

**PLANT McDONOUGH-ATKINSON
CCR SURFACE IMPOUNDMENTS
(CCR UNIT AP-1)
COBB COUNTY, GEORGIA
PART A SECTION 1 – INTRODUCTION**

FOR



**Georgia
Power**

September 2021



GOLDER
MEMBER OF WSP

INTRODUCTION

PLANT MCDONOUGH CCR UNIT CLOSURE PERMITTING

On November 2, 2016, the Georgia Environmental Protection Division (EPD) adopted a new rule in the Solid Waste Regulations entitled “Rule 391-3-4-.10. Coal Combustion Residuals” (State CCR Rules). Chapter 391-3-4-.10 incorporates by reference the provisions contained in the United States Environmental Protection Agency (USEPA) Title 40 of the Code of Federal Regulations (CFR) §257 (40 CFR §257) (Federal CCR Rule). This rule, effective November 22, 2016, applies to owners and operators of new and existing surface impoundments that dispose or otherwise engage in solid waste management of CCR generated from the combustion of coal at electric utilities and independent power producers. Section (9) of the State CCR Rules requires all CCR units in Georgia to obtain a solid waste handling permit. Pursuant to these requirements, Georgia Power Company (Georgia Power), the owner and operator of Plant McDonough-Atkinson (Plant McDonough) in Cobb County near Smyrna, Georgia, is applying to EPD for a Solid Waste Handling Permit for the closure of the inactive CCR surface impoundments at Plant McDonough.

Plant McDonough is a power generating facility, owned and operated by Georgia Power, located in Cobb County, Georgia. Plant McDonough historically operated as a coal fired facility, and currently operates as a natural gas combined cycle generating facility. Four CCR surface impoundments were utilized for the disposal of CCR material on-site over the duration of Plant McDonough’s coal fired operations: Ash Pond 1 (AP-1), Ash Pond 2 (AP-2), Ash Pond 3 (AP-3) and adjacent Ash Pond 4 (AP-4). AP-3 and AP-4 were historically operated together and are being closed as a Combined Unit AP- 3/4. In 2011, Plant McDonough ceased coal-fired electric generating activities, and subsequently ceased placing CCR in the units. In accordance with State CCR Rule 391-3-4-.10(2), which incorporates the definitions of 40 CFR § 257.53, all surface impoundments at Plant McDonough met, or currently meet, the definition of Inactive Surface Impoundments as the ash ponds no longer received CCR on or after October 19, 2015 and still contained both CCR and liquids on and after October 19, 2015.

This permit application is for a solid waste permit for CCR Unit AP-1, which substantially completed installation of the final cover system in the first quarter of 2017 and closure construction activities are ongoing at the time of the submission of this permit application.

Georgia Power began to comply with the requirements of the Federal CCR Rule for closure of inactive impoundments prior to the amendment of the Georgia Rules to include the regulation of CCRs. For the Plant McDonough surface impoundments, this consisted of initiating closure activities under the “3-year closure provision” provided in 40 CFR §257.100(b)(1) which was part of the Federal CCR Rules published in April 2015 but was subsequently removed from the Rules in 2016. Closure continued in accordance with §257.102(d) following removal of § 257.100(b)(1). The final Federal CCR Rule published in 2016 removed the “3-year closure provision” and amended timeframes for location demonstrations, design and operating criteria, groundwater monitoring and corrective action, and closure and post-closure care for inactive surface impoundments. These amended timeframes apply to Plant McDonough AP-1 because

Georgia Power met the deadlines listed in 40 CFR 257.100(e)(i)- (iii) by placing a notification of intent to initiate closure in the operating record on December 7, 2015, prior to the deadline of December 17, 2015, providing notification to the Georgia EPD of intent to initiate closure prior to January 19, 2016, and placing this notification of intent to initiate closure on the publicly accessible website prior to January 19, 2016. While the closure of the surface impoundment at Plant McDonough was initiated before Georgia adopted rules for the management of CCRs (i.e. November 22, 2016), Georgia Power conducted these activities in accordance with the requirements of the State CCR Rule.

