

Environmental Protection Division

2 Martin Luther King Jr. Drive, Suite 1456, Atlanta, Georgia 30334
Judson H. Turner, Director
(404) 656-4713

September 23, 2015

Mr. D. L. Fulton, Environmental Manager
Southern Nuclear Operating Company
42 Inverness Center Parkway
Birmingham, Alabama 35242

RE: Permit Issuance
Plant Vogtle, Units 3 and 4
NPDES Permit No. GA0039420
Waynesboro, Burke County

Dear Mr. Fulton:

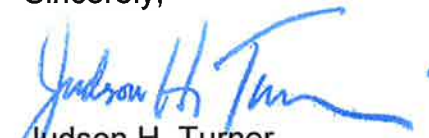
Pursuant to the Georgia Water Quality Control Act, as amended, the Federal Clean Water Act, as amended, and the Rules and Regulations promulgated thereunder, we have issued the attached permit for the above-referenced facility.

Your facility has been assigned to the following EPD office for reporting and compliance. Signed copies of all required reports shall be submitted to the following address:

Environmental Protection Division
Watershed Protection Branch
2 Martin Luther King Jr. Drive, Suite 1152
Atlanta, Georgia 30334

Please be advised that on and after the effective date indicated in the permit, the permittee must comply with all terms, conditions, and limitations of the permit. If you have questions concerning this correspondence, please contact Audra Dickson at 404.463.4934 or via e-mail at audra.dickson@dnr.ga.gov

Sincerely,



Judson H. Turner
Director

Enclosure(s)

CC: Southern Nuclear -- Mr. Matthew Montz (email)
EPD Watershed Compliance Office, Ms. Jill Causse, Industrial Compliance
Manager

PERMIT NO. GA0039420

STATE OF GEORGIA
DEPARTMENT OF NATURAL RESOURCES
ENVIRONMENTAL PROTECTION DIVISION

AUTHORIZATION TO DISCHARGE UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM

In accordance with the provisions of the Georgia Water Quality Control Act (Georgia Laws 1964, p. 416, as amended), hereinafter called the State Act; the Federal Water Pollution Control Act, as amended (33 U.S. C. 1251 et seq.), hereinafter called the Federal Act; and the Rules and Regulations promulgated pursuant to each of these Acts,

Southern Nuclear Operating Company
42 Inverness Center Parkway
Birmingham, Alabama 35242

is issued a permit to discharge from a facility located at

Plant Vogtle, Units 3 and 4
7821 River Road
Waynesboro, Georgia 30830
(Burke County)

to receiving waters

Savannah River (outfalls 001 and 011) and Beaverdam Creek
(outfalls 012, 002A, and 003A)

in accordance with effluent limitations, monitoring requirements and other conditions set forth in the permit and with the statements and supporting information submitted with the application.

This permit shall become effective on October 1, 2015.

This permit and the authorization to discharge shall expire at midnight on September 30, 2020.



Issued this 23rd day of September 2015.


Director
Environmental Protection Division

PART I

A. Effluent Limitations and Monitoring Requirements

1. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall number 001¹ – final discharge to Savannah River.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations mg/l unless otherwise specified		Monitoring Requirements ²		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow, (Million Gallons per Day)	Report	Report	Daily	Continuous	Final Outfall

The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units and shall be monitored once/week by a grab sample.

There shall be no discharge of floating solids or visible foam in other than trace amounts.

1. Refer to Special Requirements Part III.A.1 and 2.
2. All the parameters must be monitored if there is any discharge. If there is no discharge, state such in the discharge monitoring report for the monitoring period.

