



GEORGIA
DEPARTMENT OF NATURAL RESOURCES

ENVIRONMENTAL PROTECTION DIVISION

Richard E. Dunn, Director

Watershed Protection Branch
2 Martin Luther King, Jr. Drive
Suite 1152, East Tower
Atlanta, Georgia 30334
404-463-1511

DEC 13 2017

Persons who commented on Draft NPDES Permit No. GA0001457

RE: EPD Response to Comments
Georgia Power Company - Plant Hammond
NPDES Permit No. GA0001457
City of Rome, Floyd County

Dear Sir/Madam:

Thank you for your comments regarding the permit issuance for the Georgia Power Company - Plant Hammond NPDES permit. Attached is a summary of comments from the public and our responses to the issue raised. In addition, we have attached the Permit Addendum and Fact Sheet Addendum documenting the changes made to the attached permit. We appreciate your interest in this matter.

After consideration of your comments, EPD has determined that the permit is protective of water quality standards and we have issued the permit.

If you have any questions, please contact Audra Dickson of my staff at 404-463-4934.

Sincerely,

Jeffrey Larson, Manager
Wastewater Regulatory Program
Watershed Protection Branch

JL/ahd
Attachment

Permit Addendum

Name of Facility Georgia Power Company Plant Hammond

NPDES Permit No. GA0001457

Were there any revisions between the draft proposed NPDES permit placed on public notice and the final proposed NPDES permit? If yes, specify: Yes No

Part I.A.1.a Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 3 to the Sample Type “calculation” to describe the methodology of how the permittee would estimate the flow.

Added temperature limits and modified footnote no. 4 revising the intake sampling location from the intake structure to river mile 270.5, included a requirement to take 5 grab samples across the river and included language to ensure the temperature measurements are taken on the same day.

Added footnote no. 5, “the permittee shall report the maximum absolute and differential temperature on the Discharge Monitoring Report in accordance with Part I.D of the permit.”

Increased the monitoring frequency for temperature from 2/year to 1/week.

Added whole effluent toxicity testing.

Part I.A.1.b Revised Table No. 2 to correctly identify the applicable flows, revised “125 cfs to 751 cfs” to “1500 cfs to 501 cfs.”

Part I.A.2 Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 6 to the Sample Type “Calculation” describing how the permittee would estimate the flow.

Permit Addendum

Part I.A.3 Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added a footnote no. 3 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Part I.A.4 Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 4 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Part I.A.5.a Added a requirement to monitor and report flow 1/week.

Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 4 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Part I.A.5.b Added a requirement to monitor and report flow 1/week.

Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 4 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Part I.A.6 Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Permit Addendum

Added footnote no. 2 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Part I.A.7 Revised the Measurement Frequency from “twice per month” to “once per day when discharging” for all pollutants of concern listed except for flow which was revised to “daily when discharging.”

Added monitoring for total dissolved solids, arsenic, total; cadmium, total; chromium, total; copper, total; lead, total; mercury; nickel, total; zinc, total; and selenium.

Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 3 to clarify what an “emergency” can be to then allow a discharge from the applicable outfalls in accordance with the permit.

Added footnote no. 4 to the Sample Type “Estimation” to describe how the permittee would estimate the flow.

Added footnote no. 5 for “adverse weather.”

Part I.A.8 Revised the Measurement Frequency from “twice per month” to “once per day when discharging” for all pollutants of concern listed except for flow which was revised to “daily when discharging.”

Added monitoring for total dissolved solids, arsenic, total; chromium, total; copper, total; lead, total; mercury; nickel, total; and zinc, total.

Added the following language to footnote no. 1 “at a minimum, at the measurement frequency stated above.”

Added footnote no. 3 to elaborate what an “emergency” can be to then allow a discharge from the applicable outfalls in accordance with the permit.

Added footnote no. 4 to the Sample Type “Estimation” to elaborate how the permittee would estimate the flow.

Permit Addendum

Added footnote no. 5 for “adverse weather.”

Part I.C.11 Added a definition for “Dewatering activity or dewatering activities.”

Part I.C.12 Added a definition for “Adverse weather.”

Part I.D.2 Added a requirement to electronically submit 316(b) Annual Reports to EPD no later than December 21, 2020.

Part III.C.5 Revised the permit condition, “§ 40 C.F.R. Part 423 Steam Electric Power Generating Point Source Category” to include the following language to reflect the regulatory changes that have occurred since the draft permit was placed on public notice:

“On April 25, 2017, EPA published a notice that it would reconsider the 40 CFR § 423 rule and announced a stay of the rule’s pending implementation deadlines for the following wastestreams: fly ash transport water, bottom ash transport water, and flue gas desulfurization (“FGD”) wastewater. See 82 Fed. Reg. 19005. On September 18, 2017, EPA withdrew the stay of the compliance dates and simultaneously postponed the earliest compliance dates for bottom ash transport water and the FGD wastewater in the 2015 Rule for a period of two years, whereas the revised earliest compliance date has been changed from November 1, 2018 to November 1, 2020. See 82 Fed. Reg. 43494.

On August 11, 2017, EPA announced a decision to conduct a rulemaking to potentially revise the effluent limitations for existing sources in the 2015 rule that applies to bottom ash transport water and FGD wastewater.

Upon the promulgation of the new 40 CFR § 423 rule, EPD may modify the permit to address the requirements of the revised sections of the rule.”

Part III.C.6 Revised the components of the Coal Ash Pond Dewatering Plan (Plan) including increased sampling frequencies for instream (once per month to twice per month) and the effluent discharge (twice per month to once per week); requirements to submit draw down rates, a Notification Process and Corrective Measures Plan, and a requirement to begin stream sampling at the time the Plan is submitted to EPD to obtain instream ambient information.

Permit Addendum

Part III.C.7 Revised the permit condition, “Implementation Schedule for Flue Gas Desulfurization (FGD) Wastewater” to include a reopener clause to reflect the recent EPA decisions to reconsider specific requirements in 40 CFR Part 436. The revised language allows EPD to open the permit pending the outcome of the EPA rule making process. Additionally, the following language has been included requiring the permittee to provide targeted updates in the June 2019 progress report:

“The June 30, 2019 progress report required in Part III.C.7.c. will provide a specific update of the permittee’s and the Georgia Public Service Commission’s evaluation of the 2019 Integrated Resource Plan (Plan). This Plan will evaluate the impact of all environmental regulations, fuel costs, implementation schedule achieving the other factors related to continued operations of Plant Hammond.

The June 30, 2019 progress report required in Part III.C.7.c will also provide an updated implementation schedule for meeting the requirements of 1.) Part I.A.5.a and Part I.A.5.b. (Implementation of numeric effluent limits for internal outfall no. 01N); 2.) Part III.C.5 (§ 40 C.F.R. Part 423 Steam Electric Power Generating Point Source Category, including an update for the conversion of the wet ash handling system to a dry ash handling system for bottom and fly ash transport water, and if applicable a revised implementation schedule to comply with the applicable regulations prior to December 31, 2023); and 3.) Part III.C.7 (Implementation Schedule for Flue Gas Desulfurization (FGD) Wastewater) of this permit.”

Part III.E Added the language “(within 24 hours)” after the word “immediately” for clarity.

The permittee has been made aware of these changes

Fact Sheet Addendum

Name of Facility Georgia Power Company Plant Hammond

NPDES Permit No. GA0001457

Were there any revisions between the draft proposed NPDES permit fact sheet placed on public notice and the final proposed NPDES permit fact sheet? If yes, specify: Yes No

Section 1.10.a Revised the winter the summer temperature to reflect updated information for Outfall No. 01 - Final plant discharge commingled with stormwater

Section 4.4 Added maximum and delta temperature limits (90°F and 5 °F; respectively) at the edge of the approved mixing zone. Modified the upstream sampling location from the intake structure to river mile 270.5 to ensure the measurement is outside the influence of the permittees discharge.

Section 4.6 Included additional monitoring for outfall nos. 03, 04 and 10 (emergency ash pond overflows) for total dissolved solids; arsenic, total; cadmium, total; chromium, total; copper, total; lead, total; mercury, total; nickel, total; zinc, total; and selenium.

Provided language to clarify the permittees use of the dilution factor on the submitted application and referenced the inclusion of a footnote in the permit. The footnote describes the specific conditions under which a discharge is authorized in accordance with the permit.

Section 4.8 Included temperature limits for outfall 01 of 90 °F and delta 5 °F at the edge of the approved mixing zone.

Section 5.1.e Revised language to reflect the regulatory changes that have occurred since the draft permit was placed on public notice and provided discussion on the addition of a reopener clause pending the outcome of the updated rules.

Section 5.1.f Revised the components of the Coal Ash Pond Dewatering Plan (Plan) including increased sampling frequencies for instream and the effluent discharge; requirements to submit draw down rates, a Notification Process and Corrective Measures Plan, and a requirement to begin stream sampling at the time the Plan is submitted to obtain background information.

Fact Sheet Addendum

Section 5.1.g Added language to reflect the submittal of a progress report following the 2019 meeting with the Public Service Commission regarding the implementation schedule for fly ash, bottom ash and FGD transport water.

Included a section under the heading “Status of the 40 CFR Part § 423 Rule at the time the proposed permit package was being prepared” to reflect the changes in the regulations since the permit was placed on public notice.

Section 5.2 Revised language to reflect the inclusion of the instream temperature limits and defined upstream sampling location..

Section 5.3 Revised the Anti-Backsliding language to reflect the inclusion of the instream temperature limits in the proposed permit.

The permittee has been made aware of these changes.

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

Table of Contents

Acronyms..... 2

General Comments..... 3

316(b) Cooling Water Intake Structures..... 6

Alternative Compliance Schedule..... 6

Establish Interim BTA..... 8

Closed Cycle Cooling 9

Submission of Additional Information for Sections 122.21(r)(2) and 122.21(r)(8)..... 9

Flue Gas Desulfurization & Bottom and Fly Ash Transport Water 11

Coal Ash Pond Dewatering..... 14

Request Public Notice & Permit Modification 15

EPA Region IV Comments to North Carolina’s Department of Natural Resources 18

Comparison of Coal Ash Pond Dewatering Activities In the State 19

Request to Establish TBELs 21

Typographical Error..... 25

Thermal Pollution, Mixing Zone and Modeling..... 25

Mixing Zone..... 26

Variance 28

Anti-Backsliding..... 28

New Thermal Limits & Modeling 31

GA Power Company Comments..... 34

Region IV EPA Comments..... 36

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

Due to the volume of comments received and the number of topics covered in a comment, EPD has summarized and grouped comments together based on the topic.

