

**PLANT McDONOUGH-ATKINSON  
CCR SURFACE IMPOUNDMENTS  
(CCR UNIT AP-2, COMBINED CCR UNIT AP-3/4)  
COBB COUNTY, GEORGIA  
PART A SECTION 1 – INTRODUCTION**

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FOR



**Georgia  
Power**

**Revision 01 – November 2020**

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**GOLDER**

## INTRODUCTION

### PLANT MCDONOUGH CCR UNIT CLOSURE PERMITTING

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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, GA. 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 the CCR Unit AP-2, which completed CCR removal activities in the first quarter of 2017 prior to submission of this permit application, and the Combined Unit AP-3/4, which is currently undergoing closure in place as one consolidated unit.

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 the 40 CFR §257.100(b)(5) which was part of the Federal CCR Rules published in April 2015 but was removed from the final Federal CCR Rules published later in 2016. 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 the McDonough surface impoundments 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 for AP-2 on December 7, 2015 and for AP-3 and AP-4 on December 8, 2015, prior to the Federal CCR Rule deadline of December 17, 2015 and January 16, 2016. While the closure of the surface impoundments 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-2 and Combined CCR Unit AP-3/4. The AP-2 and AP-3/4 were operated in coordination and are in close proximity to one another in the central and northeastern area of the Plant McDonough property and as such, the former AP-2 and AP-3/4 have been included together in this permit application.

### **Summary of Inactive CCR Surface Impoundment Facilities**

AP-2 was commissioned in 1968 for use in sluicing operations for mainly bottom ash. AP-3 and AP-4 were constructed to receive and store CCRs from the generating process at Plant McDonough and were used for sluicing operations for fly ash and dry stacking of CCR. Construction for AP-3 and AP-4 was completed in 1969 and 1974, respectively, and the units were subsequently put into operation and operated concurrently once both were in use. CCR placement in AP-3/4 ceased in 2011 after Plant McDonough retired its coal units. Closure activities in accordance with 40 CFR 257.100 were initiated in January 2016 for AP-2 and AP-3/4 ahead of the promulgation of the Georgia State CCR permit program.

AP-2 closure activities consisted of closure by removal of CCR, where CCR removed from AP-2 was placed in the adjacent Plant McDonough units AP-1 and AP-3. Closure activities for AP-3/4, which are close to completion at the time of this permit, consist of a combination of closure by removal, consolidating, and closing in place as a combined unit.

### **Plant McDonough CCR Unit AP-2 and Combined CCR Unit AP-3/4 Permitting Requirements**

This permit application for CCR Unit AP-2 and Combined CCR Unit AP-3/4 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 by removal of AP-2 and the closure in place of AP-3/4 to address the State CCR Rule criteria specified for Inactive Surface Impoundment 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 the 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 the permit application.

- ✓ 391-3-4-.10(9)(b)3. - *Property boundary survey and legal description.*  
The property boundary survey and legal description is included in the Closure Drawings in Section 9 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 Plan and will be provided once EPD concurs with the closure and post-closure 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 the 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 3 Year **Notification of Intent to Initiate Closure** is included in Section 3 of Part B of this permit application.  
The location restriction demonstrations will be provided before April 16, 2020, as required by 257.100(2)(i).  
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 will be posted on or before August 1, 2019, as required by § 257.100(5)(ii).  
The Closure Plan and Post Closure 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 permanent identification markers as set forth by § 257.73(a)(1).

The requirements for an existing surface impoundment permit application are also addressed since Combined CCR Unit AP-3/4 did not complete closure by April 17, 2018. Those requirements are discussed after the inactive surface impoundment permit application requirements below.

- 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.*

40 CFR 257.100 requires that Georgia Power complete the location restriction demonstration for inactive surface impoundments by April 16, 2020, these siting criteria will be addressed prior to April 16, 2020. 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-2 by removal and close Combined CCR Unit AP-3/4 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 and method of evaluation of the culverts beneath Combined CCR Unit AP-3/4 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-2 and Combined CCR Unit AP-3/4 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 Combined CCR Unit AP-3/4, as closed, 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 23 monitoring network wells, located around and upgradient of the perimeter of CCR Unit AP-2 and Combined CCR Unit AP-3/4. 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 September 2018, seven (7) of 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 Plan included as Sections 7 and 8 of Part A of this permit application.

Existing CCR Surface Impoundment Permit Application Requirements:

CCR Unit AP-2 completed closure by CCR removal in the first quarter of 2017, prior to April 17, 2018. As such, AP-2 is not subject to the requirements for existing CCR surface impoundments under the State Rule. However, if available these sections where applicable for AP-2 are included in this permit application.

AP-3/4 is currently undergoing closure construction, and closure was not completed as of April 17, 2018. As such, the requirements for existing CCR surface impoundment are met for AP-3/4 as follows:

- ✓ *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 Operating 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 this 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 were completed and posted on the Operating Record on April 17, 2018 and to the Georgia Power Company website 30 days later. Additionally, the Engineering Report included in Part B of the permit application includes closure design for the closure of the units. The initial factor of safety assessment for Combined CCR Unit AP-3/4 required in 40 CFR 257.73 is posted on the Georgia Power Company website under Environmental Compliance and is included in Section 3 of Part B of this permit application.

Stability of CCR Unit AP-2 and Combined CCR Unit AP3/4 during and after closure is discussed in the Closure Plan in Section 7 of Part A and in the Engineering Report in Section 2 of Part B of this permit application.

- ✓ *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.

The initial inflow design flood control system design was placed in the Georgia Power website under Environmental Compliance and is included in Section 3 of Part B 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-2 and Combined CCR Unit AP-3/4 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 Plan in Sections 7 and 8 of Part A of this permit application which provide explanation of how these requirements are met. Note that only Combined CCR Unit AP-3/4 requires post-closure care.