This permit application has been developed in compliance with the Georgia Rules for Solid Waste Management, Chapter 391-3-4-.10(9), Coal Combustion Residuals – Permits. This permit application contains the documentation required to address the State CCR Rule criteria specified for Inactive Surface Impoundments in State CCR Rule 391-3-4-.10(9)6 which apply to CCR Unit AP-1.

Summary of Inactive CCR Surface Impoundment Facilities

AP-1 was commissioned in 1964 for use in sluicing operations for all ash types and was in service until 1968 when Georgia Power ceased placing CCR in AP-1 upon reaching storage capacity. AP-1 was covered with an intermediate soil cover system and the unit was utilized as a lay down area. Prior to the initiation of closure activities in 2016, there was heavy vegetation and trees in the west and north portions of AP-1. Closure activities in accordance with 40 CFR 257.100 were initiated in January 2016 for AP-1 ahead of the promulgation of the Georgia State CCR permit program.

AP-1 closure activities consist of consolidating and closing in place with a reduced AP-1 footprint, where some CCR was excavated and relocated to the central portions of AP-1. Additionally, CCR material from the closure by removal of adjacent AP-2 and a portion of the CCR from AP-3 was placed in Plant McDonough AP-1 to meet final closure grades. Closure also includes the construction of a perimeter subsurface barrier wall as the selected advanced engineering method.

Plant McDonough CCR Unit AP-1 Permitting Requirements

This permit application for CCR Unit AP-1 is presented to fulfill the requirements of the State of Georgia Rules for Solid Waste Management, Coal Combustion Residuals (Rule 391-3-4-.10). Georgia Power has prepared this permit application for the closure in place of AP-1 to address the State CCR Rule criteria specified for Inactive Surface Impoundments as required in 391-3-4-.10(9)(b) and 391-3-4-.10(9)(c)6. as follows:

General CCR Unit Permit Application Requirements

- ✓ 391-3-4-.10(9)(b)1. - A completed form designated by EPD.
The completed form is included in Section 2 of Part A of this permit application.
- ✓ 391-3-4-.10(9)(b)2. - Written verification that the site conforms to all local zoning or land use ordinances.
Zoning Confirmation is included in Section 4 of Part A of this permit application.
- ✓ 391-3-4-.10(9)(b)3. - Property boundary survey and legal description.

The property boundary survey and legal description is included after the Closure Drawings in Section 9 of Part A of this permit application.

- ✓ 391-3-4-.10(9)(b)4. - Financial assurance mechanism meeting the criteria in Rule 391-3-4-.13.
Financial Assurance is addressed in the Closure and Post-Closure Care Plan in Sections 7 and 8 of Part A of this permit application and will be provided once EPD concurs with the closure and post-closure care cost estimates provided in the permit application.

- ✓ 391-3-4-.10(9)(b)5. - A qualified professional engineer's certification that all application requirements have been met.

The professional engineer's certification is included in Section 3 of Part A of this permit application.

Inactive CCR Surface Impoundment Permit Application Requirements:

- ✓ 391-3-4-.10(9)(c)6. - Inactive Surface Impoundments. An owner or operator of an inactive surface impoundment shall complete closure of the CCR unit as specified in 40 CFR 257.100 no later than April 17, 2018 or submit a permit application for an existing CCR surface impoundment, including:

- 391-3-4-.10(9)(c)6.(i) - Technical data and report showing compliance with 40 CFR 257.100.

Georgia Power has met the recordkeeping, notification and posting requirements of 40 CFR 257.100 according to the required deadlines. The required documents have been prepared, placed in the facility's operating record, and posted online on the Georgia Power Company website under Environmental Compliance.

The Notification of Intent to Initiate Closure is included in Section 3 of Part B of this permit application.

The location restriction demonstrations were completed and posted in the Operation Record on April 16, 2020 and to the Georgia Power Company website 30 days later. The Location Restriction Report is included in Section 4 of Part B of the permit application.