Acronyms

BAT – Best Available Technology Economically Achievable
BCT – Best Conventional Pollutant Control Technology
BPT – Best Practicable Control Technology Currently Available
CFR – Code of Federal Regulations
CCR – Coal Combustion Residual
ELG – Effluent Limit Guideline for Steam Electric Power Generating Facilities, Part 40 CFR Part 423
EPD – Environmental Protection Division
EPA – Environmental Protection Agency
Permittee – Georgia Power Company – Plant Hammond
RCRA –Resource Conservation and Recovery Act
RPA – Reasonable Potential Analysis
Rules - Georgia Rules and Regulations for the Water Quality Control Act
TBEL- Technology Based Effluent Limit
WQBEL- Water Quality Based Effluent Limit
WQS – State of GA Water Quality Standards

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p align="center"><u>General Comments</u></p> <p>1. EPD has repeatedly failed to do anything to limit this toxic pollution from Plant Hammond. The Draft Permit proposed by EPD continues this trend and sets no substantive limits on the discharge of these [metals] pollutants through the plant's wastestreams.</p> <p>2. Hammond currently has no limits on discharges of toxic metals such as mercury or arsenic.</p>	<p>A reasonable potential analysis was conducted on the pollutant data submitted in the Form 2C application and along with other supporting documents and appropriate effluent limits have been included to ensure there is no reasonable potential to cause or contribute to an instream WQS violation.</p> <p>Effluent limits for arsenic, total and mercury, total have been added to internal outfall no. 01N based on the Effluent Limit Guidelines; and effluent limits for selenium, total and cadmium, total have been added for external outfall no. 10 based on Reasonable Potential Analysis.</p>
<p>Take public comment for no less than 60 days on the draft NPDES permits and Fact Sheets for GA coal-fired power plants that include compliance determinations for the ELGs.</p>	<p>The public notice complied with all State and Federal requirements. The draft permit was public noticed on February 15, 2017 by EPD and a public hearing was held on April 12, 2017 in Rome, GA. The public comment period ended on April 14, 2017. The public comment period was 58 days long.</p>
<p>Plant Hammond has added economic value to our community by providing energy, jobs, and development.</p>	<p>Comment Noted.</p>
<p>1. Adding more pollution from Plant Hammond will cause beauty and wildlife to be lost.</p> <p>2. Deficiencies in the language of the permit lead one to believe that toxic pollutants discharged are not limited strictly, because the Coosa</p>	<p>EPD is responsible for issuing protective, legal and enforceable permits in accordance with the applicable Rules.</p> <p>A reasonable potential analysis was conducted on the pollutant data submitted in the Form 2C application and along with other supporting</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>only spends 15 miles in the State of Georgia (later hitting Alabama).</p> <p>3. There are already too many pollutants in the river/lake now, from General Electric and carpet industry discharges of PCPs.</p> <p>4. EPD should not serve the polluter but the community by which is affected by the pollution.</p> <p>5. Without freshwater, mankind cannot exist. Freshwater/clean water is the most important aspect of life and it cannot be recreated.</p> <p>6. EPD is allowing Plant Hammond to kill hundreds of fish daily.</p> <p>7. We are not just good country folk. We deserve clean water; we deserve healthy food from clean waters.</p> <p>8. The proposed reissuance of the NPDES permit fails to satisfy the requirements of the Clean Water Act and its implementing regulations.</p> <p>9. The Draft Permit must be withdrawn, substantially revised to address insufficiencies and reissued for public comment. We urge you to protect the health and safety of the local community and help restore the Coosa and its fishery for this and future generations.</p>	<p>documents and appropriate effluent limits have been included to ensure there is no reasonable potential to cause or contribute to an instream WQS violation.</p> <p>The permit has more stringent permit requirements and limits than is in the previously issued permit. EPD utilized the applicable Federal Code of Regulations (CFR) and the Georgia Water Quality Control Act (Rules) to ensure the permit is legal, enforceable and protective of human health and the environment.</p>
<p>1. The downstream communities (Alabama) are not being considered.</p> <p>2. What happens on the Coosa River affects us all, including your neighbors in Alabama on Weiss Lake.</p>	<p>EPD did consider the State of Alabama and effects on Lake Weiss during the technical review of the application, water quality modeling and drafting of the permit</p>
<p>1. Coosa River is dying, and yahoo.com designates it as number 4 in the top endangered rivers in the country.</p>	<p>The Coosa River is not “dying.” EPD monitors the Coosa River long with the United States Geologic Survey (USGS), Rivers Alive volunteers,</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>2. The cumulative effect of the plant has reduced the quantity and diversity of fish in this river system.</p>	<p>and the Coosa River Basin Initiative. As of August 14, 2017, the Coosa River Basin Initiative’s website (http://www.coosa.org/Our%20River) states the following regarding the Coosa River: “North America’s Most Biologically Diverse River System,” and “No other river basin in North America has a higher percentage of endemic species than the Upper Coosa River Basin. Thirty (30) different species of fishes, mussels, snails and crayfishes call the waters of the Coosa—and nowhere else—home. Researchers call the Upper Coosa Basin a “globally significant biological treasure.”</p>
<p>We have the technology and the knowledge to solve our pollution issues. We should replace all outdated technology and it is ridiculous to not.</p>	<p>The recently updated federal regulations for Steam Electric Power Generating Facilities, Part 40 CFR § 423 requires several new technologies to be implemented, such as the installation of a dry ash handling system to replace the existing wet ash systems currently in use at the permittees facility.</p>
<p>Plant Hammond is one of Georgia Power’s least efficient plants, whereas using solar power would provide them with greater efficiency. A solar cell field would create more energy for less cost.</p>	<p>EPD does not evaluate or regulate the efficiency of power plants.</p>
<p>1. Given the outdated nature of the current NPDES permit, we welcome the release of a new Draft Permit by the Georgia Environmental Protection Division. In that respect, the Draft Permit’s issuance is a welcome development.</p> <p>2. Georgia Power has diligently followed the permitting regulatory</p>	<p>Comment Noted.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>process and is committed to ensuring that Plant Hammond continues to provide safe reliable power for its customers while also being protective of the consumer and public health and environment.</p> <p>3. Georgia Power sees the reissuance of the permit as much more restrictive, requiring more extensive modeling and more stringent heat loading limits.</p>	
<p>It should be assumed for purposes of the Draft Permit that Plant Hammond may again operate at higher capacity factors, in which case the facility may discharge at or near its permitted maximum, 620 million gallons per day. In short, the Draft Permit must be suited to protect water quality for the full range of potential operating conditions.</p>	<p>The draft permit assumes the permittee is operating at the proposed daily maximum flow of 620 MGD, 365 days a year, and 24 hours a day to ensure a conservative protective permit.</p>
<p><u>316(b) Cooling Water Intake Structures</u></p>	
<p><u>Alternative Compliance Schedule</u></p> <p>1. EPD must establish an alternative compliance schedule to ensure that the best technology available to protect against impingement mortality and entrainment is implemented “as soon as practicable.”</p> <p>2. EPD appears willing to grant Georgia Power’s “wishes”, as Georgia Power is seeking 5 years to comply with the 316(b) rule.</p> <p>3 EPD provides no information detailing what alternate schedule will be imposed. EPD must set a schedule for Georgia Power to submit missing materials, and must require those submissions to occur “as soon as practicable.” EPD may, and should, “include permit conditions to</p>	<p>An alternative schedule to submit the required information was included in Part III.C.4 of the permit. The permit condition requires the permittee to submit the additional information with the next permit renewal application. Hence, the additional information is scheduled to be submitted 180 days prior to the expiration of this proposed permit. Since the proposed permit is not yet issued, a calendar date for required information cannot be provided.</p> <p>The document entitled “Plant Hammond 316(b) Schedule - NPDES Permit Application 2016 was submitted as part of the permit application and does not need to be incorporated into the permit.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>ensure that, for any subsequent permit, the Director will have all the information required . . . necessary to establish impingement mortality and entrainment BTA requirements” 40 C.F.R. § 125.98(b)(5).</p> <p>4. Georgia Power’s permit application includes a document entitled “Plant Hammond 316(b) Schedule - NPDES Permit Application 2016.” If this document is intended to represent the alternate schedule, it must be incorporated into the permit</p>	
<p>EPD should not grant Georgia Power’s request for an alternate 316(b) rule compliance schedule. Georgia Power’s request for an alternate compliance schedule for most of the rule’s requirements is insufficient on its face. EPD may establish an alternate schedule for submission of required information only “[i]f the owner or operator of the facility demonstrates that it could not develop the required information by the applicable date for submission” 40 C.F.R. § 125.95(a)(2). Georgia Power has provided no such demonstration. Therefore, EPD should deny Georgia Power’s request for a full and unconditional extension of time to comply with the 316(b) rule.</p>	<p>40 CFR. § 125.95(a)(2), states a facility whose currently effective permit expires prior to July 14, 2018 may request an alternative schedule for the submission of information required.</p> <p>The permittee submitted a document entitled “Plant Hammond 316(b) Schedule - NPDES Permit Application 2016” with the revised permit application. The document details the work performed to date and work to be completed. As stated in the Fact Sheet, EPD has reviewed the submitted information and finds the permittee has demonstrated it could not develop the required information by the application request date. Hence, EPD approved the request for an alternative 316 (b) compliance schedule.</p>
