



Sean T. O'Connor
General Manager, Engineering
Harris Nuclear Plant
5413 Shearon Harris Road
New Hill, NC 27562-9300

919.362.3140

September 28, 2016
Serial: HNP-16-074

ATTN: Document Control Desk
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Shearon Harris Nuclear Power Plant, Unit 1
Docket No. 50-400/Renewed License No. NPF-63

Subject: NPDES Permit Renewal and Prior Amendment

Ladies and Gentlemen:

In accordance with Section 3.2 of the Environmental Protection Plan (Nonradiological), issued as Appendix B to the Renewed Facility Operating License No. NPF-63 for the Shearon Harris Nuclear Power Plant, Unit 1, Duke Energy Progress, LLC (Duke Energy), is providing notification of the renewal of the facility's National Pollutant Discharge Elimination System (NPDES) Permit No. NC0039586. The permit renewal was approved August 29, 2016, by the North Carolina Department of Environmental Quality (NCDEQ), Division of Water Resources. A copy of the renewed permit is enclosed as Enclosure 1.

Prior to permit renewal, on May 24, 2016, Duke Energy submitted to the NCDEQ an amendment to the permit application for renewal to reflect additional changes since the May 22, 2014, permit application amendment notification (Agencywide Documents Access and Management System Accession No. ML14160A701). The renewed permit in Enclosure 1 incorporates the amendment requested in Enclosure 2.

If you have any questions or require additional information, please contact John Caves, Manager – Regulatory Affairs, at (919) 362-2406.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sean T. O'Connor', written in a cursive style.

Sean T. O'Connor

Enclosure 1: NPDES Permit No. NC0039586 Renewal
Enclosure 2: NPDES Permit Application Amendment Request

c: Mr. M. J. Riches, NRC Sr. Resident Inspector, HNP
Ms. M. Barillas, NRC Project Manager, HNP
NRC Regional Administrator, Region II



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Enclosure 1

NPDES Permit NC0039586 Renewal

(53 pages including cover)



PAT MCCRORY
Governor

DONALD R. VAN DER VAART
Secretary

S. JAY ZIMMERMAN
Director

August 29, 2016

Ms. Tanya Hamilton, Plant Manager
Duke Energy Progress
Harris Nuclear Plant
5413 Shearon Harris Road
New Hill, North Carolina 27563

Subject: Final NPDES Permit Renewal
Permit NC0039586
Shearon Harris Nuclear Plant
Wake County
Class II Facility

Dear Ms. Hamilton:

Division personnel have reviewed and approved your renewal application for the subject permit. Accordingly, we are forwarding the attached NPDES permit. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

After evaluation of your comments on the draft permit the Division offers the following responses:

- pH limits at outfalls 001, 004, and 005 – the Division agrees to remove the pH limits for the low volume waste outfalls 004 and 005. These outfalls are a relatively small volume and are combined with the much larger flow from outfall 001 and other internal outfalls. The pH limits for outfalls 001 and 003 will remain in the permit.
- Schedule of compliance for copper and zinc limits at outfall 006 – The final limits and effective day were maintained as in the draft permit. The Schedule of Compliance was modified to include language pertaining to additional studies that may be included in the Corrective Action Plan. Upon completion of studies and approval by the Division you may request a permit modification to implement alternative limits.
- Outfall 002 Total Residual Chlorine – a footnote was added indicating that monitoring is only applicable if chlorine is added.
- Auxiliary Reservoir Special Condition – this condition was inadvertently omitted from the draft permit. It is now included as Special Condition A. (20).
- Special condition A. (15) was corrected to refer to the Shearon Harris Nuclear Plant.
- Supplement to Permit Cover Sheet – the holding tanks and comminutor were eliminated from the description of the treatment system for outfall 002

The final permit includes the following changes from your existing permit:


- Effluent and Monitoring requirements for outfall 002 were modified to reflect the expansion of the wastewater treatment system. Special Condition A. (18) was added to the permit to allow for the transfer of wastewater between the two domestic WWTPs.
- As a result of the RPA monitoring for total nickel, total iron and total manganese were removed from the monitoring requirements for outfall 001.
- Flow monitoring was added to outfall 006. Flow is a monitoring requirement for all discharges per 15A NCAC 02B .0505.
- Special Condition A. (17) was added to the permit regarding the submittal of all the required information under 40 CFR 125.95 with the next permit application.
- The stormwater requirements included in Special Condition A. (21) will expire when the Division of Energy, Minerals and Land Resources issues the individual stormwater permit for this facility.
- A special condition was added to your permit including requirements for electronic reporting. Proposed federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and specify that, if a state does not establish a system to receive such submittals, then permittees must submit DMRs electronically to the Environmental Protection Agency (EPA). The Division anticipates that these regulations will be adopted and is beginning implementation. The requirement to begin reporting discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application has been added to your NPDES permit. [See **Special Condition A. (19)**] For information on eDMR, registering for eDMR and obtaining an eDMR user account, please visit the following web page:
<http://portal.ncdenr.org/web/wq/admin/bog/ipu/edmr>.
For information on EPA's proposed NPDES Electronic Reporting Rule, please visit the following web site:<http://www2.epa.gov/compliance/proposed-npdes-electronic-reporting-rule>.
- The following special conditions were added to the permit to be consistent with other Duke Energy permits: A. (10) Biodices, A. (11) Chemical Cleaning Wastes, A. (12) Combined Waste Streams, A. (13) Federal Insecticide, Fungicide and Rodenticide Act, A. (14) PCB Compounds, A. (15) Radioactive Material, and A. (16) Toxicity Reopener.

If any parts, measurement frequencies or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming to Chapter 150B of the North Carolina General Statutes, and filed with the Office of Administrative Hearings (6714 Mail Service Center, Raleigh, North Carolina 27699-6714). Unless such demand is made, this decision shall be final and binding.

Please note that this permit is not transferable except after notice to the Division. The Division may require modification or revocation and reissuance of the permit. This permit does not affect the legal requirements to obtain other permits which may be required by the Division of Water Resources or any other Federal, State, or Local governmental permits that may be required.

If you have any questions concerning this permit, please contact Teresa Rodriguez at telephone number (919) 807-6387 or at email Teresa.rodriguez@ncdenr.gov.