- During the period specified on the first page of this permit, the permittee is authorized to discharge from internal plant outfall numbers 002 and 003 – cooling tower blowdown, as well as outfall numbers 002A¹ and 003A¹ – cooling tower emergency overflows to storm drains.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations mg/l unless otherwise specified		Monitoring Requirements ²		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Free Available Chlorine (FAC) ⁶	0.2	0.5	1/Week	Multiple Grabs ³	See Below ⁴
Total Residual Chlorine (TRC) ⁶	Report	Report	1/Week	Multiple Grabs ³	See Below ⁴
FAC/TRC Discharge Time (minutes/day/unit) ⁵	---	120	1/Week	Total	See Below ⁴
Chromium, total recoverable ⁷	0.2	0.2	1/Quarter	Grab	See Below ⁴
Zinc, total recoverable ⁷	1.0	1.0	1/Quarter	Grab	See Below ⁴

- There shall be no discharge of floating solids or visible foam in other than trace amounts.
- All the parameters must be monitored if there is any discharge. If there is no discharge, state such in the discharge monitoring report for the monitoring period.
- Multiple grab samples are to be collected on 15-minute intervals during periods of FAC and/or TRC discharges attributable to cooling tower chlorination.
- Each cooling tower system prior to mixing with other waste streams.
- Refer to Special Requirements, Part III.A.5 and 6.
- Refer to Special Requirements, Part III.A.7.
- In lieu of this monitoring, the permittee may certify in accordance with Special Requirements, Part III.A.8.

3. During the period specified on the first page of this permit, the permittee is authorized to discharge from internal plant outfall numbers 004 and 005 – low volume waste streams from waste water retention basins.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations mg/l unless otherwise specified		Monitoring Requirements		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Total Suspended Solids	30.0	100.0	2/Month	Grab	See Below ¹
Oil and Grease	15.0	20.0	2/Month	Grab	See Below ¹

1. Monitoring prior to mixing with other waste streams.

4. During the period specified on the first page of this permit, the permittee is authorized to discharge from internal plant outfall numbers 006 and 007 – liquid radwaste treatment systems.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations mg/l unless otherwise specified		Monitoring Requirements		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Total Suspended Solids	30.0	100.0	1/Quarter	Grab	See Below ¹
Oil and Grease	15.0	20.0	1/Quarter	Grab	See Below ¹

Note: The radioactive component of this discharge is regulated by the US Nuclear Regulatory Commission (10 CFR Part 20).

1. Monitoring prior to mixing with other waste streams.

5. During the period specified on the first page of this permit, the permittee is authorized to discharge from internal plant outfall numbers 008 and 009 – service water system blowdown.

Such discharges shall be limited and monitored by the permittee as specified below:

Parameter	Discharge Limitations mg/l or (lb/day) unless otherwise specified		Monitoring Requirements ¹		
	Daily Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Free Available Chlorine (FAC) ³	0.2	0.5	1/Week	Grab	See Below ²

1. Monitoring is required only when discharges occur.
2. Monitoring prior to mixing with other waste streams.
3. Refer to Special Requirements, Part III.A.7.

6. During the period specified on the first page of this permit, the permittee is authorized to discharge from internal plant outfall number 010 – radwaste dilution flow.

This is an internal waste stream consisting of river water with no additives. There are no applicable discharge limitations.

7. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall number 011 – intake screen backwash to the Savannah River.

This discharge shall consist only of intake screen backwash. The permittee shall take all reasonable steps to minimize any adverse impact to waters of the State.

8. During the period specified on the first page of this permit, the permittee is authorized to discharge from outfall number 012 – passive cooling system discharge to Beaverdam Creek.

The discharge shall consist of intermittent washdowns and testing of the passive containment cooling water storage tank. The permittee shall take all reasonable steps to minimize any adverse impact to waters of the State.

B. Monitoring and Reporting

1. Representative Sampling

Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge.