<p>According to the timeline the Source Water Baseline Biological Characterization Data required under Section 122.21(r)(4) should have been completed by November 4, 2016. However, it appears that biological characterization data were not included in the permit application or other materials. Our review of the permit file and documents received in response to open records act requests in January and February 2017 revealed no documents purporting to comply with Section 122.21(r)(4).</p>	<p>As stated in the permit application and supporting documents, the permittee has requested an alternative schedule to submit the Source Water Baseline Biological Characterization Data and EPD has provided an alternative schedule as required in Part III.C.4 of the draft permit.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p><u>Establish Interim BTA</u></p> <p>EPD “must establish interim BTA requirements in the permit based on the Director’s best professional judgement on a site-specific basis . . . ” 40 C.F.R. § 125.98(b)(5). The final permit must cure this deficiency by including interim BTA standards based on EPD’s best professional judgment and consideration of factors and technologies listed at 40 C.F.R. 125.94 and 125.98.</p>	<p>40 CFR § 125.98(b)(5) states, “In addition, the Director must establish interim BTA requirements in the permit based on the Director’s best professional judgment on a site-specific basis in accordance with § 125.90(b) and 40 CFR 401.14 [emphasis added].”</p> <p>40 CFR § 125.90(b) states, “Cooling water intake structures not subject to requirements under §§ 125.94 through 125.99 or subparts I or N of this part must meet requirements under section 316(b) of the CWA established by the Director on a case-by-case, best professional judgment (BPJ) basis [emphasis added].”</p> <p>“Exhibit I-3—Applicable Requirements of Today’s Rule for Existing Facilities” in the preamble to the federal rule states 40 CFR § 125.90(b) applies to “Other existing facility with a DIF of 2 mgd or smaller or that has an intake structure that withdraws less than 25 percent of the water for cooling purposes on an actual intake flow basis.” If the permittee was subject to 40 CFR § 125.90(b), then EPD would have to include interim BTA standards. Since the permittee is not subject to 40 CFR § 125.90(b), EPD does not have to establish interim BTA requirements.</p>
<p>In considering renewal of the Merrimack NPDES permit, EPA (the permitting authority for Merrimack) recently concluded that the cost of retrofitting hybrid wet-dry mechanical draft cooling towers and operating in a closed-cycle mode year-round “would be significant but economically achievable for [Merrimack]” at an “after-tax cash flow cost . . . of \$111.8 million, with an annual equivalent cost of \$9.0 million (at 5.3 percent over 21 years) on an after-tax, nominal dollar basis (i.e., including the effects of inflation).” EPA found this cost not only affordable, but reasonable in relation to the major reduction in</p>	<p>Comment noted. EPD has not evaluated the Merrimack NPDES application, permit or Fact Sheet. EPD will evaluate the submitted information provided by the permittee and make the appropriate permitting decisions based on that information in accordance with the applicable rules.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>environmental harm that would be achieved by reducing intake and thermal discharge by 95%.44</p>	
<p><u>Closed Cycle Cooling</u></p> <ol style="list-style-type: none"> 1. In finalizing the permit, EPD should require closed-cycle, recirculating cooling towers as the Best Technology Available (“BTA”). Recirculating cooling towers are the Best Technology Available for addressing impingement and entrainment at Plant Hammond. 2. As you know, according to Georgia Power Co.’s own study, the facility may cause the death of between 30,000 and 60,000 fish annually because of the plant’s massive water withdrawal. Installing cooling towers at the plant would eliminate these deaths and the corresponding hot water discharge. 3. The final permit must also require cooling towers to stop enormous damage to the Coosa River caused by Hammond’s Antiquated “once-through” system. 4. By requiring Georgia Power to install a cooling tower, EPD may cost them more money, but will not bankrupt Southern Company. 	<p>In the final rule, 40 CFR § 125 for Cooling Water Intake Structures, EPA did not consider closed cycle cooling along with cooling towers to be BTA. The BTA determination will be established based on the information provided by the permittee and EPD’s evaluation. A BTA determination cannot be made by EPD until the required information has been submitted and evaluated in accordance with the applicable rules.</p> <p>40 CFR § 125 provides several BTA options and the permittee may choose one (1) of the seven (7) approved BTA options. EPD cannot require closed-cycle recirculating cooling towers.</p>
<p><u>Submission of Additional Information for Sections 122.21(f)(2) and 122.21(f)(8).</u></p> <ol style="list-style-type: none"> 1. EPD should require Georgia Power to correct and supplement data submitted pursuant to Sections 122.21(f)(2) and 122.21(f)(8). 2. Georgia Power does not request an alternate compliance schedule for Section 122.21(f)(8) regarding the plant’s operational status. Thus, this 	<p>The permittee has submitted additional information in accordance with the Sections 122.21(f)(2) and 122.21(f)(8).</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>information should be included in the application.</p> <p>The 316(b) rule submission addressing source water data is inaccurate and incomplete. In its application addendum addressing 316(b) rule compliance, Georgia Power includes a brief narrative paragraph to respond to source water data information requirements under Section 122.21(r)(2). According to the source water narrative, "Plant Hammond withdraws water for cooling and other purposes from Weiss Lake, a 30,200-acre multi-purpose impoundment of the Coosa River formed by Weiss Dam located in northeast Alabama." Permit Application at 316(b) Addendum, at 1.56 This is incorrect, and in fact, contradicts other representations made in the permit application</p>	<p>EPD issued a surface water withdrawal permit to the permittee on April 26, 2011. The permit allows them to withdraw 655 MGD of water from the Coosa River in the Coosa River Basin, in the State of Georgia; which is also the headwaters of Lake Weiss in the State of Alabama.</p>
<p>EPD must include baseline monitoring and reporting requirements in the permit. <u>EPD must include cooling water intake structure monitoring requirements</u> in the Draft Permit. 40 C.F.R. § 125.98(b)(3). At a minimum, EPD should require weekly visual monitoring or use of remote monitoring devices when the water intake is in operation. 40 C.F.R. § 125.96(e). According to Georgia Power's proposed alternate schedule, the Company will provide EPD with monthly progress updates for its 316(b) rule compliance starting December 3, 2015. EPD should make this a permit requirement by amending the Draft Permit to require submission of these monthly progress reports.</p>	<p>Upon submittal of the required information, completion of EPD's evaluation and BTA determination, EPD will establish an appropriate monitoring schedule to be included in the next permit.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p align="center"><u>Flue Gas Desulfurization & Bottom and Fly Ash Transport Water</u></p> <ol style="list-style-type: none"> 1. Federal Regulations require that EPD must limit toxic discharges as soon as possible, yet in the permit EPD allows Georgia Power almost six years, December 31st 2023, to comply with these mandatory restrictions on toxic discharges. Requesting compressed timeline. 2. The Draft Permit improperly allows Plant Hammond to use the maximum time allowable, 80+ months from today's date, to comply with updated requirements contained in EPA's updated Effluent Limitation Guidelines ("ELG") for steam electric power plants. 3. The timeline is wholly unsupported and fails to provide for expeditious compliance as required. Accordingly, EPD should revise the Draft Permit to require Plant Hammond to eliminate all discharges of ash transport waters and meet new effluent limits on toxic pollutants in FGD by the November 2018 compliance deadline and in no event later than April 2019. 4. EPD should require Plant Hammond to comply with a zero discharge limit for bottom ash transport water by no later than April 2019. 	<p>At the time the draft permit was placed on public notice, February 15, 2017, the Federal ELG required the permitting authority to include an implementation schedule with a deadline of April 2019 or as soon as possible.</p> <p>In setting the "as soon as possible" compliance deadline, EPD is authorized to consider the following factors: (a) Time to expeditiously plan (including to raise capital), design, procure, and install equipment to comply with the requirements of the final rule; (b) Changes being made or planned at the plant in response to greenhouse gas regulations for new or existing fossil fuel-fired power plants under the Clean Air Act, as well as regulations for the disposal of coal combustion residuals under subtitle D of the Resource Conservation and Recovery Act; (c) For FGD wastewater requirements only, an initial commissioning period to optimize the installed equipment; and (d) Other factors as appropriate."</p> <p>As stated in the draft permit's Fact Sheet, EPD evaluated the submitted information and determined that the December 31, 2023 deadline would be appropriate. On April 25, 2017, EPA published a Federal Register Notice of the stay of the compliance deadlines, in other words the compliance dates of April 2019 or as soon as possible or December 31, 2023 are no longer required by the Federal ELG. On September 18, 2017, EPA withdrew the stay of the compliance dates and simultaneously postponed the earliest compliance dates for bottom ash transport water and the FGD wastewater in the 2015 Rule for a period of two years, whereas the revised earliest compliance date has been changed from November 1, 2018 to November 1, 2020. See 82 Fed. Reg. 43494.</p>