Sincerely,



S. Jay Zimmerman, P.G.
for Director, Division of Water Resources

Hardcopy: NPDES Files
Central Files
DWR/Raleigh Regional Office/Water Quality
Ecopsy: US EPA Region 4
DWR/Aquatic Toxicology Branch/Susan Meadows

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Sincerely,

ORIGINAL SIGNED BY TOM BELNICK

S. Jay Zimmerman, P.G.
Director, Division of Water Resources

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Ecology:	US EPA Region 4 DWR/Aquatic Toxicology Branch/Susan Meadows

**STATE OF NORTH CAROLINA
DEPARTMENT OF ENVIRONMENTAL QUALITY
DIVISION OF WATER RESOURCES**

PERMIT

**TO DISCHARGE WASTEWATER UNDER THE
NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provision of North Carolina General Statute 143-215.1, other lawful standards and regulations promulgated and adopted by the North Carolina Environmental Management Commission, and the Federal Water Pollution Control Act, as amended,

Duke Energy Progress, LLC

is hereby authorized to discharge wastewater from a facility located at

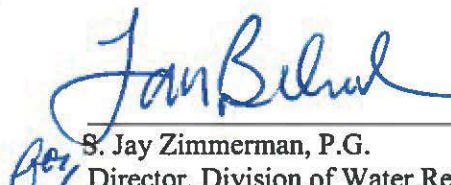
Harris Nuclear Plant and Harris Energy and Environmental Center
5413 Shearon Harris Road
New Hill
Wake County

to receiving waters designated as Harris Reservoir in the Cape Fear River Basin in accordance with effluent limitations, monitoring requirements, and other conditions set forth in Parts I, II, III, IV, and V hereof.

The permit shall become effective September 1, 2016.

This permit and the authorization to discharge shall expire at midnight on August 31, 2021.

Signed this day August 29, 2016.



S. Jay Zimmerman, P.G.
Director, Division of Water Resources
By Authority of the Environmental Management Commission

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Director, Division of Water Resources
By Authority of the Environmental Management Commission

SUPPLEMENT TO PERMIT COVER SHEET

All previous NPDES Permits issued to this facility, whether for operation or discharge are hereby revoked. As of this permit issuance, any previously issued permit bearing this number is no longer effective. Therefore, the exclusive authority to operate and discharge from this facility arises under the permit conditions, requirements, terms, and provisions included herein.

Duke Energy Progress, LLC

is hereby authorized to:

1. Continue to discharge cooling tower blowdown through internal outfall 001; and
2. Continue to operate a 0.065 MGD extended aeration wastewater treatment plant consisting of dual package plants with the following components:
 - Primary treatment tank
 - equalization basin
 - aeration basin
 - sludge holding tanks
 - clarifiers
 - chlorine contact tanks
 - recirculating bed filters
 - sand filter
 discharging through internal outfall 002; and
3. Continue to operate a metal cleaning waste treatment system consisting of dual neutralization basins discharging through internal outfall 003; and
4. Continue to operate a low volume waste treatment system consisting of:
 - Waste neutralization basin (also used for metal cleaning waste treatment, outfall 003)
 - Settling basin
 discharging through internal outfall 004; and
5. Continue to operate a radwaste treatment system consisting of a Modular Fluidized Transfer Demineralization System discharging through internal outfall 005; and
6. Discharge wastewater from outfalls 001 through outfall 005 through the combined outfall 006 located at the Harris Nuclear Power Plant, 5413 Shearon Harris Road, New Hill, Wake County; and
7. Continue to operate a 0.02 MGD wastewater treatment facility consisting of:
 - bar screen
 - influent pump station
 - aerated pond
 - stabilization pond
 - polishing pond
 - sand filter,
 - UV disinfection
 - Backup chlorination and dechlorination
 discharging through outfall 007 located at the Harris Energy and Environmental Center, 3932 New Hill/Holleman Road, New Hill, Wake County; and
8. Discharge from said treatment works and stormwater outfalls into Harris Reservoir, a Class WS-V water in the Cape Fear River Basin, at the locations specified on the attached maps.

PART I**A (1). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 001)**

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge cooling tower blowdown from **internal outfall 001**. Such discharges shall be limited and monitored⁶ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow ² (MGD)			Continuous	Recorder	Effluent
Free Available Chlorine ³	0.2 mg/l	0.5 mg/l	Weekly	See Note 4	See Note 4
Total Residual Chlorine ³ (µg/l)			Weekly	See Note 4	See Note 4
Time of TRC ³ (min/day/unit)		120.0 min	Weekly	Calculations	Effluent
Total Chromium ⁵	0.2 mg/l	0.2 mg/l	Weekly	Grab	Effluent
Total Zinc ⁵	1.0 mg/l	1.0 mg/l	Weekly	Grab	Effluent
pH	6 to 9 S.U.		Weekly	Grab	Effluent
The 126 Priority Pollutants ⁵			Annually	Grab	Effluent

Notes:

1. Effluent prior to mixing with any other waste stream.
2. Discharge of blowdown from the cooling system shall be limited to the minimum discharge of recirculating water necessary for the purpose of discharging materials contained in the water, the further built-up of which would cause concentrations in amounts exceeding limitations established by best engineering practices. The permittee may discharge cooling water to the auxiliary reservoir in compliance with condition A. (20) of this permit.
3. Neither free available chlorine nor total residual chlorine 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 free available or total residual chlorine at any one time unless the utility can demonstrate to the Director that the units in question cannot operate at or below this level of chlorination. The permittee shall record and report times of release as part of the monthly monitor report. Free available chlorine shall be a daily average and daily maximum.
4. Samples shall be multiple grabs at the tower which shall consists of grab samples collected at the approximate beginning of the total residual chlorine discharge and once every 15 minutes thereafter until the end of the total residual chlorine discharge. For the purpose of this permit, daily average (as it relates to the chlorination period) shall mean the average over any total residual chlorine discharge period.
5. These limitations and monitoring requirements apply only if these materials are added for cooling tower maintenance by the permittee. There shall be no discharge of detectable amounts of the 126 priority pollutants (40 CFR 423 Appendix A) contained in chemicals added for cooling tower maintenance except for Total Chromium and Total Zinc. Compliance with the limitations for the 126 pollutants may be determined by engineering calculations which demonstrate that the regulated pollutants are not detectable in the discharge by the analytical methods in 40 CFR 136.
6. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

A (2). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 002)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **internal outfall 002, Sanitary Waste Treatment Plant**. Such discharges shall be limited and monitored³ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow	0.065 MGD		Continuous	Recording ²	I or E
BOD, 5 day, 20°C	30.0 mg/l	45.0 mg/l	Weekly	Composite	E
Total Suspended Solids	30.0 mg/l	45.0 mg/l	Weekly	Composite	E
NH ₃ as N (mg/l)			Monthly	Composite	E
Fecal Coliform (geometric mean)	200/100 ml	400/100 ml	Weekly	Grab	E
Total Residual Chlorine (µg/l) ⁴			Weekly	Grab	E

Notes:

1. Sample locations: E- Effluent prior to mixing with any other waste stream; I-Influent
2. Flow may be measured by pump logs.
3. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).
4. Monitoring only applicable if the facility adds chlorine to water that is eventually discharged.