2. Reporting

- a. Monitoring results obtained during the calendar month shall be summarized for each month and reported on the Discharge Monitoring Report (DMR). The results of each sampling event shall be reported on the Operating Monitoring Report (OMR) and submitted as an attachment to the DMR. The DMR and OMR and any other required forms, reports and/or information shall be completed, signed and certified by a principal executive officer or ranking elected official, or by a duly authorized representative of that person who has the authority to act for or on behalf of that person, and submitted to EPD, postmarked no later than the 15th day of the month following the reporting period.
- b. However, upon final approval from EPD to use the online NetDMR application for the submittal of DMRs and OMRs required by this permit, the permittee shall submit the DMRs and OMRs to EPD utilizing the online NetDMR submittal process. The permittee shall submit the DMR no later than 11:59 p.m. on the 15th day of the month following the reporting period.
- c. Signed copies of these and all other reports required herein, unless otherwise stated, shall be submitted to the EPD Office listed on the permit issuance letter signed by the Director of EPD.
- d. All instances of noncompliance not reported under Part I.B. and Part II. A. shall be reported at the time the operation monitoring report is submitted.
- e. Unless otherwise specified in this permit, quarterly samples shall be taken during the periods January-March, April-June, July-September, and October-December. Semiannual samples shall be taken during the periods January-June and July-December. Results from these samples shall be reported to the EPD on the monitoring report for the last month of the period. Results of annual samples will be reported on the June monitoring report.

3. Definitions

- a. The "daily average" mass means the total discharge by mass during a calendar month divided by the number of days in the month that the production or commercial facility was operating. Where less than daily sampling is required by this permit, the daily average mass shall be determined by the summation of all the measured daily discharges by weight divided by the number of days sampled during the calendar month when the measurements were made.
- b. The "daily maximum" mass means the total discharge by mass during any calendar day.

- c. The "daily average" concentration means the arithmetic average of all the daily determinations of concentrations made during a calendar month. Daily determinations of concentration made using a composite sample shall be the concentration of the composite sample.
- d. The "daily maximum" concentration means the daily determination of concentration for any calendar day.
- e. For the purpose of this permit, a calendar day is defined as any consecutive 24-hour period.
- f. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.
- g. "Severe property damage" means substantial physical damage to property, damage to treatment facilities that causes them to become inoperable, or substantial and permanent loss of natural resources that can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.
- h. "EPD" as used herein means the Environmental Protection Division of the Department of Natural Resources.
- i. "State Act" as used herein means the Georgia Water Quality Control Act (Official Code of Georgia Annotated; Title 12, Chapter 5, Article 2).
- j. "Rules" as used herein means the Georgia Rules and Regulations for Water Quality Control.

4. Monitoring Procedures

Analytical methods, sample containers, sample preservation techniques, and sample holding times must be consistent with the techniques and methods listed in 40 CFR Part 136. The analytical method used shall be sufficiently sensitive. EPA-approved methods must be applicable to the concentration ranges of the NPDES permit samples.

5. Detection Limits

All parameters shall be analyzed using appropriate detection limits. These parameters will be reported as "not detected" when they are below the detection limit and will then be considered in compliance with the effluent limit. The detection limit will also be reported.

6. Recording of Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information:

- a. The exact place, date, and time of sampling or measurements, and the person(s) performing the sampling or the measurements;

- b. The dates and times the analyses were performed, and the person(s) performing the analyses;
- c. The analytical techniques or methods used;
- d. The results of all required analyses.

7. Additional Monitoring by Permittee

If the permittee monitors any pollutant at the location(s) designated herein more frequently than required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be included in the calculation and reporting of the values required in the Discharge Monitoring Report forms. Such increased monitoring frequency shall also be indicated. EPD may require, by written notification, more frequent monitoring or the monitoring of other pollutants not required in this permit.

8. Records Retention

The permittee shall retain records of all monitoring information, including all records of analyses performed, calibration and maintenance of instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a minimum of three (3) years from the date of the sample, measurement, report or application, or longer if requested by EPD.

9. Penalties

The Federal Clean Water Act and the Georgia Water Quality Control Act provide that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit, makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine or by imprisonment, or by both. The Federal Clean Water Act and the Georgia Water Quality Control Act also provide procedures for imposing civil penalties which may be levied for violations of the Act, any permit condition or limitation established pursuant to the Act, or negligently or intentionally failing or refusing to comply with any final or emergency order of the Director of EPD.