**Public Comments and EPPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPPD RESPONSE
	<p>On August 11, 2017, EPA announced a decision to conduct a rulemaking to potentially revise the effluent limitations for existing sources in the 2015 rule that applies to bottom ash transport water and FGD wastewater.</p> <p>Upon the promulgation of the new 40 CFR § 423 rule, EPPD may modify the permit to address the requirements of the revised sections of the rule.</p> <p>EPPD believes the schedule in the draft permit is justifiable and in an effort to ensure the permittee is able to comply with the rest of the ELG, the schedule will remain in the proposed permit even though there is no regulatory requirement for the schedule of implementation. EPPD has included re-opener clause specific to the deadlines related to FGD wastewater, fly ash transport water and bottom ash transport water once EPA promulgates a new rule.</p> <p>The following language has been included in the draft permit: “Upon completion of the reconsideration process and promulgation of a new 40 CFR §423 rule, EPPD may modify the permit to address the requirements of the revised sections of the rule. Additionally, if the revised rule modifies the compliance dates past December 31, 2023, the implementation schedule and deadlines in Part I.A.5.a, Part I.A.5.b, Part III.C.5 and Part III.C.7 may no longer be applicable and EPPD will reevaluate based on the new rule.”</p>
<p>As explained next and in the attached report by Dr. Ranajit Sahu—an expert with over twenty-five years of experience in environmental, mechanical, and chemical engineering, including extensive work regarding coal-fired power plants—Plant Hammond can achieve compliance with the ELGs by April 2019 at the latest, even assuming no</p>	<p>EPPD appreciates Dr. Sahu’s report and we agree that if you only evaluate the planning, design and construction of the fly ash transport projects, then the permittee should be able to meet the April 2019 deadline (of which is no longer the deadline, as of August 14, 2017, due to the stay of the implementation dates in the Federal ELG).</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>preparations had been undertaken, which Georgia Power’s admissions clearly contradicts. Ranajit Sahu, Technical Assessment of the Feasibility of Timely Compliance with FGD Wastewater and Ash Transport Effluent Limitations Guidelines at Plant Hammond (Apr. 2017)</p>	<p>However it appears that Dr. Sahu only evaluated the physical feasibility of the FGD Wastewater and Ash Transport projects and failed to evaluate all of available information. The Rule requires EPD to evaluate all available information including: a) Time to expeditiously plan (including to raise capital), design, procure, and install equipment to comply with the requirements of the final rule; (b) Changes being made or planned at the plant in response to greenhouse gas regulations for new or existing fossil fuel-fired power plants under the Clean Air Act, as well as regulations for the disposal of coal combustion residuals under subtitle D of the Resource Conservation and Recovery Act; (c) For FGD wastewater requirements only, an initial commissioning period to optimize the installed equipment; and (d) Other factors as appropriate.”</p> <p>EPD evaluated the appropriate information and include an implementation schedule in the draft permit.</p>
<p>The “submitted information” from Georgia Power contains no meaningful support for the December 31, 2023 extension or plant-specific analysis and offers only generic statements. The information in the permitting record is insufficient to justify the proposed extension and to explain why allowing additional time to meet the limitations is appropriate at Plant Hammond.</p>	<p>As stated in the Fact Sheet, EPD has reviewed the submitted information provided with the permit application and additional supporting documentation. The permittee has demonstrated and provided the necessary information to justify the proposed December 31, 2023 deadline.</p>
<p>Southern Company’s own case studies show that conversion to dry bottom ash handling using a submerged flight conveyor, the technology cited by Georgia Power in its permit renewal application, can be completed in just 27 to 33 months.</p>	<p>This comment has been taken in parts from a comment provided to EPA during the Steam Electric rule making process. The permittee also provided comments during the rule making process and noted that it would take longer to retrofit and install multiple units to consistently comply with the rules.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>1. Despite the evidence demonstrating that Plant Hammond is already capable of meeting the standard: "Fly ash can be transported out of the plant via a dry ash collection system or by wet sluicing. When utilizing the dry ash system, the fly ash is transported to the dry ash silo where it is loaded onto trucks and hauled to Ash Pond to the Huffaker Road facility. When the fly ash is sluiced wet, it goes to Ash Pond 2.</p> <p>2. As EPA explains, "in cases where the plant is already operating the BAT basis for a specific wastestream (e.g., dry fly ash handling system). . . it would not generally be appropriate to allow additional time beyond that date." Plant Hammond already has BAT for fly ash transport water and must comply with the standard and eliminate harmful discharges immediately.</p>	<p>A fly ash dry handling system is already in place for part of the permittees facility; however the system was not originally designed to manage all of the wet ash from the facility. The draft permit requires the permittee to meet the implementation dates to achieve BAT by December 31, 2023.</p>
<p><u>Coal Ash Pond Dewatering</u></p>	
<p>1. Importantly, none of the ash pond closure records were submitted as part of Georgia Power's NPDES permit application for Plant Hammond.</p> <p>2. EPD needs to address the dewatering of the coal ash ponds. There is no description of the plan for dewatering in the permit or how Georgia Power will limit the amount of toxins that are released during the dewatering process. Other Georgia Power permits have more descriptive and protective sections for dewatering.</p> <p>3. In applying for the issuance or renewal of a NPDES permit, an applicant must identify the operation contributing to the effluent for which discharge authorization is sought. Ga. Comp. R. & Regs. 391-3-6-.06(5)(a), (c); 40 C.F.R. §§ 122.21(e)(3), (f)(1), (g)(3), (g)(4), (g)(7). The applicant must additionally identify the proposed methods for treating</p>	<p>The submitted application does not include specific references to the dewatering of the coal ash ponds because at the time the application was submitted and the permit was being drafted, the permittee did not have the specific information to provide to EPD. The permittee has informed EPD of their intent to dewater the coal ash ponds during the term of the permit.</p> <p>As a result of the information provided, EPD has included a permit condition, Part III.C.6 specifically addressing the submittal of a Coal Ash Pond Dewatering Plan. The permit condition specifically details the components of the Plan. Additionally, in light of comments received for this permit and other draft permits with similar permit conditions, the components of the Plan have been revised in the proposed permit to include increased monitoring, draw down rates and increased notification</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>those discharges. Ga. Comp. R. & Regs. 391-3-6-.06(5)(a), (c); 40 C.F.R. § 122.21(g)(3). Georgia Power's application does not describe the type of operation that a future "dewatering plan" would contemplate: the complete draining of those ponds. Instead, the application merely identifies the same sort of operation that has been in place for decades – the passive treatment, by settling, of coal ash waste.</p> <p>4. The proposed discharges at issue here are only those identified in Georgia Power's NPDES permit application. The application does not identify or contemplate the complete pumping out of the coal ash ponds at Plant Hammond.</p>	<p>requirements.</p> <p>Upon approval, EPD will post the Coal Ash Pond Dewatering Plan to our website at the following address: https://epd.georgia.gov/coal-ash-pond-dewatering-plans</p>
<p>Harm associated with regular discharges from coal ash ponds could increase drastically with Georgia Power's planned coal ash pond dewatering.</p>	<p>EPD understands that when the coal ash ponds are being dewatered there may be a change in the effluent characterization provided on the application, hence EPD is proactively requiring the permittee to submit a Coal Ash Dewatering Plan, in Part III.C.6 of the draft permit, for review and approval to ensure the effluent discharged is not significantly changed and will not cause or contribute to instream WQS violations.</p>
<p><u>Request Public Notice & Permit Modification</u></p> <p>1. The Draft Permit improperly allows Georgia Power to drain Plant Hammond's ash impoundments without any modification of the permit, bypassing requirements for public notice and comment and avoiding an opportunity to strengthen the permit to properly mitigate impact of discharges caused by any dewatering activities. EPD must revise the Draft Permit to require permit modification subject to public notice and comment prior authorizing the complete drawdown and draining of Plant Hammond's coal ash impoundments.</p>	<p>EPD has evaluated the submitted permit application and supporting documentation and proposed a permit with appropriate effluent limits based on applicable Federal and State Regulations and the reasonable potential analysis conducted on the pollutants of concern submitted in the Form 2C permit application and other supporting documents ensuring the permit is legal, enforceable and protective of human health and the environment. Upon issuance he permittee will be authorized to discharge treated wastewater from the permitted outfalls.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>2. Part III.C.6 of the Draft Permit improperly proposes to give Georgia Power advance authorization to discharge all of its impounded, coal ash-polluted wastewater—the accumulation of decades of on-site coal ash disposal—into the Coosa River at some unspecified future date.</p> <p>3. Alterations, additions and changes in disposal practices as will be necessary to fully dewater the ponds are specifically enumerated as cause for major permit modification, Part III.C.6 of the Draft Permit cannot authorize EPD to determine unilaterally whether to “open the permit to include applicable effluent limits to protect the receiving water body.” Such a provision violates 40 C.F.R. § 122.62(a)(1) and must be stricken for that reason. See Ga. Comp. R. & Regs. 391-3-6-.06(12)(b) (requiring that permit provisions must be “in accordance with the provisions of the Federal Regulations”).</p>	<p>EPD agrees that 40 CFR § 122.62 allows the director to determine if cause exists to modify or revoke a permit, and that in particular § 122.62(a)(1) states that a cause for modification may include “material and substantial alterations or additions to the permitted facility or activity” (emphasis added). See also Ga. Comp. R. & Regs. r. 391-3-6-.06(12)(b).</p> <p>Part III.C.6 of the draft permit addresses the potential for dewatering of the coal ash ponds on site, including a permit condition that mandates that the permittee submit to EPD a Coal Ash Dewatering Plan no fewer than ninety (90) days before beginning dewatering activities. EPD will review and approve any such Coal Ash Dewatering Plan, and will post the approved plan on EPD’s website for ease of access by the public.</p> <p>Accordingly, the draft permit already addresses the potential for dewatering of the onsite coal ash ponds. EPD therefore disagrees that dewatering of the coal ash ponds included in the permit are a “material and substantial” alteration to the permitted activities, justifying a cause to modify the permit prior to coal ash pond dewatering. If, however, during the permit term EPD ever believes cause exists to modify the permit, EPD may modify the permit in accordance with all applicable laws and rules.</p>