See Special Condition A. (18) Wastewater Management Domestic Treatment Systems.

A (3). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 003)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **internal outfall 003, Metal Cleaning Wastes¹**. Such discharges shall be limited and monitored⁵ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow ³	0.05 MGD		See Note 3	See Note 3	Effluent
Total Copper	1.0 mg/l	1.0 mg/l	Daily ⁴	Grab	Effluent
Total Iron	1.0 mg/l	1.0 mg/l	Daily ⁴	Grab	Effluent
pH	6 to 9 SU		Daily ⁴	Grab	Effluent

Notes:

1. Metal cleaning waste sources as defined in 40 CFR 423.11 (d).
2. Effluent prior to mixing with any other waste stream.
3. Discharge from outfall 003 must continue to be routed to outfall 004 before final discharge. Flow shall be measured during discharge using pump logs.
4. Daily during metal cleaning waste discharge events only.

5. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

The discharge shall comply with the limitations specified for metal cleaning waste prior to mixing with other waste streams.

A (4). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 004)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **internal outfall 004, Low Volume Wastes**¹ (including membrane backwash water). Such discharges shall be limited and monitored⁴ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ²
Flow	1.5 MGD		Weekly	Estimate ³	Effluent
Total Suspended Solids	30.0 mg/l	100.0 mg/l	2/Month	Grab	Effluent
Oil and Grease	15.0 mg/l	20.0 mg/l	Weekly	Grab	Effluent

Notes:

1. Low volume waste sources as defined in 40 CFR 423.11 (b).
2. Effluent prior to mixing with any other waste stream.
3. The volume of wastewater discharged from the facility shall be monitored. If continuous flow monitoring is not feasible, flow may be estimated.
4. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

A (5). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 005)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **internal outfall 005, Radwaste System**. Such discharges shall be limited and monitored³ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow (MGD)			Monthly	Estimate ²	Effluent
Total Suspended Solids	30.0 mg/l	100.0 mg/l	Monthly	Grab	Effluent
Oil and Grease	15.0 mg/l	20.0 mg/l	Monthly	Grab	Effluent

Notes:

1. Effluent prior to mixing with any other waste stream.
2. Flow shall be estimated during discharge.
3. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

A (6). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 006)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **outfall 006, combined outfalls 001 through 005**. Such discharges shall be limited and monitored⁸ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations			Monitoring Requirements		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow (MGD)				Weekly	Estimate ²	Effluent
Hydrazine ³			60.0 µg/l	Weekly	Grab	Effluent
Temperature (April 1 – October 31) ⁴ (°C)				Weekly	Grab	Effluent
Temperature (November 1 – March 31) (°C)				Weekly	Grab	Effluent
Acute Toxicity ⁵				Quarterly	Composite ⁶	Effluent
pH	6 to 9 S.U.			Weekly	Grab	Effluent
Total Copper ⁷	7.9 µg/l		10.5 µg/l	Monthly	Composite ⁶	Effluent
Total Zinc ⁷	126 µg/l		126 µg/l	Monthly	Composite ⁶	Effluent
NH ₃ as N (mg/l)				Monthly	Composite ⁶	Effluent
Total Suspended Solids (mg/l)				Monthly	Composite ⁶	Effluent
Total Nitrogen (mg/l)				Monthly	Composite ⁶	Effluent
Total Phosphorus (mg/l)				Monthly	Composite ⁶	Effluent

Notes:

1. Effluent after combination of all waste streams from outfalls 001 through 005 and prior to discharge into Harris Reservoir.
2. The volume of wastewater discharged from the facility shall be monitored. If continuous flow monitoring is not feasible, flow may be estimated.
3. The hydrazine limit of 60 µg/L shall apply at all times except during the periods following wet lay-up of equipment during an extended outage when a hydrazine limit of 2.0 mg/L shall apply for a total period of no more than 48 hours. Alternately, the permittee may elect to meet these limits at outfall 004, in which case sampling for hydrazine at outfall 006 is not required.
4. The discharge shall not result in the violation of the temperature or chlorine water quality standards outside of a mixing zone of 200 acres around the point of discharge. The facility is located in the Lower Piedmont area of the state; the applicable state water quality temperature standard is 32 °C (89.6 °F) and the total residual chlorine standard is 17 µg/l. The temperature within the mixing zone shall not: (1) prevent free passage of fish around or cause fish mortality within the mixing zone, (2) result in offensive conditions, (3) produce undesirable aquatic life or result in a dominance of nuisance species outside of the zone, or (4) endanger the public health or welfare. Temperature and total residual chlorine data collected according to the Monitoring Plan for Harris Reservoir should be summarized in the Annual Environmental Monitoring Report for Harris Reservoir.
5. Acute toxicity (Pimephales) P/F at 90%: February, May, August, and November, See Special Condition A (8).
6. A composite sample consisting of 24 or more grab samples of equal volumes taken at equal intervals over a 24 hour period.
7. The limits shall become effective September 30, 2021. See Special Condition A. (9) Schedule of Compliance for Hardness Dependent Metals.
8. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

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

A (7). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS (OUTFALL 007)

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.]

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from **Outfall 007, Harris Energy & Environmental Center**. Such discharges shall be limited and monitored⁵ by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location ¹
Flow	0.02 MGD		Weekly	Instantaneous	I or E
BOD, 5 day, 20°C (April 1 – October 31)	15.0 mg/l	22.5 mg/l	Weekly	Grab	Effluent
BOD, 5 day, 20°C (November 1 – March 31)	30.0 mg/l	45.0 mg/l	Weekly	Grab	Effluent
Total Suspended Solids	30.0 mg/l	45.0 mg/l	Weekly	Grab	Effluent
NH ₃ as N (April 1 – October 31)	4.0 mg/l	20.0 mg/l	Weekly	Grab	Effluent
NH ₃ as N (November 1 – March 31)	8.0 mg/l	35.0 mg/l	Weekly	Grab	Effluent
Fecal Coliform (geometric mean)	200 /100 ml	400/100 ml	Weekly	Grab	Effluent
Total Residual Chlorine		28 µg/l	2/Week	Grab	Effluent
pH ²			Weekly	Grab	Effluent
Temperature (°C)			Weekly	Grab	Effluent
TKN (mg/l)	Monitor and report		Quarterly	Grab	Effluent
NO ₂ -N + NO ₃ -N (mg/l)	Monitor and report		Quarterly	Grab	Effluent
Total Nitrogen (mg/l)			Quarterly	Grab	Effluent
Total Phosphorus (mg/l)			Quarterly	Grab	Effluent
Dissolved Oxygen ³			Weekly	Grab	Effluent
Acute Toxicity ⁴			Quarterly	Composite	Effluent

Notes:

1. Sample locations: E- Effluent, I- Influent
2. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
3. The daily average dissolved oxygen effluent concentration shall not be less than 5 mg/L.
4. Acute Toxicity (Pimephales) P/F at 90%: August, November, February and May. See Special condition A. (8).
5. By December 21, 2016, begin submitting Discharge Monitoring Reports electronically using NC DWR's eDMR application system. See Special Condition A (19).

