repairs to accessible portions of pipe outfalls and underdrain collection systems
- Housekeeping and general upkeep of the closed Units

Regular maintenance will be performed on a semi-annual schedule, with more frequent maintenance performed if and as needed following the inspections performed by qualified personnel, summarized in Section 3.3.2.

# 2.4 Planned Use of Property

#### AP-2

AP-2 CCR removal activities concluded in the first quarter of 2017 for closure by removal. Future development for AP-2 includes a proposed backfill of the excavated unit utilizing compacted, clean soil. Following backfilling of AP-2, additional proposed future development of AP-2 may include the following:

- Material lay down area for use by facility operations personnel. All material temporarily stored over the ClosureTurf™ cover system will be evaluated to prevent damage to the cover system.
- Plant personnel recreational area
- Future temporary or overflow vehicle parking
- Future site infrastructure

It is noted that the limits of AP-2 include active plant transmission and other power plant infrastructure that will be maintained and may require repairs and replacement of materials including installation of temporary and permanent support infrastructure.

Any future use of the property after closure will consider maintaining the functionality of the groundwater monitoring system.

#### AP-3/4

AP-3/4 is being evaluated for future potential developments following the complete closure of the unit. At present, future development plans include the potential installation of a solar panel farm over the gently sloped top deck of the unit as well as the south facing slopes of AP-3/4. These potential solar development areas are presented in the AP-3/4 Closure Plans in Part A of this permit application.

The potential installation of the solar panel farm may include, but is not limited to, the following components and activities:

- Solar panel infrastructure installation
- Installation of transmission lines for conveyance of solar energy
- Access to solar panel farm areas via designed access roads and on ClosureTurf™

Portions of the closed unit are proposed to be used for temporary storage or staging of maintenance or replacement materials for the Unit such as additional infill, turf, liner, rock and other materials.

It is noted that the limits of AP-3/4 include an active natural gas pipeline, active plant transmission, water treatment, and other power plant infrastructure that will be maintained and may require repairs and replacement of materials including installation of temporary and permanent support infrastructure. Any future use of the property after closure will not disturb the integrity of the final cover or any other component of the containment system. Furthermore, the functionality of the groundwater monitoring system will be maintained.

# 2.5 Post Closure Operations

Plant operations and maintenance will occur within the permit boundary but outside the limits of the CCR consolidation area (e.g. outside the waste boundary and final cover system). Activities not directly affecting the CCR consolidation or 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 Permittee's discretion.

Operation and maintenance of transmission and/or distribution structures within the limits of the CCR consolidation area as engineered and permitted not directly affecting the CCR consolidation or final cover system, may also be conducted at the Permittee's discretion.

However, should utility operations be required such that the final cover system is required to be disturbed, notification shall be provided to the Director of EPD that the demonstration of any disturbance to the final cover, liner, or other component of the containment system including any removal of CCR, will not increase the potential threat to human health or the environment, and a report documenting the repair of the final cover system will be placed in the facility operating record. The repair documentation will include as-builts, CQA information, and certification from a professional engineer licensed to practice in Georgia.

Activities related to ongoing operations at AP-2 and AP-3/4 within the AP-2 and AP-3/4 permit boundary may include but are not limited to those listed below.

#### Water Treatment

Contact water collected from the onsite CCR Units from dewatering wells, under-slope drainage systems, and other potential sources will be conveyed to the proposed on-site water treatment facility located south of the AP-3/4 closure system. Contact water will be treated for discharge per the facility's dewatering plan during closure, contact water management as outlined in the Engineering Report presented in Section B of this permit application, and the facility's active NPDES permit (Permit No. GA0001431).

## Piezometers, Dewatering Wells, and Instrumentation

Instrumentation for the AP-3/4 closure consists of piezometers for water level documentation and inclinometers monitoring potential movement of the eastern slope of AP-3/4, as well as temporary dewatering wells used to accelerate long term unit dewatering. The site instrumentation will be routinely inspected and maintenance will be performed as needed per the facility's instrumentation guidance. Instrumentation associated with AP-3/4 is also presented on the Contact Water Management and Instrumentation Plan presented in the AP-3/4 Closure Plans in Part A of this permit application.

#### Solar Development

The Closure Plan for AP-2 and AP-3/4 presented in this Part of the permit application indicates potential future development for an on-site solar farm. Additional details for the future solar development are included in the Solar Development Plan in Part B Section 5 of this permit application, and includes plans for solar panels along the top deck of AP-3/4. If solar development proceeds it will include construction of solar panel, ballast system, and other electric infrastructure to tie in to the existing transmission service at Plant McDonough.

#### 3.0 POST-CLOSURE CARE PERIOD

In accordance with 40 CFR §257.104(c), Georgia Power will conduct post-closure care for 30 years for AP-3/4. If, at the end of the 30-year post-closure care period, groundwater at AP-3/4 is being monitored under the

assessment monitoring program in accordance with 40 CFR §257.95, Georgia Power must continue to conduct post-closure care until AP-3/4 returns to detection monitoring in accordance with 40 CFR §257.95.

Any amendments to the post-closure care plan during the post-closure care period will be made 60 days prior to a planned change in the operation of AP-3/4 or no later than 60 days after an unanticipated event requiring the revision of the existing post-closure care plan, in accordance with §257.104(d)(3).

As per 40 CFR §257.104(a), AP-2 is not subject to post closure care criteria following the time at which the unit meets the requirements of §257.102(c) and is released from requirements as approved by EPD.

# 3.1 Recordkeeping

The owner/operator shall comply with all recordkeeping requirements of 40 CFR 257.105(i), closure and post-closure care notification requirements specified in 40 CFR 257.106(i) and closure and post-closure care internet requirements in 40 CFR 257.107(i) as well as State of Georgia Solid Waste Management Rule 391-3-4-.10(9)(c)(5)(vi).

No later than 60 days following completion of the post-closure care period of 30 years, and provided the provisions of §257.104(c)(2) don't apply, Georgia Power Company will prepare a notification verifying completion of the post-closure care as described in §257.104(e).

Documentation for Plant McDonough AP-2 and AP-3/4 operating record are located electronically at the website titled "Plant McDonough CCR Rule Compliance Information" located at the Georgia Power Company website under Environmental Compliance.

# 4.0 FINANCIAL ASSURANCE

In compliance with applicable securities laws and regulations, GPC will provide cost estimates for post-closure care to GA EPD under separate cover. The post-closure care costs will include 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 will be generated in current dollars and adjusted annually for inflation. GPC will provide a demonstration of financial assurance upon approval of the closure and post-closure care cost estimates by GA EPD.