<p>1. Part III.C.6 of the draft Permit must be amended by striking the entire sentence appearing after subsection (g) which currently reads: “EPD will evaluate the submitted data and determine if there is a reasonable potential for the discharge to cause or contribute to a violation of the instream water quality standards and if necessary, may open the permit to include applicable effluent limits to protect the receiving water body.” In place of this language, Part III.C.6 of the draft Permit should be amended by inserting the following sentence to read as follows</p>	<p>Comment noted.</p> <p>EPD does not believe this language is necessary and has not included the suggested language.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>(hereinafter, the “Dewatering Condition”): EPD will evaluate the submitted data and act in accordance with the requirements of EPA’s regulations for permit modification under 40 C.F.R. § 122.62(a), to develop appropriate effluent limitations and other conditions applicable to discharges comprising coal ash pond dewatering. EPD will develop appropriate water-quality based effluent limitations or technology-based effluent limitations in accordance with 33 U.S.C. § 1311(b)(1)(C), 40 C.F.R. § 125.3(g); Ga. Comp. R. & Regs. 391-3-6-.06(4)(a)(1), (a)(10), (d). No discharge of effluent associated with the large-scale decanting or dewatering of the ash ponds for closure purposes shall be authorized under this Permit prior to modification of this Permit in accordance with this Paragraph 6.</p> <p>2. Part II.A.1.c of the draft Permit must be amended by inserting the following language underlined below to read: Following notice in paragraph a. or b. of this condition, the permit may be modified in accordance with 40 C.F.R. § 122.62 and any other applicable requirements imposed by law.</p>	
<p>1. The draft permit’s effluent limitations are not sufficient to cover future dewatering discharges, which result from a fundamentally different activity than the passive, gravity-based settling treatment contemplated by the draft permit and application.</p> <p>2. Georgia Power’s permit application fails to identify coal ash pond dewatering as a new and distinct activity, requiring effluent characterization.</p>	<p>Coal ash pond dewatering is not a new and distinct activity nor is it fundamentally different. Section 8.3.8 of the “Technical Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category,” EPA-821-R-15-007, dated September 2015, states the following: “For purposes of the BAT limitations in this rule, EPA uses the term “legacy wastewater” to refer to FGD wastewater, fly ash transport water, bottom ash transport water, FGMC wastewater, or gasification waste water generated prior to the date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023 (see Section 8.3.7). Under this rule, legacy wastewater must comply with specific BAT limitations, which EPA is setting equal to the previously promulgated BPT limitations on TSS in the discharge of fly ash transport</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p><u>EPA Region IV Comments to North Carolina's Department of Natural Resources</u></p> <p>EPA Region IV has addressed the material distinction between discharge of coal ash pond effluent stemming from ordinary passive, gravity-based settling wastewater treatment methods versus the large scale decanting of coal ash ponds in connection with Duke Energy's request to decant 14 ponds. EPA informed North Carolina's Department of Natural Resources ("DENR") that Duke's request was unacceptable under the Clean Water Act, absent adherence with the applicable regulatory controls. EPA reasoned that large scale decanting represents a major change in discharge activity as compared with discharges from the upper levels of these coal ash ponds. The mechanical draining of ash ponds circumvents the treatment system envisioned by the NPDES permit, including the methods of wastewater treatment identified in the Hammond NPDES Application at 1a – 4.</p>	<p>water, bottom ash transport water, and low volume waste sources.”</p> <p>The complete dewatering of the coal ash ponds could potentially occur without reopening the permit, as long as the permittee complies with the NPDES permit.</p> <p>In accordance with EPD's Memorandum of Agreement with EPA Region IV, signed in 2007 EPD transmitted the draft permit and supporting documentation to EPA for review. EPA provided comments for the draft permit, provided below in the “EPD Response to Comments – EPA Comments” section.</p> <p>EPA's comments did not address a purported material distinction between discharge of coal ash pond effluent stemming from ordinary passive, gravity-based settling wastewater treatment methods versus decanting or dewatering.</p> <p>The following is language from the Preamble to 40 CFR § 423 regarding the applicable TBELS for the discharge of “legacy wastewater;”</p> <p>“Under this rule, legacy wastewater must comply with specific BAT limitations, which EPA is setting equal to the previously promulgated BPT limitations on TSS in the discharge of fly ash transport water, bottom ash transport water, and low volume waste sources.”</p> <p>Additionally, in Section 8.3.8 of the “Technical Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category,” EPA-821-R-15-007, dated September 2015, it states the following “For purposes of the BAT</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
	<p>limitations in this rule, EPA uses the term “legacy wastewater” to refer to FGD wastewater, fly ash transport water, bottom ash transport water, FGMC wastewater, or gasification waste water generated prior to the date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023 (see Section 8.3.7). Under this rule, legacy wastewater must comply with specific BAT limitations, which EPA is setting equal to the previously promulgated BPT limitations on TSS in the discharge of fly ash transport water, bottom ash transport water, and low volume waste sources.”</p> <p>Since the draft permit was placed on public notice, EPA has subsequently announced its decision to reconsider the final rule’s effective date of November 1, 2018 and administratively stay compliance dates that have not yet passed. See EPA April 12, 2017 Notice, delay of compliance deadlines. Docket ID No. EPA-HQ-OW-2009-0819, RIN 2040-AF14. The stay of the compliance dates does not affect EPA’s BAT determination for discharge of treated wastewater from coal ash ponds.</p> <p>See the Fact Sheet for further discussions regarding the EPA established BAT technology based effluent limit for the discharge of treated legacy wastewater from the coal ash ponds.</p> <p>The draft permit includes the applicable TBELs required under 40 CFR § 423.</p>
<p><u>Comparison of Coal Ash Pond Dewatering Activities In the State</u></p> <p>Based on information obtained to date, it appears that the concentrations of toxic pollutants in the dewatering effluent at other Georgia Power plants are materially higher than those disclosed on Georgia Power’s NPDES permit applications for those facilities. For instance, based on dewatering discharge monitoring records reported since December 2016,</p>	<p>EPD approved the Coal Ash Dewatering Plans for GA Power Company’s Plant McDonough-Atkinson and Plant McManus on January 10, 2017.</p> <p>Georgia Power has commenced dewatering of the ash ponds at Plant McManus in Glynn County and Plant McDonough-Atkinson in Cobb</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>concentrations of Chromium were detected in the dewatering effluent from Georgia Power's Plant McDonough at 14 ug/L, nearly three times the effluent characterization disclosed in the McDonough NPDES Form 3510-2C permit application. Likewise, concentrations of Selenium were detected in the pond dewatering effluent from the McDonough ash pond at 13 ug/l and 16 ug/l, thirteen and sixteen times the concentration identified in Georgia Power's effluent characterization for Plant McDonough.</p>	<p>County for the purpose of closing them.</p> <p>For these facilities, Georgia Power provided advance notice to EPD of the dewatering activities in accordance with their NPDES permits and submitted detailed plans to EPD describing the water treatment controls, processes, and monitoring and reporting practices implemented to protect water quality.</p> <p>The approved Plans are available on our website at: https://epd.georgia.gov/coal-ash-pond-dewatering-plans</p> <p>EPD is reviewing the monitoring data as we receive it and so far the data confirms that water quality is being protected. EPD understands there are concerns about some of the higher concentrations of pollutants being discharged and reported to EPD.</p> <p>EPD has evaluated the submitted data and determined that the increased level of pollutants does not cause or contribute to instream WQS violations; hence the increased level of pollutants discharged has not triggered the reasonable potential for an effluent limit in the NPDES permit.</p> <p>If during the dewatering activities EPD determines that a reasonable potential exists, EPD will take appropriate actions to ensure the discharge does not cause or contribute to WQ violations.</p>