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

A (8). ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (QUARTERLY) OUTFALLS 006 AND 007

[15A NCAC 02B .0200 et seq.]

The permittee shall conduct acute toxicity tests on a quarterly basis using protocols defined in the North Carolina Procedure Document entitled "Pass/Fail Methodology For Determining Acute Toxicity In A Single Effluent Concentration" (Revised December 2010 or subsequent versions). The monitoring shall be performed as a Fathead Minnow (*Pimephales promelas*) 24 hour static test. The effluent concentration at which there may be at no time significant acute mortality is **90%** (defined as treatment two in the procedure document). The tests will be performed during the months of February, May, August, and November. These months signify the first month of each three month toxicity testing quarter assigned to the facility. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

Should any single quarterly monitoring indicate a failure to meet specified limits, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) for the month in which it was performed, using the parameter code TGE6C. Additionally, DWR Form AT-2 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Resources
Water Sciences Section/Aquatic Toxicology Branch
1623 Mail Service Center
Raleigh, North Carolina 27699-1623

Completed Aquatic Toxicity Test Forms shall be filed with the Water Sciences Section no later than 30 days after the end of the reporting period for which the report is made.

Test data shall be complete and accurate and include all supporting chemical/physical measurements performed in association with the toxicity tests, as well as all dose/response data. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

Should there be no discharge of flow from the facility during a month in which toxicity monitoring is required, the permittee will complete the information located at the top of the aquatic toxicity (AT) test form indicating the facility name, permit number, pipe number, county, and the month/year of the report with the notation of "No Flow" in the comment area of the form. The report shall be submitted to the Water Sciences Section at the address cited above.

Should the permittee fail to monitor during a month in which toxicity monitoring is required, then monthly monitoring will begin immediately until such time that a single test is passed. Upon passing, this monthly test requirement will revert to quarterly in the months specified above. Assessment of toxicity compliance is based on the toxicity testing quarter, which is the three month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third month.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Resources indicate potential impacts to the receiving stream, this permit may be re-opened and modified to include alternate monitoring requirements or limits.

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival and appropriate environmental controls, shall constitute an **invalid test** and will require immediate follow-up testing to be completed no later than the last day of the month following the month of the initial monitoring.

A. (9) SCHEDULE OF COMPLIANCE (OUTFALL 006) [G.S. 143-215.1(b)]

1. Within one year from the effective day of the permit the Permittee shall submit to the Division of Water Resources a Corrective Action Plan summarizing the actions to be taken to achieve compliance with the total copper and total zinc limits at outfall 006 and a schedule of activities to implement the Plan. The Correction Action Plan may include mixing zone studies and/or site specific studies. Methods for conducting site specific studies must be approved by the Division.

2. Within two years from the effective date of the permit submit a report to the Division summarizing actions taken in accordance with the Corrective Action Plan.
3. Within three years from the effective date of the permit submit a report to the Division summarizing actions taken in accordance with the Corrective Action Plan.
4. Within four years from the effective date of the permit submit a report to the Division summarizing actions taken in accordance with the Corrective Action Plan.
5. Achieve compliance with total copper and total zinc limits by September 30, 2021.

Upon approval of the Corrective Action Plan by the Division, the report and actions become an enforceable part of this permit. The Division can reopen this permit to implement interim or alternative limits based on studies that demonstrate an interim or alternate limit is appropriate. Any modifications to the schedule shall be requested to the Division at least ninety (90) days before the deadline. Modifications to the schedule in excess of four months will be subject to public notice.

A. (10) BIOCIDES [G.S. 143-215, 143-215.1]

The permittee shall not use any biocides except those approved in conjunction with the permit application. The permittee shall notify the Director in writing not later than ninety (90) days prior to instituting use of any additional biocide used in cooling systems which may be toxic to aquatic life other than those previously reported to the Division of Water Resources. Such notification shall include completion of Biocide Worksheet Form 101 and a map locating the discharge point and receiving stream. Completion of Biocide Worksheet Form 101 is not necessary for those outfalls containing toxicity testing. Division approval is not necessary for the introduction of new biocides into outfalls currently tested for whole effluent toxicity.

A. (11) CHEMICAL METAL CLEANING WASTES

The term "chemical metal cleaning waste" means any wastewater resulting from the cleaning of any metal process equipment with chemical compounds including, but not limited to, boiler tube cleaning.

A. (12) COMBINED WASTE STREAMS

In the event that waste streams from various sources are combined for treatment or discharge, the quantity of each pollutant or pollutant property attributable to each controlled waste source shall not exceed the specified limitation for that waste source.

A. (13) FEDERAL INSECTICIDE, FUNGICIDE, AND RODENTICIDE ACT

Discharge of any product registered under the Federal Insecticide, Fungicide, and Rodenticide Act to any waste stream which may ultimately be released to lakes, rivers, streams, or other waters of the United States is prohibited unless specifically authorized elsewhere in this permit. This requirement is not applicable to products used for lawn and agricultural purposes. Discharge of chlorine from the use of chlorine gas, sodium hypochlorite, or other similar chlorination compounds for disinfection in plant potable and service water systems and in sewage treatment is authorized.

A. (14) POLYCHLORINATED BIPHENYL COMPOUNDS [G.S. 143-215, 143-215.1]

There shall be no discharge of polychlorinated biphenyl compounds such as those commonly used for transformer fluid.

A. (15) RADIOACTIVE MATERIAL

Releases of radioactive material shall be monitored and conducted in accordance with all conditions and limitations required by the Nuclear Regulatory Commission (NRC) and as specified in the Final Safety Analysis Report, Technical Specifications, and Environmental Statement for the Shearon Harris Nuclear Plant.