The groundwater monitoring requirements set forth in 40 CFR 257.90(b) and 257.94(b) are met by the Groundwater Monitoring Plan included in Section 6 of Part A of this permit application.

The groundwater monitoring and corrective action report set forth in 40 CFR 257.90 was posted on July 9, 2020, as required by §257.100(5)(ii).

The Closure Plan and Post-Closure Care Plan for the requirements of the State CCR Rule are included in Section 7 and Section 8 of Part A of this permit application.

The other design criteria required under 40 CFR 257.73 has also been addressed by installation of a permanent identification marker as set forth by § 257.73(a)(1).

- 391-3-4-.10(9)(c)6.(ii) - Technical report of geological and hydrogeological units within the disposal site.

A geological and hydrogeological report is included in Section 1 of Part B of this permit application.

- 391-3-4-.10(9)(c)6.(iii) - Potentiometric surface map of the water table.

A potentiometric surface map of the water table is included in the Groundwater Monitoring Plan included in Section 6 of Part A of this permit application.

- 391-3-4-.10(9)(c)6. (iv) - *Siting report which includes identification of wetlands, floodplains, and seismic impact zones.*

The Location Restriction Report, which includes identification of wetlands and seismic impact zones, is included in Section 4 of Part B of the permit application. Floodplain criteria is addressed in Section 1 of Part B of this permit application.
- 391-3-4-.10(9)(c)6. (v) – *Written closure plan that includes at a minimum:*
 - 391-3-4-.10(9)(c)6.(v)(I) - *Narrative describing how the CCR unit will be closed including the elimination of free liquids and stabilization of remaining waste or by closure through removal of CCR.*

The Closure Plan included in Section 7 of Part A of this permit application describes the closure criteria used to close CCR Unit AP-1 in place.
 - 391-3-4-.10(9)(c)6.(v)(II) - *Identification of any pipes, utilities, or other penetrations through or beneath the impoundment. The inspection frequency and method of evaluation should be provided.*

The Closure Plan included in Section 7 of Part A of this permit application addresses the inspection frequency at CCR Unit AP-1 at Plant McDonough.
 - 391-3-4-.10(9)(c)6.(v)(III) - *Final cover analysis.*

The Closure Plan included in Section 7 of Part A of this permit application describes the final cover system used to close CCR Unit AP-1 in place. The final cover analysis is included in the Engineering Report in Section 2 of Part B of this permit application.
- 391-3-4-.10(9)(c)6.(vi) - *Stability analysis that, at a minimum, includes the following:*
 - 391-3-4-.10(9)(c)6.(vi)(I) - *On-site or local soil conditions that may result in significant differential settling.*
 - 391-3-4-.10(9)(c)6.(vi)(II) - *On-site or local geologic or geomorphologic features.*
 - 391-3-4-.10(9)(c)6.(vi)(III) - *On-site or local human-made features or events, both surface and subsurface.*

Slope stability and settlement analyses of CCR Unit AP-1, as a closed unit, were performed and are included in the Engineering Report in Section 2 of Part B of this permit application.
- 391-3-4-.10(9)(c)6.(vii) - *Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6).*

Included in Section 6 of Part A of this permit application is a Groundwater Monitoring Plan which describes the groundwater monitoring well network that has been installed. This groundwater monitoring system consists of 10 monitoring network wells, located around and upgradient of the perimeter of CCR Unit AP-1. Since August 2016, independent groundwater samples from each monitoring well network have been collected and analyzed for test parameters in 391-3-4-.10(6)(b), which reference the constituents listed in CFR 257, Subpart D, Appendices III and IV of the Federal Rules, to establish a background statistical analysis dataset. As of December 2018, all eight (8) rounds of background sampling events have been completed.
- 391-3-4-.10(9)(c)6.(viii) - *Closure through removal of CCR is subject only to (v)(I) above and is not subject to the financial assurance requirements of Rule 391-3-4-.13.*

Financial Assurance is addressed in the Closure Plan and Post-Closure Care Plan included in Sections 7 and 8 of Part A of this permit application.