**Public Comments and EPPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPPD RESPONSE
<p><u>Request to Establish TBELs</u></p> <p>1. Draft Permit fails to establish TBELs for coal ash pond dewatering activities. In an apparent attempt to address the future, substantially different dewatering wastestreams that would be released by the complete pumping out of the Plant Hammond coal ash ponds, Part III.C.6 of the Draft Permit calls for the permittee to submit a Coal Ash Pond Dewatering Plan outlining materially different “wastewater treatment system components” and “process controls being installed” to treat these future dewatering wastestreams. Part III.C.6.a– b. The approach envisioned by such a provision is contrary to both the letter and intent of the Clean Water Act and attendant regulations, which require imposing specific TBELs within a permit, and prior to authorizing such discharges.</p> <p>2. EPPD’ [has an} obligation to make site-specific determinations of the best available technology for treating Plant Hammond’s discharges. It would be arbitrary and capricious, and contrary to the Clean Water Act for EPPD to fail to use its best professional judgement to set BAT consistent TBELs in Plant Hammond’s permit.</p> <p>3. The 1982 ELGs do not apply to coal ash pond dewatering discharges. As EPA Region 1 recently explained in amending TBELs in a NPDES permit governing coal ash pond discharges, the 1982 ELGs “established effluent limitations based on the best practicable control technology currently available (BPT) standard for the ‘catch-all’ category of ‘low-volume wastes.’” Because discharges associated with draining the ponds are different in both volume and kind, they require EPPD to formulate TBELs specific to that activity.</p> <p>Because the 1982 ELGs do not envision the discharge of these settled and removed wastes, and therefore do not impose national effluent</p>	<p>The following is language from the Preamble to 40 CFR Part § 423 regarding the applicable TBELs for the discharge of “legacy wastewater”</p> <p>“Under this rule, legacy wastewater must comply with specific BAT limitations, which EPA is setting equal to the previously promulgated BPT limitations on TSS in the discharge of fly ash transport water, bottom ash transport water, and low volume waste sources.”</p> <p>Additionally, in Section 8.3.8 of the “Technical Development Document for Effluent Limitations Guidelines and Standards for the Steam Electric Power Generating Point Source Category,” EPA-821-R-15-007, dated September 2015, it states the following: “For purposes of the BAT limitations in this rule, EPA uses the term “legacy wastewater” to refer to FGD wastewater, fly ash transport water, bottom ash transport water, FGMW wastewater, or gasification waste water generated prior to the date determined by the permitting authority that is as soon as possible beginning November 1, 2018, but no later than December 31, 2023 (see Section 8.3.7). Under this rule, legacy wastewater must comply with specific BAT limitations, which EPA is setting equal to the previously promulgated BPT limitations on TSS in the discharge of fly ash transport water, bottom ash transport water, and low volume waste sources.”</p> <p>Since the draft permit was placed on public notice, EPA has subsequently announced its decision to reconsider the final rule’s effective date of November 1, 2018 and administratively stay compliance dates that have not yet passed. See EPA April 12, 2017 Notice, delay of compliance deadlines. Docket ID No. EPA-HQ-OW-2009-0819, RIN 2040-AF14. The stay of the compliance dates does not affect EPA’s BAT determination for discharge of treated wastewater from coal ash ponds.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>standards for such wastestreams, it is incumbent upon EPD to develop applicable TBELs either now or as part of a future permit modification.</p> <p>4. The law is clear that separate TBELs must be developed and imposed on proposed dewatering discharges prior to authorizing their release. The Clean Water Act requires that TBELs “shall be established . . . for solids, sludges, filter backwash, and other pollutants removed in the course of treatment or control of wastewaters in the same manner as for other pollutants.” 40 C.F.R. § 125.3(g) (emphasis added); Ga. Comp. R. & Regs. 391-3-6-.06(4)(a)(1), (a)(10), (d).</p>	<p>See the Fact Sheet for further discussions regarding the EPA established BAT technology based effluent limit for the discharge of treated legacy wastewater from the coal ash ponds.</p> <p>The draft permit includes the applicable TBELs required under 40 CFR § 423.</p>
<p>1. The Draft Permit erroneously omits the mandatory TBEL analysis from PartIII.C.6 by only addressing water quality impacts stemming from Coal Ash Pond Dewatering Plan.</p> <p>2. Here, the final sentence within Part III.C.6 of the Draft Permit erroneously omits EPD’s mandatory determination of appropriate TBELs under the BAT standard using its BPI, focusing solely upon water quality based impacts stemming from future dewatering discharges. (See Draft Permit, p. 28) (“EPD will evaluate the submitted data and determine if there is a reasonable potential for the discharge to cause or contribute to a violation of the instream water quality standards . . .”). The WQBEL-only inquiry envisioned by Part III.C.6 is improper, and therefore cannot authorize the discharge of pollutants stemming from the large-scale drawdown, release and dewatering of coal ash ponds at Plant Hammond at some unknown future date.</p>	<p>As stated above in the “EPD Response,” EPA developed a BAT TBEL for the discharge of “legacy wastewater” and it has been applied in the proposed permit in accordance with the Rules. The language in Part III.C.6 of the permit does solely focus upon WQBELs to ensure the treated discharge from the coal ash ponds does not cause or contribute to instream violations of the WQS</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>1. EPD should require Georgia Power to resubmit its effluent characterization for Outfalls 03, 04, and 10 because the data provided does not reflect the discharges.</p> <p>2. Georgia Power's permit application improperly characterizes effluent, which in turn causes EPD's reasonable potential analyses to be deficient. In August 2016, Georgia Power submitted updated versions of EPA Form 2C for Outfalls 03, 04, 05, and 10 in response to a verbal request from EPD. Addendum to Hammond NPDES Permit Application (Aug. 12, 2016) ("Permit Application Addendum"). Outfalls 03, 04, and 10 are discharge points for emergency overflows for Plant Hammond's ash ponds. The forms purport to characterize the effluent present in coal ash pond discharges. Georgia Power reports the same values for each of the outfalls. On each of the three forms, Georgia Power states at the bottom of the page, "NOTE - Effluent characteristics based upon a storm water dilution factor of 2.1."119 No other information in the permit file provides details on this note. The note appears to mean that Georgia Power applied a dilution factor to effluent samples before entering pollutant concentrations into the form submitted to EPD.</p>	<p>The permittee is required to characterize the effluent discharge and submit the information on the permit application. The permittee provided effluent data characterizing the effluent discharge for outfalls 03, 04 and 10. Since the permittee was unable to collect an effluent sample due to the lack of a discharge from the outfall, the permittee used best professional judgement, as allowed, to characterize the discharge from the outfalls. The permittee believes discharges from the emergency overflows will only occur during a precipitation related event; hence the permittee believes it is appropriate to apply a dilution factor of 2:1.</p> <p>EPD finds the self-imposed dilution factor to be uncommon; however it is the responsibility of the permittee to provide representative effluent data on the application and EPD's responsibility to evaluate the provided data and establish legal, enforceable and protective permits.</p> <p>To ensure EPD's evaluation of the permit application and supporting documentation is preserved, language has been added to specify the conditions when it will be appropriate to discharge from the emergency ash ponds (outfall nos. 03, 04 and 10). EPD believes there are several possible scenarios of which there should be discharges from the emergency outfalls, (1) a rainfall event that meets the 100 year, 24 hour storm event criteria, (2) several continuous or intermittent days of rainfall that may cause harm or jeopardize the stability of the impoundments and (3) unforeseen catastrophic precipitation weather events.</p> <p>EPD has included the following language in the proposed permit,</p> <p>"Discharges from this outfall shall consist of emergency overflows only due to precipitation related events. There shall be no discharge from the outfall except when a precipitation emergency presents, such as excessive rainfall that meets the 100 year, 24 hour storm water criteria, several continuous or intermittent days of excessive rainfall that may</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>Relatedly, in its effluent characterization form for Outfall 1, Georgia Power does not report the temperature of the cooling water discharge at the point of discharge. Instead, it reports it at the end of its mixing zone. The effluent itself is not characterized in the application.</p>	<p>adversely impact the stability of the impoundments or unforeseen catastrophic precipitation weather events.”</p> <p>Additionally, EPD has added monitoring requirements for total dissolved solids, copper, total, selenium, total, arsenic, total, mercury, total, chromium, total, lead, total, cadmium, zinc, total, nickel, total and hardness, applicable only when there is a discharge from the emergency outfalls.</p>
<p>EPD’s reasonable potential analyses appear to contain several errors. In the analysis for Outfall 03, the value for cadmium is marked as zero. For other coal ash pond outfalls, EPD uses the reported effluent concentration of 1.2 µg/L.</p>	<p>The permittee has submitted updated information characterizing the discharge for temperature for outfall no.01.</p>
<p>Similarly, there are measurable amounts of mercury in Outfalls 01, 03, 04, and 10. Yet, EPD appears to have entered zero into its reasonable potential analysis as the concentration of this toxin. EPD should update its analyses to reflect the concentrations of each pollutant found in Plant Hammond’s discharges.</p>	<p>EPD reviewed the RPA based on comments received. As provided in the draft permit Fact Sheet, the input value for cadmium was 1.2 µg/L not zero. Additionally, the input value for outfall nos. 03, 04, and 10 for mercury has also been reviewed. It appears that due to the width of the column in the spreadsheet, the input value appears as 0.0 µg/L, however when the width of the column in the spreadsheet is expanded one can see the actual input value used during the RPA evaluation was 0.0145 µg/L.</p>
<p>EPD conducted a reasonable potential analysis for ten metals: arsenic, cadmium, chromium III, chromium VI, copper, lead, mercury, nickel, zinc, and selenium. EPD did not conduct a reasonable potential analysis for thallium even though it was reported as present in coal ash pond</p>	<p>EPD does not believe that thallium is a pollutant of concern.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>effluents at a concentration of 1.2 µg/L. Thallium is listed as a toxic priority pollutant pursuant to Section 307(a)(1) of the Clean Water Act and is subject to an EPD established water quality standard. EPD should conduct a reasonable potential analysis for thallium to ensure water quality standards are not jeopardized.</p>	
<p><u>Typographical Error</u></p> <p>Finally, Part III.C.6.e of the Draft Permit should be amended to correct a typographical error, striking internal reference to Part III.C.7.d and replacing the stricken reference with Part III.C.6.d.</p>	<p>Comment noted and the reference to Part III.C.7.d has been corrected in the proposed permit.</p>
<p align="center"><u>Thermal Pollution, Mixing Zone and Modeling</u></p>	
<ol style="list-style-type: none"> 1. Plant Hammond is the cause of ongoing temperature impairment of the river, as well as a leading contributor to its impairment for dissolved oxygen. 2. Plant Hammond also does enormous damage to the Coosa and aquatic life by withdrawing huge quantities of water for cooling from the river, running it through the system, and then discharging the hot water back to the river. 3. Unfortunately for a river so blessed with aquatic life, and so beloved by fishermen and other recreational users, the Coosa River is currently not meeting water quality standards for those uses. 	<p>Coosa River from Beach Creek to the Stateline is listed as impaired or temperature and DO on the approved 2014 list; however, the segment is only listed for temperature on the draft 2016 Impaired Water List. The water quality modeling performed to develop Plant Hammond's permit limits shows that the river will be in compliance with both the 90°F and 5°F criteria. Therefore the permit will address the temperature impairment.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>There is no evidence in the permit record that DNR Fisheries experts have been consulted with respect to Plant Hammond's thermal discharges, including during development of the Draft Permit.</p>	<p>The DNR Wildlife Resource Division is included on the EPD Public Notice mailing list and they did not provide any comments.</p>
<p><u>Mixing Zone</u></p> <p>The mixing zone has been in place for so long that the creation and substantiation of it are no longer apparent in the permit record. The current permit refers to it as the "defined mixing zone" but there is no definition of it in the permit or (that we could find) in the permit record, other than the frequently occurring description of its outer edge as occurring at River Mile 269.6.</p> <p>EPD should be using the modeling to define a reasonable and limited mixing zone, and not merely to continue the one already in place, which is not reasonably limited.</p>	<p>The "defined mixing zone" is based on field studies conducted by Dr. John Edinger and Dwight Evans in 1974 in a document entitled, "<i>Hydrothermal Regimes of the Coosa River in Relation to Plant Hammond.</i>"</p> <p>The GARIV-1 model used to determine the allowable heat load to the river assumes complete mix. To ensure compliance with the water quality standards at RM 269.6, instream temperature limits and compliance monitoring have been added to the proposed permit.</p>
<p>What are the legal requirements and duties of a mixing zone?</p>	<p>Chapter 391-3-6-.03 of the GA Rules, requires effluent releases to a stream be fully and homogeneously dispersed and mixed insofar as practical with the main flow by appropriate methods at the discharge point. Chapter 391-3-6 (10) of the GA Rules, allows for a reasonable and limited mixing zone on receipt of satisfactory evidence that such a zone is necessary and that it will not create an objectionable or damaging pollution conditions. The mixing zone shall provide protection from acute toxicity and ensure a zone of safe passage for aquatic organisms.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<ol style="list-style-type: none"> 1. What and where is the “mixing” zone for Plant Hammond? 2. How far does it extend upstream and downstream from the discharge? 3. What the record (such as it is) appears to show is that the mixing zone is defined as the entire width and depth of the river from the discharge point to river mile 269.6. 	<p>The mixing zone compliance sampling location at river mile (RM) 269.6 corresponds to the original location of the Highway 100 bridge. The bridge was subsequently moved ~25 ft upstream at some point after the original field studies were conducted. This mixing zone is based on field studies conducted by Dr. John Edinger and Dwight Evans in 1974.</p> <p>The Edinger study does not show that the temperature plume covers the entire width and depth of the river from the discharge to RM 269.6.</p>
<ol style="list-style-type: none"> 1. Does anyone know if this mixing zone creates a barrier for fish movement up or downstream? 2. Within its reach, the mixing zone has been documented to produce “destratification” of the river so that uniformly high temperatures exist at all depths—i.e., the complete overtaking of water quality, the opposite of complete mixing. This in turn can produce, and has produced, objectionable and damaging pollutions conditions within the mixing zone, including conditions lethal to fish and the river segment’s overall impairment for temperature. As DNR personnel have observed, the mixing zone can serve as both a barrier to fish movements, or during short-term fluctuations, a lethal trap. 	<p>EPD is unaware of any barrier created by the Plant Hammond discharge that prevents safe passage of aquatic life.</p> <p>The comment is unclear and contradicts itself. Uniform temperature at all depths is complete mix.</p>
<p>Is it acceptable to use the natural system as part of a treatment system?</p>	<p>The receiving water body is not being used to treat the discharge from Plant Hammond. Mixing zones are allowed by the Clean Water Act and it is recognized that in this zone the water quality standards are not met.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>EPD's model improperly treats the existing mixing zone as a fixed input. See Sept. 2016 WLA memo at 7 ("To allow for complete mixing of Plant Hammond's cooling water discharge with the receiving stream, the facility's instream temperature compliance point is located ~3000 feet downstream . . . For the heat loads given in the table above, the simulations predict that the maximum instream temperature will remain below 90°F at that location. The results also predict that the maximum temperature increase will remain below 5°F."). EPD should instead be using this permitting process to reconsider the appropriateness of the mixing zone, especially in light of the Coosa's persistent impairment for DO and temperature.</p>	<p>Coosa River from Beach Creek to the Stateline is listed as impaired or temperature and DO on the approved 2014 list however, the same waterbody reach is only listed for temperature on the draft 2016 Impaired Water List. The water quality modeling performed to develop Plant Hammond's permit limits does assume complete mix. The model indicates the river will be in compliance with both the 90°F and 5°F criteria. Therefore, the permit will address the temperature impairment.</p>
<p><u>Variance</u></p> <p>The mixing zone is a de facto variance, which EPD proposes to grant without complying with CWA requirements for variances.</p>	<p>Mixing zones are allowed by the Clean Water Act and it is recognized that in this zone the water quality standards are not met. The Georgia Rules and Regulations 391-3-6.03(10) allows for a reasonable and limited mixing zone on receipt of satisfactory evidence that such a zone is necessary and that it will not create an objectionable or damaging pollution conditions.</p>
<p><u>Anti-Backsliding</u></p> <ol style="list-style-type: none"> 1. The Draft Permit's proposed elimination of temperature limits based on state water quality standards violates the CWA's Anti-Backsliding Regulatory Provisions. 2. The Draft Permit proposes to eliminate the existing permit's 	<p>EPD does not believe the elimination of the temperature limits in the draft permit violates the CWA's Anti-Backsliding Regulatory Provisions because more restrictive effluent limits have been added to the permit to further restrict the discharge based on the river flow.</p>