A. (16) TOXICITY REOPENER [G.S. 143-215, 143-215.1]

This permit shall be modified, or revoked and reissued to incorporate toxicity limitations and monitoring requirements in the event toxicity testing or other studies conducted on the effluent or receiving stream indicate that detrimental effects may be expected in the receiving stream as a result of this discharge.

A. (17) CLEAN WATER ACT SECTION 316 (b)

The permittee shall comply with the Cooling Water Intake Structure Rule per 40 CFR 125.95. The permittee shall submit all the materials required by the Rule with the next renewal application.

A. (18) WASTEWATER MANAGEMENT DOMESTIC TREATMENT SYSTEMS (OUTFALLS 002 AND 007)

The permittee shall at all times properly operate and maintain the domestic wastewater treatment plants to meet secondary treatment standards. The permittee can operate the two domestic treatment plants to treat wastewaters from either facility as described in the permit application and authorized in this permit in Special Conditions A. (2) and A. (7).

A. (19) ELECTRONIC REPORTING OF DISCHARGE MONITORING REPORTS [G.S. 143-215.1(b)]

Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports and specify that, if a state does not establish a system to receive such submittals, then permittees must submit monitoring data and reports electronically to the Environmental Protection Agency (EPA). The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015.

NOTE: This special condition supplements or supersedes the following sections within Part II of this permit (*Standard Conditions for NPDES Permits*):

- Section B. (11.) Signatory Requirements
- Section D. (2.) Reporting
- Section D. (6.) Records Retention
- Section E. (5.) Monitoring Reports

1. Reporting Requirements [Supersedes Section D. (2.) and Section E. (5.) (a)]

Effective **December 21, 2016**, the permittee shall report discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit DMRs electronically using the internet. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state electronically using eDMR and will be required to complete the eDMR submission by printing, signing, and submitting one signed original and a copy of the computer printed eDMR to the following address:

NC DENR / Division of Water Resources / Water Quality Permitting Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

If a permittee is unable to use the eDMR system due to a demonstrated hardship or due to the facility being physically located in an area where less than 10 percent of the households have broadband access, then a temporary waiver from the NPDES electronic reporting requirements may be granted and discharge monitoring data may be submitted on paper DMR forms (MR 1, 1.1, 2, 3) or alternative forms approved by the Director. Duplicate signed copies shall be submitted to the mailing address above. See "How to Request a Waiver from Electronic Reporting" section below.

Regardless of the submission method, the first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge.

Starting on **December 21, 2020**, the permittee must electronically report the following compliance monitoring data and reports, when applicable:

- Sewer Overflow/Bypass Event Reports;
- Pretreatment Program Annual Reports; and
- Clean Water Act (CWA) Section 316(b) Annual Reports.

The permittee may seek an electronic reporting waiver from the Division (see "How to Request a Waiver from Electronic Reporting" section below).

2. **Electronic Submissions**

In accordance with 40 CFR 122.41(l)(9), the permittee must identify the initial recipient at the time of each electronic submission. The permittee should use the EPA's website resources to identify the initial recipient for the electronic submission.

Initial recipient of electronic NPDES information from NPDES-regulated facilities means the entity (EPA or the state authorized by EPA to implement the NPDES program) that is the designated entity for receiving electronic NPDES data [see 40 CFR 127.2(b)].

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA's NPDES Electronic Reporting Rule is found at:

<http://www2.epa.gov/compliance/final-national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule>.

Electronic submissions must start by the dates listed in the "Reporting Requirements" section above.

3. **How to Request a Waiver from Electronic Reporting**

The permittee may seek a temporary electronic reporting waiver from the Division. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to the Division. Requests for temporary electronic reporting waivers must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin submitting monitoring data and reports. The duration of a temporary waiver shall not exceed 5 years and shall thereupon expire. At such time, monitoring data and reports shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary electronic reporting waiver by the Division. Approved electronic reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved reporting waiver request is effective.

Information on eDMR and the application for a temporary electronic reporting waiver are found on the following web page:

<http://deq.nc.gov/about/divisions/water-resources/edmr>

4. **Signatory Requirements [Supplements Section B. (11.) (b) and Supersedes Section B. (11.) (d)]**

All eDMRs submitted to the permit issuing authority shall be signed by a person described in Part II, Section B. (11.) (a) or by a duly authorized representative of that person as described in Part II, Section B. (11.) (b). A person, and not a position, must be delegated signatory authority for eDMR reporting purposes.

For eDMR submissions, the person signing and submitting the DMR must obtain an eDMR user account and login credentials to access the eDMR system. For more information on North Carolina's eDMR system, registering for eDMR and obtaining an eDMR user account, please visit the following web page:

<http://deq.nc.gov/about/divisions/water-resources/edmr>

Certification. Any person submitting an electronic DMR using the state's eDMR system shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

5. Records Retention [Supplements Section D. (6.)]

The permittee shall retain records of all Discharge Monitoring Reports, including eDMR submissions. These records or copies shall be maintained for a period of at least 3 years from the date of the report. This period may be extended by request of the Director at any time [40 CFR 122.41].

A. (20) AUXILIARY RESERVOIR

In order to ensure that the auxiliary reservoir is available for its designated use at all times, the permittee may circulate heated water through the auxiliary reservoir to prevent ice formation at any time that the surface water temperature is below 35° F provided that the surface water temperature in the auxiliary reservoir is not raised more than 5° F above ambient temperature and in no case is raised to more than 40° F. Emergency Service Water may be discharged to the auxiliary reservoir as required for operation of nuclear safety systems and testing.

A. (21) STORMWATER MONITORING REQUIREMENTS [G.S. 143-215.1(a) et seq., 15A NCAC 02h .0126 et seq.]

Stormwater conditions under this section will expire on the effective date when an individual stormwater permit is issued to the facility by the Division of Energy, Mineral and Land Resources.

1. Qualitative Monitoring

Qualitative monitoring requires a qualitative inspection of each stormwater outfall, regardless of representative outfall status, for the purpose of evaluating the effectiveness of the Stormwater Pollution Prevention Plan (SPPP) and assessing new sources of stormwater pollution. No analytical tests are required. Qualitative monitoring of stormwater outfalls does not need to be performed during a representative storm event.

Stormwater Discharge Characteristics	Monitoring Frequency ¹	Sample Location ²
Color	Semi-Annual	SDO
Odor	Semi-Annual	SDO
Clarity	Semi-Annual	SDO
Floating Solids	Semi-Annual	SDO
Suspended Solids	Semi-Annual	SDO
Foam	Semi-Annual	SDO
Oil Sheen	Semi-Annual	SDO
Other obvious indicators of stormwater pollution	Semi-Annual	SDO

Notes:

1. Qualitative monitoring will be performed twice per year, once in the spring (April-June) and once in the fall (September-November).
2. Sample location: SDO – Stormwater Discharge Outfall.