Additional Plant McDonough AP-1 Permit Application Requirements to include Existing CCR Surface Impoundment Permit Application Requirements:

Additional permit application requirements are listed in this section based on requirements of 391-3-4-.10(9)(c)6 for inactive surface impoundments.

- ✓ 391-3-4-.10(9)(c)5.(i) - Location restriction demonstrations required by 40 CFR 257.60, 40 CFR 257.61, 40 CFR 257.62, 40 CFR 257.63, and 40 CFR 257.64.

The location restriction demonstrations were completed and posted in the Operation Record on April 16, 2020 and to the Georgia Power Company website 30 days later. Additionally, the Location Restriction Report is included in Part B Section 4 of the permit application.

- ✓ 391-3-4-.10(9)(c)5.(ii) - Description of the CCR surface impoundment's design criteria required by 40 CFR 257.71 and 40 CFR 257.73.

The design criteria required by 40 CFR 257.71 and 40 CFR 257.73 for Plant McDonough AP-1 were completed and posted on the Operating Record on April 17, 2018 and to the Georgia Power Company website 30 days later. The permanent marker for AP-1, a requirement of §257.73, was installed in July 2015 and placed on the operating record in October 2015.

Additionally, the Engineering Report included in Part B of this permit application details the closure design for AP-1.

- ✓ 391-3-4-.10(9)(c)5.(iii) - Description of how the CCR surface impoundment's operating criteria required by 40 CFR 257.80, 40 CFR 257.82, and 40 CFR 257.83 are met.

The dust control measures taken during closure and the subsequent inspections are discussed in the Closure Plan in Section 7 of Part A of this permit application.

- ✓ 391-3-4-.10(9)(c)5.(iv) - Groundwater monitoring plan in accordance with Rule 391-3-4-.10(6). Explanation of how groundwater monitoring and corrective action criteria required by 40 CFR 257.90, 40 CFR 257.91, 40 CFR 257.93, 40 CFR 257.94, 40 CFR 257.95, 40 CFR 257.96, 40 CFR 257.97, and 40 CFR 257.98 are met.

A Groundwater Monitoring Plan was prepared for CCR Unit AP-1 in accordance with 40 CFR 257.90, 40 CFR 257.91, and 40 CFR 257.93 through 40 CFR 257.98 and is included in Section 6 of Part A of this permit application.

- ✓ 391-3-4-.10(9)(c)5.(v) - Explanation of how closure and post-closure care requirements found in 40 CFR 257.101, 40 CFR 257.102, 40 CFR 257.103, and 40 CFR 257.104 will be met.

This permit application includes both a Closure Plan and a Post-Closure Care Plan in Sections 7 and 8 of Part A of this permit application which provide explanation of how these requirements are met.

- ✓ Rule 391-3-4-.10(9)(c)5.(vi) - Website address for information required to be posted by 40 CFR 257.105, 40 CFR 257.106, and 40 CFR 257.107.

The information required to be posted and applicable to Plant McDonough CCR Unit AP-1 is found on the Georgia Power Company website under Environmental Compliance.

**PLANT McDONOUGH-ATKINSON
CCR SURFACE IMPOUNDMENT
(CCR UNIT AP-1)
COBB COUNTY, GEORGIA
PART A SECTION 2
PERMIT APPLICATION**

FOR



**Georgia
Power**

March 2023

WSP USA Inc.
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341
(770) 496-1893



Send completed application to:
 Environmental Protection Division, Solid Waste Management Program
 4244 International Parkway, Suite 104
 Atlanta, GA 30354-3902

County: _____
 Facility Name: _____

CCR Unit - Application for Solid Waste Handling Permit

(Please type or print)

I. APPLICANT INFORMATION

Owner's Name or Registered Corporation Name: Georgia Power Company – Plant McDonough-Atkinson

Facility Address: 5551 South Cobb Dr. SE

Phone: 404-506-6505

City: Smyrna

State: GA

ZIP Code: 30080

Authorized Official: Aaron D. Mitchell

Title: Vice President – Environmental Affairs

Mailing Address: 241 Ralph McGill Blvd. NW

Phone: 404-506-6505

City: Atlanta

State: GA

ZIP Code: 30308

Email Address: gpcenv@southernco.com

Facility CCR Website(s): www.georgiapower.com

II. PROPERTY DETAILS: Complete below and attach a street or highway map indicating the site/facility location. Application must be accompanied by written zoning confirmation.