- ✓ *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-2 and Combined CCR Unit AP-3/4 is found in the Georgia Power Company website under Environmental Compliance.

**PLANT McDONOUGH-ATKINSON  
CCR SURFACE IMPOUNDMENTS  
(CCR UNIT AP-2, COMBINED CCR UNIT AP-3/4)  
COBB COUNTY, GEORGIA  
PART A SECTION 2 – PERMIT APPLICATION**

---

**FOR**



**Georgia  
Power**

**May 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: Jennifer McNelly		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: gpcenv2@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: 33.82889, Longitude: -84.4775	
Property for Processing/Disposal is: <input checked="" type="checkbox"/> Owned <input type="checkbox"/> 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-2  
Combined CCR Unit AP-3/4

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:

06/08/23

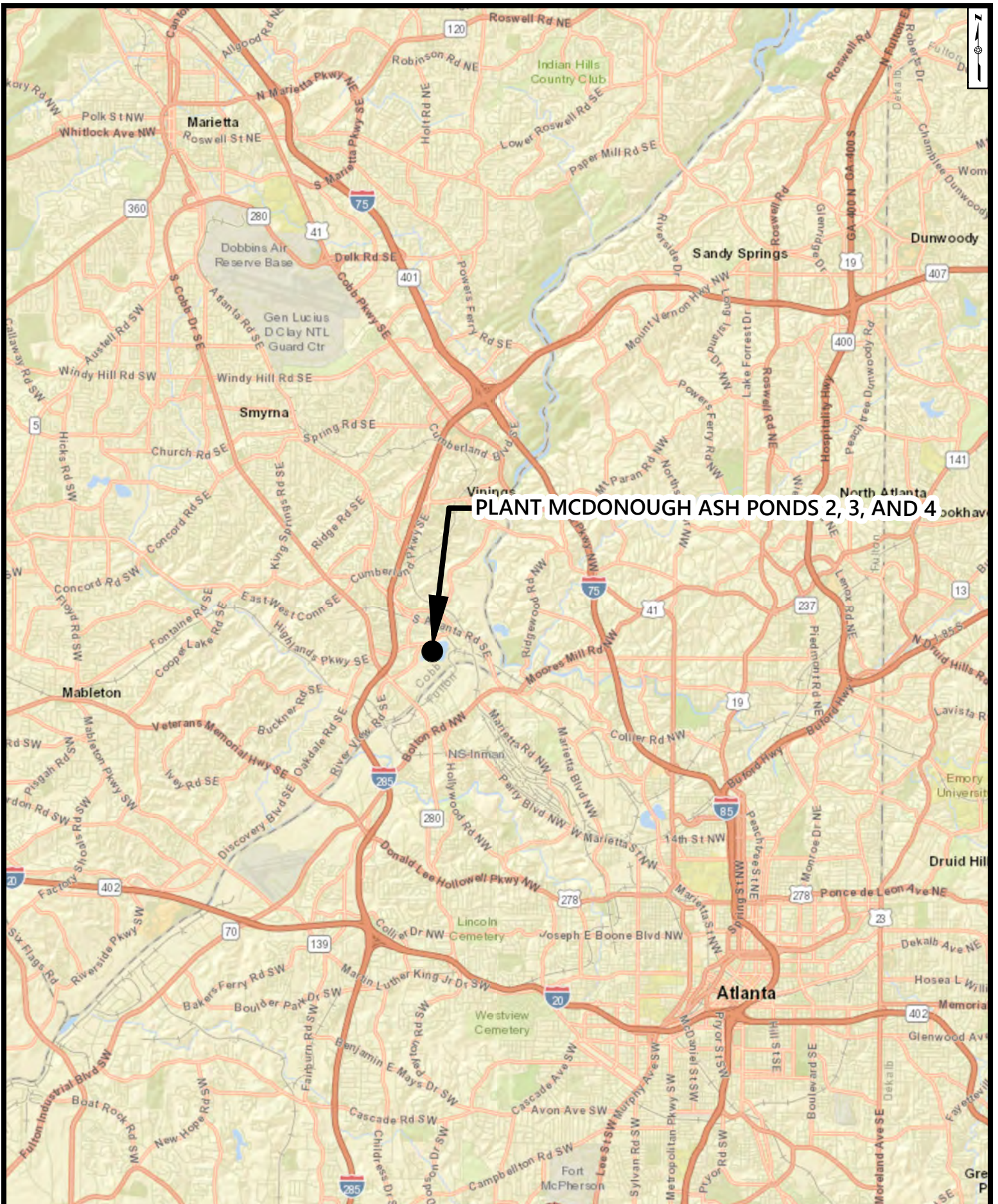
Sworn to and subscribed before me this 8<sup>th</sup> day of June, 2023.

Notary Public:



My commission expires: 04/18/2027





PLANT McDONOUGH ASH PONDS 2, 3, AND 4

Location Map

Georgia Power Company - Plant McDonough  
CCR Surface Impoundments Ash Ponds 2, 3, and 4



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-2 & Combined CCR Unit AP-3/4

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

Authorized Official: **Jennifer McNelly**

Title: **Vice President** – Environmental Affairs

Mailing Address: 241 Ralph McGill Boulevard

Phone: (404) 506 - 6505

City: Atlanta

State: GA

ZIP Code: 30308

Email Address: **gpcenv2@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: *Jennifer McNelly*

Date: *06/08/23*

Sworn to and subscribed before me this *June* of *2023*.

Notary Public: *Patricia McCarty* My commission expires: *04/15/2027*