2. Stormwater Pollution Prevention Plan

The permittee shall develop a Stormwater Pollution Prevention Plan, herein after referred to as the Plan. The Plan shall be considered public information in accordance with Part VI, Section E.10 of this permit. The Permittee is not required to submit a copy of the Plan to the Division. The Plan shall be available at the permitted facility for Division staff or public review upon request. The Plan shall include, at a minimum, the following items:

- a. Site Plan: The site plan shall provide a description of the physical facility and the potential pollutant sources which may be expected to contribute to contamination of regulated stormwater discharges. The site plan shall contain the following:

- (1) A general location map (USGS quadrangle map, or appropriately drafted equivalent map), showing the facility's location in relation to transportation routes and surface waters, and the name of the receiving water(s) to which the stormwater outfall(s) discharges. If the discharge is to a municipal separate storm sewer system, the name of the municipality and the ultimate receiving waters, and accurate latitude and longitude of the point(s) of discharge must be shown.
 - (2) A narrative description of storage practices, loading and unloading activities, outdoor process areas, dust or particulate generating or control processes, and waste disposal practices.
 - (3) A site map (or series of maps) drawn to scale with the distance legend indicating location of industrial activities (including storage of materials, disposal areas, process areas, and loading and unloading areas), drainage structures, drainage areas for each outfall and activities occurring in the drainage area, building locations and impervious surfaces, the percentage of each drainage area that is impervious. For each outfall, a narrative description of the potential pollutants which could be expected to be present in the regulated stormwater discharge.
 - (4) A list of significant spills or leaks of pollutants that have occurred at the facility during the 3 previous years and any corrective actions taken to mitigate spill impacts.
 - (5) Certification that the stormwater outfalls have been evaluated for the presence of non-stormwater discharges. The certification statement will be signed in accordance with the requirements found in Part VI, Section B.11.
- b. Stormwater Management Plan: The stormwater management plan shall contain a narrative description of the materials management practices employed which control or minimize the exposure of significant materials to stormwater, including structural and non-structural measures. The stormwater management plan, at a minimum, shall incorporate the following:
- (1) A study addressing the technical and economic feasibility of changing the methods of operations and/or storage practices to eliminate or reduce exposure of materials and processes to stormwater. Wherever practicable the permittee should consider covering storage areas, material handling operations, manufacturing or fueling operations to prevent materials exposure to stormwater. In areas where elimination of exposure is not practicable, the stormwater management plan shall document the feasibility of diverting the stormwater runoff away from areas of potential contamination.
 - (2) A schedule to provide secondary containment for bulk storage of liquid materials, storage of Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) water priority chemicals, or storage of hazardous materials to prevent leaks and spills from contaminating stormwater runoff. If the secondary containment devices are connected directly to stormwater conveyance systems, the connection shall be controlled by manually activated valves or other similar devices [which shall be secured with a locking mechanism] and any stormwater that accumulates in the containment area shall be at a minimum visually observed prior to release of the accumulated stormwater. Accumulated stormwater shall be released if found to be uncontaminated. Records documenting the individual making the observation, the description of the accumulated stormwater and the date and time of the release shall be kept for a period of five years.
 - (3) A narrative description of Best Management Practices (BMPs) to be considered such as, but not limited to, oil and grease separation, debris control, vegetative filter strips, infiltration and stormwater detention or retention, where necessary. The need for structural BMPs shall be based on the assessment of potential of sources contributing significant quantities of pollutants to stormwater discharges and data collected through monitoring of stormwater discharges.
 - (4) Inspection schedules of stormwater conveyances and controls and measures to be taken to limit or prevent erosion associated with the stormwater systems.
- c. Spill Prevention and Response Plan: The Spill Prevention and Response Plan shall incorporate a risk assessment of potential pollutant sources based on a materials inventory of the facility. Facility personnel (or team) responsible for implementing the plan shall be identified in the plan. A responsible person shall be on-site at all times during facility operations that have the potential to contaminate stormwater runoff through spills or exposure of materials associated with the facility operations.

- d. Preventative Maintenance and Good Housekeeping Program: A preventative maintenance program shall be developed. The program shall document schedules of inspections and maintenance activities of stormwater control systems, plant equipment and systems. Inspection of material handling areas and regular cleaning schedules of these areas shall be incorporated into the program.
- e. Training schedules shall be developed and training provided at a minimum on an annual basis on proper spill response and cleanup procedures and preventative maintenance activities for all personnel involved in any of the facility's operations that have the potential to contaminate stormwater runoff. Facility personnel (or team) responsible for implementing the training shall be identified in the plan.
- f. The Stormwater Pollution Prevention Plan shall identify a specific position(s) responsible for the overall coordination, development, implementation, and revision to the Plan. Responsibilities for all components of the Plan shall be documented and position(s) assignments provided.
- g. Plan Amendment: The permittee shall amend the Plan whenever there is a change in design, construction, operation, or maintenance which has a significant effect on the potential for the discharge of pollutants via a point source to surface waters. The Stormwater Pollution Prevention Plan shall be reviewed and updated on an annual basis.

The director may notify the permittee when the Plan does not meet one or more of the minimum requirements of the permit. Within 30 days of such notice, the permittee shall submit a time schedule to the Director for modifying the Plan to meet minimum requirements. The permittee shall provide certification in writing (in accordance with Part VI, Section B.11.) to the Director that the changes have been made.

- h. Facility Inspections: Inspections of the facility and all stormwater systems shall occur at a minimum on a semiannual schedule, once in the fall (September - November) and once during the spring (April - June). The inspection and any subsequent maintenance activities performed shall be documented, recording date and time of inspection, individual(s) making the inspection and a narrative description of the facility's stormwater control systems, plant equipment and systems. Records of these inspections shall be incorporated into the Stormwater Pollution Prevention Plan.

Visual monitoring as required in Part I, Section A(8) Stormwater Monitoring Requirements/Qualitative Monitoring shall be performed in addition to facility inspections.