County: Cobb County

City: Smyrna

Co-ordinates (in decimal degrees, near facility center): Latitude: 33.82417, Longitude: -84.48056

Property for Processing/Disposal is: Owned Leased (please complete owner details below)

Property Owner (if leased):

Address:

Phone:

City:

State:

Zip:

III. APPLICATION TYPE:

New Permit

Major Modification to Existing Permit

Transfer of Permit

Other

IV. CCR UNITS: List all CCR units covered under this application

CCR Unit AP-1

V. OWNERS: List all owners of the facility (defined as holding a 5% or greater share). All owners listed below must complete the Supplemental Form for O.C.G.A. 12-8-23.1(a)(3)(B)

Georgia Power Company

VI. SIGNATURE

Authorized Official's Signature:



Date:

3/28/23

Sworn to and subscribed before me this 28 day of March, 2023

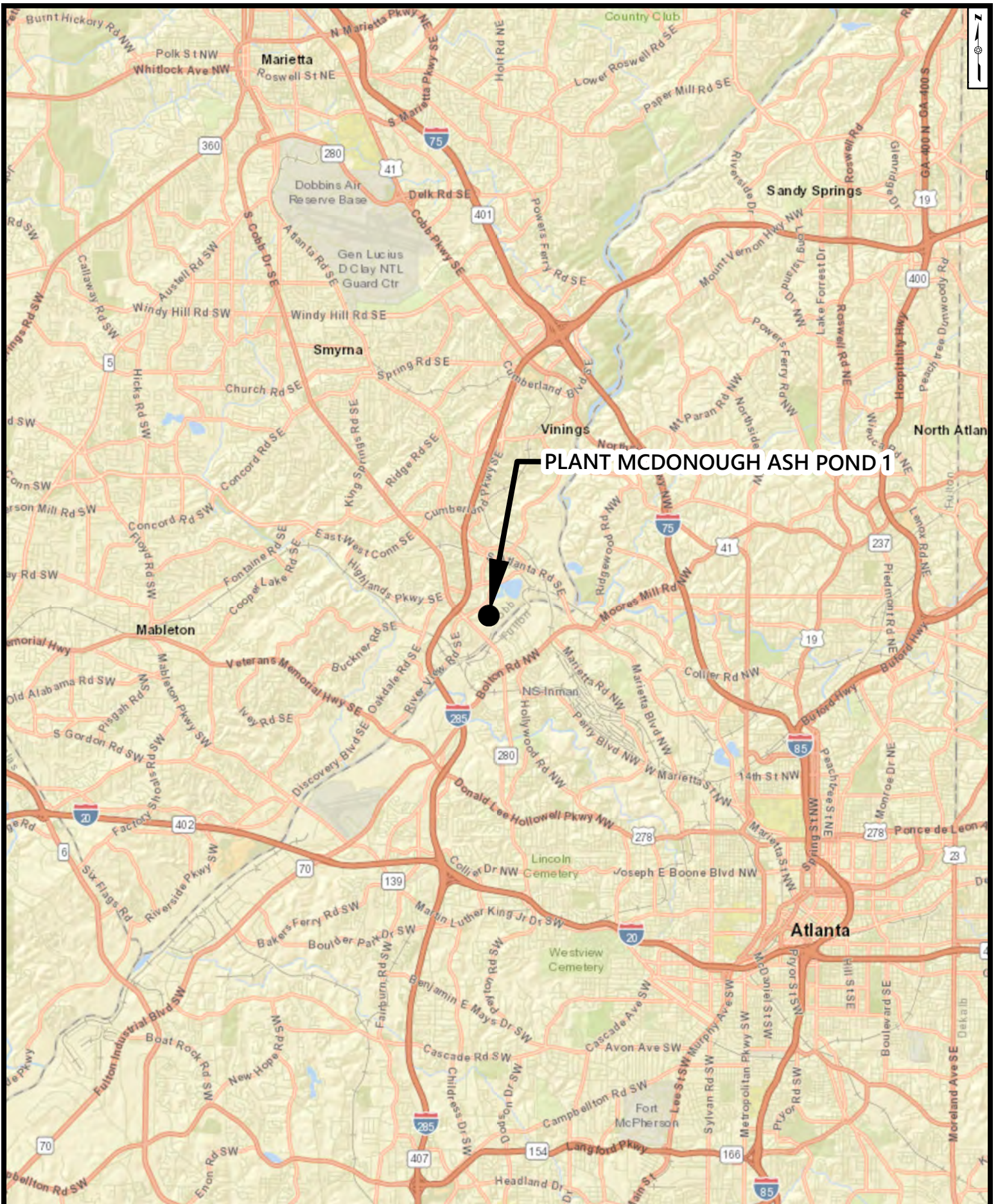
Notary Public:



My commission expires:

4-26-26





Location Map

Georgia Power Company - Plant McDonough
 CCR Surface Impoundment Ash Pond 1



Date: 11/2/2018



Send with completed application to:
 Environmental Protection Division, Solid Waste Management Program
 4244 International Parkway, Suite 104
 Atlanta, GA 30354-3902

County: _____

Facility: _____

Solid Waste Handling Permit Supplemental Form for O.C.G.A. 12-8-23.1(a)(3)(B)

(Please type or print)

I. INFORMATION: This form must be completed by each owner, or an authorized official of a corporation, holding a 5% or greater ownership share. This form must be notarized.

Name of Facility Applying for Solid Waste Handling Permit: Plant McDonough-Atkinson CCR Unit AP-1

Owner's Name or Registered Corporation Name: Georgia Power Company

Authorized Official: Aaron D. Mitchell

Title: Vice President – Environmental Affairs

Mailing Address: 241 Ralph McGill Boulevard

Phone: (404) 506 - 6505

City: Atlanta

State: GA

ZIP Code: 30308

Email Address: gpcenv@southernco.com

A.	Yes	No
(1) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association intentionally misrepresented or concealed any material fact in the application submitted to the director?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(2) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association obtained or attempted to obtain the permit by misrepresentation or concealment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(3) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been convicted by final judgment, and all appeals have been exhausted, in the State of Georgia or any federal court of any felony involving moral turpitude within three years immediately preceding the application for a permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(4) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been convicted of any violations of any environmental laws punishable as a felony in any state or federal court within five years preceding the application for a permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(5) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association knowingly, willfully, and consistently violated the prohibitions specified in Code Section 12-8-30.7?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
(6) Has the applicant, or if the applicant is a corporation, partnership, or association, has any officer, director, manager, or shareholder of five percent or more of stock financial interest in the corporation, partnership, or association been adjudicated in contempt of any court order enforcing any federal environmental laws or any environmental laws of the State of Georgia within five years preceding the application for a permit?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

B. On a separate sheet, please provide detailed explanations for each question above answered "yes."

Signature: *Aaron D. Mitchell*

Date: 3/28/23

Sworn to and subscribed before me this 28th day of March, 2023

Notary Public: *Dana L. McLean*

My commission expires:



**PLANT McDONOUGH-ATKINSON
CCR SURFACE IMPOUNDMENTS
(CCR UNIT AP-1)
COBB COUNTY, GEORGIA
PART A SECTION 3 – PROFESSIONAL ENGINEER
CERTIFICATION**