**Public Comments and EPPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPPD RESPONSE
<p>temperature-based effluent limitations. Instead of having to demonstrate compliance with the 90°F and 5°F criteria on a weekly basis, Georgia Power would now only be required to take and “report” the temperature values twice per year.</p> <p>3. The proposed effluent limitations increase on the amount of hot water than can be discharged is appreciated, but the current draft permit does not provide enough assurance that these amounts will be observed. Requesting regular monitoring (weekly) and real-world data to validate the computer modeling.</p> <p>4. It does no good for EPPD to assert that its changes do not constitute backsliding because “the permit limits in this permit, which are more stringent, supersede the 2004 DO TMDL heat allocation.” Fact Sheet at 9. The 2004 DO TMDL limits were never incorporated into the existing permit, even though that was what EPPD, at the time, promised to do. See TMDL DO at 33, 42. The relevant limits for purposes of the anti-backsliding analysis are the ones the existing permit actually contains, and those indisputably are not based on a TMDL or WLA analysis.</p> <p>5. The proposed revisions would allow Georgia Power to substitute, for compliance demonstration purposes, an internal monitoring point for an external one. Georgia Power would now be permitted to demonstrate compliance solely on the basis of temperature monitoring within the plant boundary, as a function of the temperature difference entering and exiting the condenser. But internal monitoring—the monitoring of a wastestream at a location within the facility before discharge to waters of the United States—is generally not appropriate for determining compliance with water-quality based effluent limitations.”³⁰ And where it takes the place of instream monitoring for compliance demonstrations it is backsliding.</p>	<p>The water quality modeling performed to develop Plant Hammond’s wasteload allocation for the draft permit for temperature considered compliance with both the 90°F and 5°F criteria. The Riv1 model indicates that the river, as a whole, will meet the temperature standards at river mile 269.6, based on permitting the facility at the recommended thermal limitations.</p> <p>The temperature limits in the 2004 DO TMDL 2004 are based on minimum streamflows that are no longer agreed to. The new permit limits are based on new information including new minimum streamflows and water quality modeling.</p> <p>The draft permit supplements the current instream temperature monitoring/limitation with effluent limitations and additional monitoring, consistent with the NPDES requirements. The current permit only required instream temperature monitoring at the plant intake and river mile 269.6 downstream of the defined mixing zone to compute compliance with applicable water quality criteria using procedures contained in “Summary of Plant Hammond Coosa River – Weiss Reservoir Hydrothermal Analyses and Compliance Temperature Reporting Procedures.”</p> <p>The NPDES permitting program prescribes the monitoring of plant effluent to determine permit compliance. Water quality models were used to determine allowable levels of discharge from the facility that will not cause or contribute to violations applicable water quality criteria in the receiving stream.</p> <p>Additionally, the draft permit was transmitted to EPA Region IV in accordance with the 2007 Memorandum of Agreement, for review and comment. EPA did not have any comments regarding the removal of the temperature limits or concerns regarding anti-backsliding.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>The use of intake temperatures already above ambient conditions may produce false results, showing the facility to be in compliance with the 5°F change limitation when in fact it may not be. This appears to be why EPD now recommends against using measured intake temperature as a means to determine permit compliance. See Sept. 2016 WLA memo at 7 (citing “potential influence among the various intakes and discharges within close proximity to Plant Hammond.”).</p>	<p>However, due to comments received, EPD has retained the instream temperature limits of 90⁰ F and delta 5⁰F and compliance monitoring at RM 269.6. Monitoring will be conducted at several transects in the cross-section of the river.</p> <p>EPD agrees. In the proposed permit, EPD is requiring monitoring upstream of the intake structure to determine compliance with the delta 5° F WQC.</p>
<p>Here the proposed revisions do not meet Section 303(d)(4) because the relevant segment of the Coosa is a “nonattainment water”—it is impaired for both temperature and dissolved oxygen. In addition, Clean Water Act Section 402(o)(3) – the “safety clause” provision – provides an absolute backstop, prohibiting the relaxation of effluent limitations in all cases if the revised effluent limitation would result in violation of applicable water quality standards.</p>	<p>The water quality modeling performed to develop Plant Hammond’s wasteload allocation for temperature shows that the river will be in compliance with both the 90°F and 5°F criteria. The new 303(d)/TMDL Vision, encourages States to go straight to implementation if they feel an alternative method to a TMDL can fix the water quality issue. For this reason, the Coosa River is one of GA EPD priority waters.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p><u>New Thermal Limits & Modeling</u></p> <p>EPD's modeling underlying the proposed new thermal limits is flawed because it fails to rely on critical conditions. A review of EPD's modeling memoranda (the initial memorandum dated September 26, 2016, as well as two subsequent addenda dated November 9, 2016 and February 9, 2017.33 respectively) show that EPD has not used conservative assumptions</p>	<p>The modeling covers a wide range of flow rates that includes critical low flows, and limits the thermal load based on the streamflow. It also uses 3 years of variable meteorological conditions, 2001 and 2005 (dry years) and 2006 (wet year). The model predicts hourly absolute temperature and delta temperature values associated with the discharge and the most stringent hourly combination of temperature/delta temperature in a given month was applied to set the thermal limit for that entire month. This results in a conservative thermal limit since the other 700+ hours in the month may be well below the applicable temperature standard.</p>
<p>Modeling should not rely on the current unlawful mixing zone.</p>	<p>The mixing zone is not unlawful. A reasonable and limited mixing zone is acceptable on receipt of satisfactory evidence that such a zone is necessary and that it will not create an objectionable or damaging pollution conditions.</p>
<p>The model should rely on the most conservative set of flow data as well as account for the effects of climate change.</p>	<p>The modeling covers a wide range of flow rates that includes critical low flows below those given in Plan G of the US Army Corps of Engineers recent record of decision. It also uses 3 years of variable meteorological conditions, 2001 and 2005 (dry years) and 2006 (wet year).</p>
<p>The model uses minimum flow data from the "US Army Corps of Engineers recent record of decision to modify operations within the ACT basin"—specifically, the so-called "Plan G" adopted by the Corps. Sept. 2016 WLA Memo at 4. The Corps' decision is currently under challenge by the State of Alabama and other groups as part of the long-running "water wars." While the outcome of that litigation is uncertain, one</p>	<p>The modeling covers a wide range of flow rates that includes critical low flows below those given in Plan G of the US Army Corps of Engineers recent record of decision and limits the thermal load based on the receiving stream streamflow. The modeling and the draft permit include flowrates that are below the Plan G targets.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>possibility might be a requirement to provide additional flows to Alabama, which could result in reduced flows available to Plant Hammond for assimilating its thermal discharges. For that reason alone, the use of Plan G flow projections is neither a solid nor conservative assumption.</p>	
<p>EPD relies on the Plan G minimum flows in place of historical data. Commenters therefore recommend that where historical flow data yield a value lower than the Plan G flow data, that EPD use the former—especially for the months of June and July.</p> <p>Notably, EPD has already had to re-run its analysis because “actual gaged Coosa River flows during 2016 have been significantly lower than the monthly Plan G benchmarks.” WLA Addenda Memo (Nov. 9, 2016) (hereinafter, Nov. 2016 WLA Addenda”).</p>	<p>EPD did look at historic flow data, and the modeling covered a wide range of flow rates that included critical low flows below those given in Plan G of the US Army Corps of Engineers recent record of decision. The thermal load to the river is limited based on the receiving stream streamflow.</p>
<p>EPD should revise the modeling to account for the effects of climate change. Where appropriate, water quality modelers should consider alternate approaches to establishing critical low flow conditions that account for these climatic changes.”</p>	<p>The model uses 3 years of variable meteorological conditions, 2001 and 2005 (dry years) and 2006 (wet year) to take into account the effects of different climate patterns.</p>
<p>The modeling should use maximum cooling water flow rate rather than the average. A key variable in the model is the cooling water flow rate, which assesses the overall volume of heated discharge that Plant Hammond may add to the river at any given time. As noted previously, the Draft Permit is premised upon a maximum daily value for the final plant discharge of 620 MGD. Draft Permit at 4. Instead of this figure the model uses the “average cooling water flowrate as specified by GPC (548 MGD) along with a temperature that varied by month.” Sept. 2016</p>	<p>The measurement of BTU loading takes into account discharge flow and temperature. Utilizing a higher flowrate in the model would correspond with a lower temperature, but the BTU loading would remain constant.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>WLA Memo at 5. EPD should have instead used the maximum permitted flowrate (620 MGD), which would produce a more conservative assumption by reflecting critical, worst-case conditions. Alternatively, EPD should use different numbers for each month corresponding to actual discharge averages for that month (e.g. average July flow rates in order to calculate thermal limits for July discharges). An average based on the flowrates for all months is insufficiently protective of water quality.</p>	
<p>EPD must divulge the “new information and analysis” allegedly supporting its second WLA amendment. The record shows that EPD twice revisited its WLA analysis in the months leading up to the Draft Permit’s issuance. In each instance the Coosa River lost protections. Under the initial analysis, dated September 26, 2016, EPD recommended no thermal loading for stream flows below 1500 cfs during July or 1157 cfs for all other months. Sept. 2016 WLA Memo at 7. In other words, no heat loading under those conditions was judged necessary to meet water quality standards at the edge of the mixing zone. Remarkably, rather than use this information to tighten the proposed thermal limits, EPD now changed the analysis to permit July loading below 1500 cfs and loading in all other months below 1157 cfs. In fact, the revised limits permit thermal loading in all months at flows as low as 751 cfs. However, EPD made clear that thermal loading below that level would be prohibited. A proposed draft permit sent to Georgia Power in January 2017 included the following provision: “When stream flow is below 750 cfs thermal loading from the facility is prohibited.”</p>	<p>USGS gage data for 2016 showed that the minimum flow targets specified in Plan G were not always met. Therefore, EPD looked at critical low flows that were below those given in Plan G of the US Army Corps of Engineers recent record of decision. In addition, EPD found that the initial requirement prohibiting thermal loading below 1500 cfs and 1157 cfs was an error.</p>
<p>Two months later, in the face of what one might presume was pushback from Georgia Power, EPD revisited its analysis for a second time. Again citing “new information and analysis” EPD now provided recommended thermal limits for flows ranging from 501 cfs to 750 cfs. WLA Addenda</p>	<p>EPD found that the initial requirement limiting thermal loading below 1500 cfs and 1157 cfs was an error.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>Memo at 1 (Feb. 9, 2017) (hereinafter, “Feb. 2017 WLA Addenda”). Presumably thermal loading at flows below 501 cfs is prohibited, but notably, the Draft Permit does not state that. The February 9th WLA amendment contains absolutely no description of the “new information and analysis” allegedly supporting this second change to the wasteload allocation.</p> <p>EPD should restore the original proposed prohibition on thermal loading below 1500 cfs in July and 1157 cfs in all other months.</p>	<p>USGS gage data for 2016 showed that the minimum flow targets specified in Plan G were not always met. Therefore, EPD look at critical low flows that were below those given in Plan G of the US Army Corps of Engineers recent record of decision. In addition, EPD found that the initial requirement prohibiting thermal loading below 1500 cfs and 1157 cfs was an error.</p>