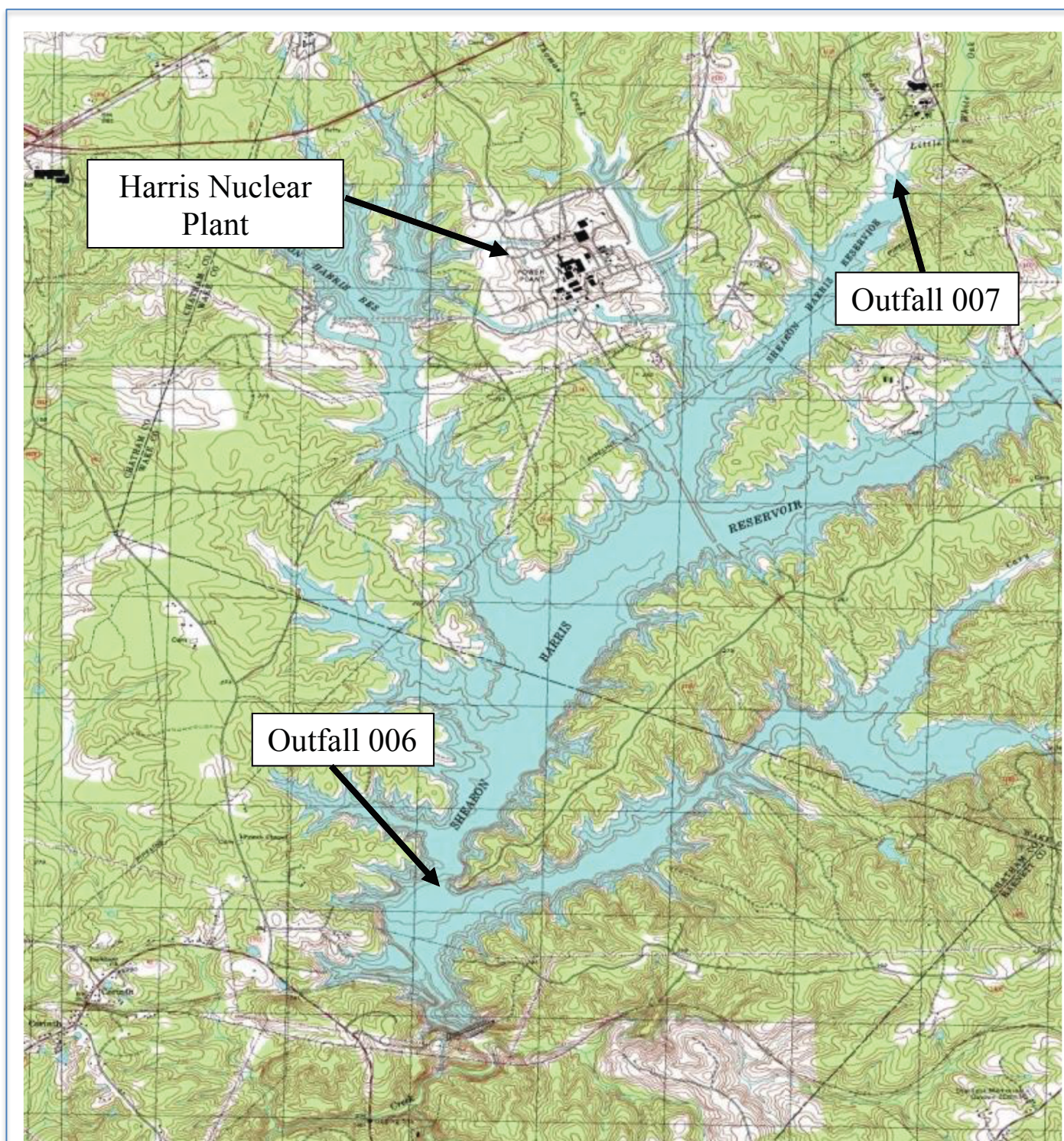
- i. Implementation: Implementation of the Plan shall include documentation of all monitoring, measurements, inspections, maintenance activities and training provided to employees, including the log of the sampling data. Activities taken to implement BMPs associated with the industrial activities, including vehicle maintenance activities, must also be recorded. All required documentation shall be kept on-site for a period of five years and made available to the Director or his authorized representative immediately upon request.

3. Stormwater Minimum Monitoring and Reporting Requirements

Minimum monitoring and reporting requirements are as follows unless otherwise approved in writing by the Director:

- a. If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the permittee may petition the Director for representative outfall status. If it is established that the stormwater discharges are substantially identical and the permittee is granted representative outfall status, then sampling requirements may be performed at a reduced number of outfalls.
- b. Qualitative monitoring for color, odor, solids, foam, outfall staining, visible sheens and dry weather flow shall be performed at all stormwater discharge outfall locations. All qualitative monitoring shall be documented and records maintained with the Stormwater Pollution Prevention Plan. The initial qualitative monitoring event shall be performed simultaneously with the first analytical monitoring event and documentation of only this initial qualitative monitoring event shall be submitted along with the required analytical monitoring submittal.
- c. If the stormwater runoff is controlled by a detention pond, the following sampling requirements shall apply:
 - (1) If the detention pond detains the runoff generated by one inch of rainfall for 24 hours, visual observations for color, foam, outfall staining, visible sheens and dry weather flow are required, but analytical sampling shall not be required.

- (2) If the detention pond discharges only in response to a storm event exceeding a 25-year, 24-hour storm, the pond shall be considered a non-discharging stormwater control system and not subject to NPDES requirements, unless the discharge causes a violation of water quality standards.
- d. Samples analyzed in accordance with the terms of this permit shall be submitted on forms approved by the Director no later than January 31 for the previous year in which sampling was required to be performed.
- e. Analytical results from sampling during the final year of the permit term shall be submitted with the permit renewal application.
- f. This permit regulates stormwater discharges associated with industrial activity. Non-stormwater discharges which shall be allowed in the stormwater conveyance system are:
 - (1) All other discharges that are authorized by an NPDES permit.
 - (2) Foundation drains, air-conditioner condensate without added chemicals, springs, waterline and fire hydrant flushing, water from footing drains, flows from riparian habitats and wetlands, fire-fighting training and fire system testing.
 - (3) Discharges resulting from fire-fighting and uncontaminated discharges resulting from fire-fighting training and associate fire system testing.
- g. If the storm event monitored and reported in accordance with this permit coincides with a non-stormwater discharge, the permittee shall separately monitor and report all parameters as required under the non-stormwater portion of this permit and provide this information with the stormwater discharge monitoring report.



Harris Nuclear Plant Wake County

Receiving Stream: Harris Reservoir	Stream Class: WS-V
HUC: 03030004	Sub-Basin: 03-06-07
Drainage Basin: Cape Fear River Basin	State Grid: Cokesbury
Outfall 006: Latitude 35° 34' 47" Longitude 78° 58' 07"	
Outfall 007: Latitude 35° 38' 05" Longitude 78° 55' 05"	

Facility Location (not to scale)



NPDES Permit NC0039586

PART II

STANDARD CONDITIONS FOR NPDES PERMITS

Section A. Definitions

2/Month

Samples are collected twice per month with at least ten calendar days between sampling events. These samples shall be representative of the wastewater discharged during the sample period.