PART II

A. Management Requirements

1. Notification of Changes

- a. The permittee shall provide EPD at least 90 days advance notice of any planned physical alterations or additions to the permitted facility that meet the following criteria:
 1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR 122.29(b);
 2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
 3. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.
- b. The permittee shall give at least 90 days advance notice to EPD of any planned changes to the permitted facility or activity which may result in noncompliance with permit requirements.
- c. Following the notice in paragraph a. or b. of this condition the permit may be modified. The permittee shall not make any changes, or conduct any activities, requiring notification in paragraph a. or b. of this condition without approval from EPD.
- d. The permittee shall provide at least 30 days advance notice to EPD of:
 1. any planned expansion or increase in production capacity; or
 2. any planned installation of new equipment or modification of existing processes that could increase the quantity of pollutants discharged or result in the discharge of pollutants that were not being discharged prior to the planned change

if such change was not identified in the permit application(s) upon which this permit is based and for which notice was not submitted under paragraphs a. or b. of this condition.
- e. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has

occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 100 µg/L, (ii) five times the maximum concentration reported for that pollutant in the permit application, or (iii) 200 µg/L for acrolein and acrylonitrile, 500 µg/L for 2,4 dinitrophenol and for 2-methyl-4-6-dinitrophenol, or 1 mg/L antimony.

- f. All existing manufacturing, commercial, mining, and silvicultural dischargers shall notify EPD as soon as it is known or there is reason to believe that any activity has occurred or will occur which would result in any discharge on a nonroutine or infrequent basis, of any toxic pollutant not limited in the permit, if that discharge will exceed (i) 500 µg/L, (ii) ten times the maximum concentration reported for that pollutant in the permit application, or (iii) 1 mg/L antimony.
- g. Upon the effective date of this permit, the permittee shall submit to EPD an annual certification in June of each year certifying whether or not there has been any change in processes or wastewater characteristics as described in the submitted NPDES permit application that required notification in paragraph a., b., or d. of this condition. The permittee shall also certify annually in June whether the facility has received offsite wastes or wastewater and detail any such occurrences.

2. Noncompliance Notification

If, for any reason, the permittee does not comply with, or will be unable to comply with any effluent limitation specified in this permit, the permittee shall provide EPD with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:

- a. A description of the discharge and cause of noncompliance; and
- b. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the noncomplying discharge.

3. Facilities Operation

The permittee shall at all times maintain in good working order and operate as efficiently as possible all treatment or control facilities or systems installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the conditions of the permit.

4. Adverse Impact

The permittee shall take all reasonable steps to minimize or prevent any discharge in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

5. Bypassing

- a. If the permittee knows in advance of the need for a bypass, it shall submit prior notice to EPD at least 10 days (if possible) before the date of the bypass. The permittee shall submit notice of any unanticipated bypass with an oral report within 24 hours from the time the permittee becomes aware of the circumstances followed by a written report within five (5) days of becoming aware of such condition. The written submission shall contain the following information:
 1. A description of the discharge and cause of noncompliance; and
 2. The period of noncompliance, including exact dates and times; or, if not corrected, the anticipated time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncomplying discharge.
- b. Any diversion or bypass of facilities covered by this permit is prohibited, except (i) where unavoidable to prevent loss of life, personal injury, or severe property damage; (ii) there were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime (this condition is not satisfied if the permittee could have installed adequate back-up equipment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance); and (iii) the permittee submitted a notice as required above. The permittee shall operate the treatment works, including the treatment plant and total sewer system, to minimize discharge of the pollutants listed in Part I of this permit from combined sewer overflows or bypasses. Upon written notification by EPD, the permittee may be required to submit a plan and schedule for reducing bypasses, overflows, and infiltration in the system.