FOR



**Georgia
Power**

November 2018

Golder Associates Inc.
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341
(770) 496-1893



November 16, 2018

Mr. Richard Dunn
Director
Georgia Environmental Protection Division
2 Martin Luther King Jr. Drive
Suite 1456
Atlanta, GA 30334-9000

**Re: Professional Engineer Certification
Rule 391-3-4.10-(9)(b)5**

Dear Mr. Dunn:

Golder Associates, Inc (Golder). is an engineering firm employing professional engineers in good standing in accordance with State statutes, and the firm has experience in the design and construction of solid waste disposal facilities. Gregory L. Hebel, P.E., with Golder, is the Engineer of Record for this permit application. He is registered in the state of Georgia and has more than 19 years of experience in Engineering.

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I do hereby certify that the application requirements of the Georgia Environmental Protection Division Solid Waste Rule 391-3-4-.10 for Management of Coal Combustion Residuals have been met."

ATTEST:

Golder Associates Inc.

Engineering Firm

Gregory L. Hebel, P.E.

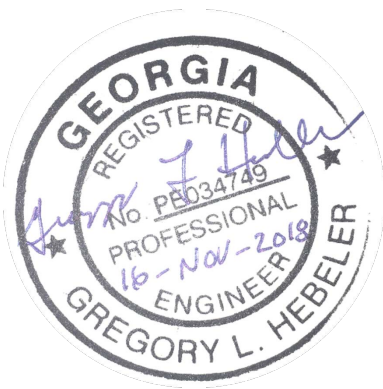
Name of Professional Engineer

Gregory L Hebel

Signature

November 16, 2018

Date



**PLANT McDONOUGH-ATKINSON
CCR SURFACE IMPOUNDMENTS
(CCR UNIT AP-1)
COBB COUNTY, GEORGIA
PART A SECTION 4 – LOCAL ZONING AND LAND
USE ORDINANCE VERIFICATION**

FOR



**Georgia
Power**

November 2018

Golder Associates Inc.
5170 Peachtree Road
Building 100, Suite 300
Atlanta, GA 30341
(770) 496-1893



1.0 INTRODUCTION

This verification of compliance with local zoning and land use ordinances for Georgia Power's AP-1 was prepared in accordance with the State of Georgia Solid Waste Management Rule 391-3-4-.10(9)(b)(2) for CCR unit permitting. Pursuant to the rule, all CCR unit permit applications must include written verification that the site conforms to local zoning and land use ordinances.

2.0 LOCAL ZONING AND LAND USE ORDINANCES

Georgia Power's Plant McDonough AP-1 is located at 5551 South Cobb Drive SE, in Cobb County, Georgia. As such, AP-1 must comply with all local zoning and land use ordinances for Cobb County, Georgia.

As indicated in a letter addressed to the Georgia Environmental Protection Division (GA EPD) dated March 1, 2018 by the Cobb County Zoning Division Manager, the CCR Units at Plant McDonough meet these zoning and land use ordinances.

As such, Unit AP-1 meets the requirements of 391-3-4-.10(9)(b)(2).

APPENDIX A

**Local Zoning and Land Use Ordinance Verification -
Cobb County, Georgia**



**COBB COUNTY
COMMUNITY DEVELOPMENT AGENCY**

John Pederson, AICP
Division Manager

Zoning Division
P.O. Box 649
Marietta, Georgia 30061
(770) 528-2035 • fax: (770) 528-2003

March 1, 2018

Mr. Jeffrey W. Cown
Branch Chief
Georgia Environmental Protection Division
2 Martin Luther King Jr. Drive, SE
Suite 1054, East Floyd Tower
Atlanta, GA 30334-9000

**Re: GA Power – Plant McDonough
Permit Application – CCR Surface Impoundments**

Dear Mr. Cown:

The Georgia Power CCR Surface Impoundments located at Plant McDonough, 5551 South Cobb Drive SE, Smyrna, Georgia comply with local zoning and land use ordinances.

Sincerely,

John P. Pederson
Zoning Division Manager