<p><u>GA Power Company Comments</u></p>	
<p>The 316(b) rules allow Georgia Power to request that EPD “establish an alternate schedule for the submission of the information required in 40 CFR § 122.21(r)”.⁶ Section 122.21(r) sets forth the application requirements for facilities with cooling water intake structures. EPD must establish an alternate schedule for submission of the required information if the owner or operator of the facility shows that it could not develop the required information by the applicable date for submission. As Georgia Power requested, the Draft Permit provides an alternate schedule.</p>	<p>EPD received the following statement and information from the permittee. “The Company wishes to supplement the record by providing additional explanation for the alternate schedule. As noted above, under 40 C.P.R. § 125.95(a)(2), a facility whose currently effective permit expires prior to July 14, 2018 may request an alternate schedule for the submission of information required under 40 C.P.R. § 122.21(r)-Application Requirements for Facilities with Cooling Water Intake Structures. It was not possible for Georgia Power to obtain this required information in time for the updated permit renewal application. As EPA</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>EPA's ELGs became effective on January 4, 2016. 1 Compliance with the ELGs do not apply until a date determined by EPD that is "as soon as possible" beginning November 1, 2018, but that is also no later than December 31, 2023. However, on April 12, 2017, the EPA Administrator Pruitt signed a letter (attached) dated April 12, 2017 announcing EPA's decision to reconsider the ELG rule.</p>	<p>explains in its preamble to the regulations for Cooling Water Intake Structures, some of the studies required under § 122.21(r) require a minimum of 30 months to complete and others can take as long as 39 months. Georgia Power's NPDES permit renewal application for Plant Hammond was originally due and submitted to EPD before EPA's most recent revisions to its 316(b) regulations even took effect in October 2014. EPD subsequently requested that Georgia Power submit an updated permit application in mid-2016. Given the extended lead times necessary to complete the studies required under § 122.2, including the time necessary to identify potential consultants capable of performing the studies, there was insufficient time for Georgia Power to complete these studies before submitting the update to its permit renewal application. Accordingly, Georgia Power requested an alternate schedule for Plant Hammond to submit those studies to EPD. Therefore, the alternate schedule in the permit is justifiable."</p>
<p>Georgia Power encourages EPD to consider how best to approach implementation of the ELG rule, in light of the EPA Administrator's actions. Given the uncertainty surrounding the outcome of the rule, the Company requests that the Draft Permit include language acknowledging the ongoing EPA process and the potential for changes.</p>	<p>Comment noted.</p> <p>EPD has included a re-opener clause specific to the deadlines related to FGD wastewater, fly ash transport water and bottom ash transport water once EPA promulgates a new rule.</p> <p>The following language has been included in the permit: "Upon completion of the reconsideration process and promulgation of a new 40 CFR §423 rule, EPD may modify the permit to address the requirements of the revised sections of the rule. Additionally, if the</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
	<p>revised rule modifies the compliance dates past December 31, 2023, the implementation schedule and deadlines in Part I.A.5.a, Part I.A.5.b, Part III.C.5 and Part III.C.7 may no longer be applicable and EPD will reevaluate based on the new rule.”</p>
<p>Subject to the outcome of EPA's reconsideration of the rule, the compliance date in the Draft Permit is reasonable and justifiable.</p>	<p>Comment noted.</p>
<p><u>Region IV EPA Comments</u></p>	
<p>The permit should require instream monitoring up- and down-stream of the facility's main outfall as soon as possible after the effective date of the permit, and the results should be used to revise the Reasonable Potential Analysis, as needed, to include appropriate water quality-based effluent limits.</p>	<p>EPD concurs and has added a permit condition in the proposed permit requiring the permittee to sample instream, (up and down stream of the permitted outfalls) at the time of the Coal Ash Pond Dewatering Plan submittal to EPD to establish background conditions.</p> <p>Part III.C.6 of the draft permit already requires the permittee to submit a Coal Ash Dewatering Plan that includes instream sampling during the dewatering activities. EPD will require a minimum sampling frequency instream of 2/month while dewatering is occurring.</p>
<p>The permit should specify the analytical test method numbers to be used for compliance. For example, the most sensitive method for mercury is EPA Method 1631E. Likewise, for other metals, EPA Method 245.7 is appropriate.</p>	<p>Part I.B.3 of the permit requires the permittee to use the “sufficiently sensitive” test method as required in the 40 CFR § 136.</p> <p>EPD does not believe the inclusion of the specific test methods for mercury and other metals is necessary and we have not included them in the proposed permit.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>The permit should define the term “dewatering activity”. For example, clarify how to differentiate between a dewatering activity from a typical discharge or drawdown event.</p>	<p>EPD has included the below language describing the terminology “dewatering activity.”</p> <p>“prior to the closure process beginning, ash pond discharges will not cause water levels to drop beyond normal historical operation, hence once the dewatering activity has begun, the water levels may drop below historical operations.”</p>
<p>Sampling to be performed during the dewatering operations should be a least weekly for the first few weeks and more often as the ash pond levels drops closer to the ash layer. This will ensure that instream water quality standards are not exceeded. Parameters should include pollutants common to ash pond discharges, such as: turbidity, TDS, Cu, Se, As, Hg, Cr, Pb, Cd, Zn, Ni, and hardness.</p>	<p>The draft permit already included EPA’s list of pollutants to be monitored. Additionally, the draft permit had already expanded on the EPA proposed list of pollutants to include flow, pH, oil and grease, biochemical oxygen demand,5-day, total suspended solids, total residual chlorine, ammonia (as NH₃), total kjeldahl nitrogen, organic nitrogen, phosphorus, and ortho-phosphorus.</p> <p>EPD believes if the treatment system is operated appropriately and the continuous inline flow, pH, and turbidity effluent targets which will be monitored continuously prior to discharge are maintained, there should not be a need to increase the sampling frequency due to the automatic shutoff and automatic return of the treated wastewater back to the coals ash pond or head of the treatment plant.</p> <p>However, EPD does appreciate and understand the concerns and also believes that increased sampling will aide in our oversight of the operability of the treatment plant to ensure the discharge does not cause or contribute to an instream water quality violation, hence EPD has increased the effluent sampling frequency from 2/month to 1/week and the instream sampling from 1/month to 2/month in Part III.C.6 of the proposed permit.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>To ensure the integrity of the pond structure is not jeopardized if the pond water is drawn down too quickly, the permit should specify the drawdown rate during dewatering operations.</p>	<p>EPD has included language Part III.C.6 of the proposed permit requiring the permittee to submit draw down rates to ensure the integrity of the ponds.</p>
<p>Instream monitoring should occur before (see comment 1) and sometime during the dewatering operation. This will provide data to demonstrate/verify that the dewatering event is not causing or contributing to a violation of instream water quality standards.</p>	<p>EPD has included language Part III.C.6, Coal Ash Pond Dewatering Plan, of the proposed permit requiring the permittee to submit information regarding safe draw down rates to ensure the integrity of the ponds.</p>
<p>For the emergency ash pond outfalls (003, 004, &10), the permit should specify the rainfall event for which the discharges will be authorized. The permit application states that the emergency ponds are designed to retain the 100Y24H storm, so I recommend the permit only allow discharges from these ponds during that storm events. Monitoring during discharge should include metals/pollutants commonly found in ash pond effluents: TDS, Cu, Se, As, Hg, Cr, Pb, Cd, Zn, Ni, and hardness.</p>	<p>EPD has added language to specify the conditions when it may be appropriate to discharge from the emergency ash ponds (outfall nos. 003, 004 and 10). EPD believes there are several possible scenarios of which there should be discharges from the emergency outfalls, (1) a rainfall event that meets the 100 year, 24 hour storm event criteria, (2) several continuous or intermittent days of rainfall that may cause harm or jeopardize the stability of the impoundments and (3) unforeseen catastrophic precipitation weather events.</p> <p>EPD believes restricting the use of the emergency outfalls to only a 100 year, 24 hour storm event is unreasonable and too restrictive due to the specific types of weather events that can and have occurred in Georgia. EPD has included the following language in the proposed permit,</p> <p>“Discharges from this outfall shall consist of emergency overflows only due to precipitation related events. There shall be no discharge from the outfall except when a precipitation emergency presents, such as excessive rainfall that meets the 100 year, 24 hour storm water criteria, several continuous or intermittent days of excessive rainfall that may adversely impact the stability of the impoundments or unforeseen catastrophic precipitation weather events.”</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
<p>For clarification, the effluent limitation tables for outfalls 003, 004 and 010 should be revised by replacing “2/month” with “See footnote 1” for the “Measurement Frequency”. Additionally, sampling during an emergency discharge should be at least once daily during the first hour of the discharge (or some other specified time frame).</p>	<p>Additionally, EPD has added monitoring requirements for total dissolved solids, copper, total, selenium, total, arsenic, total, mercury, total, chromium, total, lead, total, cadmium, zinc, total, nickel, total and hardness, applicable only when there is a discharge from the emergency outfalls.</p> <p>EPD has revised the sampling frequency from “2/month” to “once per day when discharging.”</p>
<p>The permit should require the permittee to measure flow for internal outfall 1N (EGD wastewater) at least as frequently as the other parameters (i.e., weekly).</p>	<p>EPD has added a requirement to monitor flow for internal outfall 1N (flue gas desulfurization) at a frequency of once per week.</p>
<p>For compliance purposes, the permit should specify how flow will be estimated for outfalls 01B, 01I (chemical metal cleaning wastes), 03, 04 and 10. Likewise, for outfalls 001 and 01A, the permit should specify how flow will be calculated.</p>	<p>EPD has included footnotes to specify how “estimated” and “calculated” may be determined. The following language has been added, “Best engineering practices or pump capacity/run times will be used to estimate the flow, and the specific methodology will be documented on site.”</p>
<p>The permit requires the permittee to perform routine inspections of the dike walls/berm; however, because there may be seeps which occur below the dike berms, we recommend the plan also require inspections for seepages from the ash pond which may be hydrologically connected to waters of the State. In which case, such discharges would need to be covered under an NPDES permit.</p>	<p>To date, EPD does not have any information indicating there are seeps which occur below the dike berms at Plant Hammond, nor does EPD have information indicating that a seep would be hydrologically connected to waters of the State. Routine inspection of the dike walls/berm, etc. is to ensure coal ash pond impoundment integrity and that includes identifying areas of possible seepage.</p>

**Public Comments and EPD Responses on Draft NPDES Permit
Georgia Power Company- Plant Hammond Permit No. GA0001457**

COMMENTS RECEIVED	EPD RESPONSE
	<p>At this time, based on current information, EPD does not believe additional language is necessary when there is currently no indication of seeps present.</p> <p>If during the permit term EPD believes there are unpermitted discharges to waters of the State, EPD will take appropriate actions.</p>