6. Sludge Disposal Requirements

Hazardous sludge shall be disposed of in accordance with the regulations and guidelines established by EPD and/or EPA pursuant to the Federal Clean Water Act (CWA) and the Resource Conservation and Recovery Act (RCRA). For land application of nonhazardous sludge, the permittee shall comply with any applicable criteria outlined in EPD's "Guidelines for Land Application of Municipal Sludges." Prior to disposal of sludge by land application, the permittee shall submit a proposal to EPD for approval in accordance with applicable criteria. Upon evaluation of the permittee's proposal, EPD may require that more stringent control of this activity is required. Upon written notification, the permittee shall submit to EPD for approval, a detailed plan of operation for land application of sludge. Upon approval, the plan will become a part of the NPDES permit.

7. Sludge Monitoring Requirements

The permittee shall develop and implement procedures to ensure adequate year-round sludge disposal. The permittee shall monitor the volume and concentration of solids removed from the plant. Records shall be maintained which document the quantity of solids removed from the plant. The ultimate disposal of solids shall be reported (in the unit of lbs) to EPD with the Operation Monitoring Report Forms required under Part I.B.2. of this permit.

8. Power Failures

Upon the reduction, loss, or failure of the primary source of power to said water pollution control facilities, the permittee shall use an alternative source of power if available to reduce or otherwise control production and/or all discharges in order to maintain compliance with the effluent limitations and prohibitions of this permit.

If such alternative power source is not in existence, and no date for its implementation appears in Part I, the permittee shall halt, reduce or otherwise control production and/or all discharges from wastewater control facilities upon the reduction, loss, or failure of the primary source of power to said wastewater control facilities.

9. Operator Certification Requirements

The permittee shall ensure that, when required, a certified operator is in charge of the facility in accordance with Georgia State Board of Examiners for Certification of Water and Wastewater Treatment Plant operators And Laboratory Analysts Rule 43-51-6(b).

10. Laboratory Analyst Certification Requirements

The permittee shall ensure that, when required, the person in responsible charge of the laboratory performing the analyses for determining permit compliance is certified in accordance with the Georgia Certification of Water and Wastewater Treatment Plant operators and Laboratory Analysts Act, as amended, and the Rules promulgated thereunder.

B. Responsibilities

1. Right of Entry

The permittee shall allow the Director of EPD, the Regional Administrator of EPA, and/or their authorized representatives, agents, or employees, upon the presentation of credentials:

- a. To enter upon the permittee's premises where a discharge source is located or in which any records are required to be kept under the terms and conditions of this permit; and
- b. At reasonable times, to have access to and copy any records required to be kept under the terms and conditions of this permit; to inspect any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and to sample any substance or parameters in any location.

2. Transfer of Ownership or Control

A permit may be transferred to another person by a permittee if:

- a. The permittee notifies the Director of EPD in writing of the proposed transfer at least thirty (30) days in advance of the proposed transfer;
- b. A written agreement containing a specific date for transfer of permit responsibility and coverage between the current and new permittee (including acknowledgement that the existing permittee is liable for violations up to that date, and that the new permittee is liable for violations from that date on) is submitted to the Director at least thirty (30) days in advance of the proposed transfer; and
- c. The Director, within thirty (30) days, does not notify the current permittee and the new permittee of the Division's intent to modify, revoke and reissue, or terminate the permit and to require that a new application be filed rather than agreeing to the transfer of the permit.

3. Availability of Reports

Except for data deemed to be confidential under O.C.G.A. § 12-5-26 or by the Regional Administrator of the EPA under the Code of Federal Regulations, Title 40, Part 2, all reports prepared in accordance with the terms of this permit shall be available for public inspection at an office of EPD. Effluent data, permit applications, permittee's names and addresses, and permits shall not be considered confidential.

4. Permit Modification

After written notice and opportunity for a hearing, this permit may be modified, suspended, revoked or reissued in whole or in part during its term for cause including, but not limited to, the following:

- a. Violation of any conditions of this permit;
- b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts;
- c. A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge; or
- d. To comply with any applicable effluent limitation issued pursuant to the order of the United States District Court for the District of Columbia issued on June 8, 1976, in Natural Resources Defense Council, Inc. et.al. v. Russell E. Train, 8 ERC 2120(D.D.C. 1976), if the effluent limitation so issued:
 1. is different in conditions or more stringent than any effluent limitation in the permit; or
 2. controls any pollutant not limited in the permit.

5. Toxic Pollutants

The permittee shall comply with effluent standards or prohibitions established pursuant to Section 307(a) of the Federal Clean Water Act for toxic pollutants, which are present in the discharge within the time provided in the regulations that establish these standards or prohibitions, even if the permit has not yet been modified to incorporate the requirement.

6. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

7. State Laws

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation under authority preserved by Section 510 of the Federal Clean Water Act.

8. Water Quality Standards

Nothing in this permit shall be construed to preclude the modification of any condition of this permit when it is determined that the effluent limitations specified herein fail to achieve the applicable State water quality standards.

9. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations.

10. Expiration of Permit

The permittee shall not discharge after the expiration date. In order to receive authorization to discharge beyond the expiration date, the permittee shall submit such information, forms, and fees as are required by the agency authorized to issue permits at least 180 days prior to the expiration date.

11. Contested Hearings

Any person who is aggrieved or adversely affected by an action of the Director of EPD shall petition the Director for a hearing within thirty (30) days of notice of such action.

12. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby.

13. Best Management Practices

The permittee will implement best management practices to control the discharge of hazardous and/or toxic materials from ancillary manufacturing activities. Such activities include, but are not limited to: materials storage, in-plant transfer, process and material handling, loading and unloading operations, site runoff management, and sludge and waste disposal.

14. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

15. Duty to Provide Information

- a. The permittee shall furnish to the EPD Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish upon request copies of records required to be kept by this permit.
- b. When the permittee becomes aware that it failed to submit any relevant facts in a permit application or submitted incorrect information in a permit application or any report to the Director, it shall promptly submit such facts and information.

16. Upset Provisions

Provisions of 40 CFR 122.41(n)(1)-(4), regarding "Upset" shall be applicable to any civil, criminal, or administrative proceeding brought to enforce this permit.

PART III

A. Special Requirements

1. There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.
2. No detectable level of Hydrazine is allowed in Outfall 001 (Final Discharge). This analysis shall be conducted and submitted annually in accordance with the reporting requirements in Part I.B.2 of this permit and when requested by EPD.
3. Any chemical metal cleaning wastes generated will be contained for further treatment or disposal in a manner to permit compliance at time of discharge with requirements listed below. This applies to any preoperational chemical cleaning of metal process equipment also.
4. The quantity of pollutants discharged in chemical metal cleaning waste shall not exceed the quality determined by multiplying the flow of metal cleaning wastes times the concentrations listed below. All effluent characteristics shall be monitored once (1) per week by grab sampling when a discharge is occurring from outfall Nos. 4 and 5, when applicable. The results shall be reported in accordance with the reporting requirements in Part 1.B.2 of this permit once (1) per month.

Parameter	Discharge Limitation (mg/L)	
	Daily Average	Daily Maximum
Total Suspended Solids	30.0	100.0
Oil and Grease	15.0	20.0
Copper	1.0	1.0
Iron	1.0	1.0

5. Neither free available chlorine (FAC) nor total residual chlorine (TRC) may be discharged from any unit for more than two hours in any one day and not more than one unit in any plant may discharge these materials at any one time unless the permittee can demonstrate to and get written authorization from the EPD Director that the units in a particular location cannot operate at or below this level of chlorination.
6. The free available chlorine (FAC) average means the average over any individual chlorine or oxidant release period which does not exceed 2 hours per day per unit. The FAC maximum is the instantaneous maximum which may occur at any time. Further, the permittee will develop a system for monitoring and recording total time of FAC and TRC discharges. The results shall be reported in a suitably concise form in accordance with the reporting requirements in Part 1.B.2 of this permit.
7. If bromine or a combination of bromine and chlorine is utilized for control of biofouling, limitations for TRC and FAC shall be applicable to TRO (Total Residual Oxidants) and FAO (Free Available Oxidants). There is no difference in test methods between TRC/FAC and TRO/FAO.

8. The permittee shall certify annually that none of the 126 priority pollutants, excluding chromium and zinc, is above detectable limits in outfalls 002, 003, 002A, and 003A (cooling tower blowdown and/or overflows). This certification may be based on manufacturers certifications or engineering calculations. A certification for chromium and/or zinc may be used in lieu of the monitoring required in Part I.A.2.
9. In the event that waste streams for various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property controlled by this permit shall not exceed the specified limitations for that source.
10. The permittee shall maintain a record of the methodology (e.g., pump curves, water use records, standard engineering calculations, etc.), used to estimate internal plant flows.
11. The permittee shall submit to EPD annually a current inventory of all water treatment chemicals, other than chlorine, discharged to State waters during the previous 12 months. This includes, but is not limited to, microbiocides, corrosion inhibitors, and dispersants. These chemicals shall be used and disposed of in accordance with the manufacturer's instructions unless other requirements are imposed by EPD.
12. This facility is subject to EPA's Requirements Applicable to Cooling Water Intake Structures for New Facilities Under Section 316(b) of the Clean Water Act. The permittee will demonstrate compliance with 316(b) through monitoring and reporting in accordance with Parts 125.87 and 125.88 of the rule.
13. The permittee shall perform an instream temperature study in the vicinity of outfall number 001 to demonstrate the results of the CORMIX mixing zone model within the first two years of the commercial operation of Vogtle Unit 4 and while all four units (Vogtle Units 1-4) are operational. The study shall be conducted during the critical periods of the year, the summer months (August – October) during low flow for the 90^o F maximum water quality standard and for the winter months (December – February) for the delta T water quality standard.
 - a. Prior to performing the temperature study, the permittee shall submit the proposed temperature study plan to EPD for review and approval. The study, at a minimum, shall include plans to monitor and report effluent temperature and instream monitoring locations at several transects within the receiving water.
 - b. If the field conditions do not exist within the first two years as referenced above (for example, low flows do not exist, the winter months are abnormally warm or other weather and/or field conditions prevent the permittee from performing the temperature study within the referenced timeframe) the permittee may submit a written request to EPD for an extension from the two year deadline referenced above. EPD may review the request and make a determination based on the provided documentation ensuring the temperature study is performed during a representative time period to validate the results of the CORMIX mixing zone modeling.

- c. Based on the submitted information provided from the temperature study, EPD may evaluate the data and determine if additional information is required, modify the permit or concur with the results of the temperature study.

B. Biomonitoring and Toxicity Reduction Requirements

1. The permittee shall comply with effluent standards or prohibitions established by section 307(a) of the Federal Act and with chapter 391-3-6-.03(5)(e) of the State Rules and may not discharge toxic pollutants in concentrations or combinations that are harmful to humans, animals, or aquatic life.

If toxicity is suspected in the effluent, EPD may require the permittee to perform any of the following actions:

- a. Acute biomonitoring tests;
 - b. Chronic biomonitoring tests;
 - c. Stream studies;
 - d. Priority pollutant analyses;
 - e. Toxicity reduction evaluations (TRE); or
 - f. Any other appropriate study.
2. EPD will specify the requirements and methodologies for performing any of these tests or studies. Unless other concentrations are specified by EPD, the critical concentration used to determine toxicity in biomonitoring tests will be the effluent instream wastewater concentration (IWC) based on the representative plant flow of the facility and the critical low flow of the receiving stream (7Q10). The endpoints that will be reported are the effluent concentration that is lethal to 50% of the test organisms (LC50) if the test is for acute toxicity, and the no observed effect concentration (NOEC) of effluent if the test is for chronic toxicity.

The permittee must eliminate effluent toxicity and supply EPD with data and evidence to confirm toxicity elimination. When approved by EPD, all study plans and TRE plans will become part of the requirements of this permit.