3/Week

Samples are collected three times per week on three separate calendar days. These samples shall be representative of the wastewater discharged during the sample period.

Act or "the Act"

The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.

Annual Average

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar year. In the case of fecal coliform, the geometric mean of such discharges.

Arithmetic Mean

The summation of the individual values divided by the number of individual values.

Bypass

The known diversion of waste streams from any portion of a treatment facility including the collection system, which is not a designed or established or operating mode for the facility.

Calendar Day

The period from midnight of one day until midnight of the next day. However, for purposes of this permit, any consecutive 24-hour period that reasonably represents the calendar day may be used for sampling.

Calendar Week

The period from Sunday through the following Saturday.

Calendar Quarter

One of the following distinct periods: January through March, April through June, July through September, and October through December.

Composite Sample

A sample collected over a 24-hour period by continuous sampling or combining grab samples of at least 100 mL in such a manner as to result in a total sample representative of the wastewater discharge during the sample period. The Director may designate the most appropriate method (specific number and size of aliquots necessary, the time interval between grab samples, etc.) on a case-by-case basis. Samples may be collected manually or automatically. Composite samples may be obtained by the following methods:

- (1) Continuous: a single, continuous sample collected over a 24-hour period proportional to the rate of flow.
- (2) Constant time/variable volume: a series of grab samples collected at equal time intervals over a 24 hour period of discharge and combined proportional to the rate of flow measured at the time of individual sample collection, or
- (3) Variable time/constant volume: a series of grab samples of equal volume collected over a 24 hour period with the time intervals between samples determined by a preset number of gallons passing the sampling point. Flow measurement between sample intervals shall be determined by use of a flow recorder and totalizer, and the preset gallon interval between sample collection fixed at no greater than 1/24 of the expected total daily flow at the treatment system, or

- (4) Constant time/constant volume: a series of grab samples of equal volume collected over a 24-hour period at a constant time interval. Use of this method requires prior approval by the Director. This method may only be used in situations where effluent flow rates vary less than 15 percent. The following restrictions also apply:
- Influent and effluent grab samples shall be of equal size and of no less than 100 milliliters
 - Influent samples shall not be collected more than once per hour.
 - Permittees with wastewater treatment systems whose detention time < 24 hours shall collect effluent grab samples at intervals of no greater than 20 minutes apart during any 24-hour period.
 - Permittees with wastewater treatment systems whose detention time exceeds 24 hours shall collect effluent grab samples at least every six hours; there must be a minimum of four samples during a 24-hour sampling period.

Continuous flow measurement

Flow monitoring that occurs without interruption throughout the operating hours of the facility. Flow shall be monitored continually except for the infrequent times when there may be no flow or for infrequent maintenance activities on the flow device.

Daily Discharge

The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for purposes of sampling. For pollutants measured in units of mass, the "daily discharge" is calculated as the total mass of the pollutant discharged over the day. For pollutants expressed in other units of measurement, the "daily discharge" is calculated as the average measurement of the pollutant over the day. (40 CFR 122.2; see also "Composite Sample," above.)

Daily Maximum

The highest "daily discharge" during the calendar month.

Daily Sampling

Parameters requiring daily sampling shall be sampled 5 out of every 7 days per week unless otherwise specified in the permit. Sampling shall be conducted on weekdays except where holidays or other disruptions of normal operations prevent weekday sampling. If sampling is required for all seven days of the week for any permit parameter(s), that requirement will be so noted on the Effluent Limitations and Monitoring Page(s).

DWQ or "the Division"

The Division of Water Quality, Department of Environment and Natural Resources.

Effluent

Wastewater discharged following all treatment processes from a water pollution control facility or other point source whether treated or untreated.

EMC

The North Carolina Environmental Management Commission

EPA

The United States Environmental Protection Agency

Facility Closure

Cessation of all activities that require coverage under this NPDES permit. Completion of facility closure will allow this permit to be rescinded.

Geometric Mean

The Nth root of the product of the individual values where N = the number of individual values. For purposes of calculating the geometric mean, values of "0" (or "< [detection level]") shall be considered = 1.

Grab Sample

Individual samples of at least 100 mL collected over a period of time not exceeding 15 minutes. Grab samples can be collected manually. Grab samples must be representative of the discharge (or the receiving stream, for instream samples).

Hazardous Substance

Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the CWA.

Instantaneous flow measurement

The flow measured during the minimum time required for the flow measuring device or method to produce a result in that instance. To the extent practical, instantaneous flow measurements coincide with the collection of any grab samples required for the same sampling period so that together the samples and flow are representative of the discharge during that sampling period.

Monthly Average (concentration limit)

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar month. In the case of fecal coliform or other bacterial parameters or indicators, the geometric mean of such discharges.

Permit Issuing Authority

The Director of the Division of Water Quality.

Quarterly Average (concentration limit)

The arithmetic mean of all samples taken over a calendar quarter.

Severe property damage

Substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage excludes economic loss caused by delays in production.

Toxic Pollutant:

Any pollutant listed as toxic under Section 307(a)(1) of the CWA.

Upset

An incident beyond the reasonable control of the Permittee causing unintentional and temporary noncompliance with permit effluent limitations and/or monitoring requirements. An upset does not include noncompliance caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

Weekly Average (concentration limit)

The arithmetic mean of all "daily discharges" of a pollutant measured during the calendar week. In the case of fecal coliform or other bacterial parameters or indicators, the geometric mean of such discharges.

Section B. General Conditions

I. Duty to Comply

The Permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the CWA and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application [40 CFR 122.41].

- a. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.
- b. The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$37,500 per day for each violation. [33 USC 1319(d) and 40 CFR 122.41(a)(2)]
- c. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or

imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. [33 USC 1319(c)(1) and 40 CFR 122.41(a)(2)]

- d. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. [33 USC 1319(c)(2) and 40 CFR 122.41(a)(2)]
- e. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions. [40 CFR 122.41(a)(2)]
- f. Under state law, a civil penalty of not more than \$25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [North Carolina General Statutes § 143-215.6A]
- g. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500. Penalties for Class II violations are not to exceed \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500. [33 USC 1319(g)(2) and 40 CFR 122.41(a)(3)]

2. Duty to Mitigate

The Permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit with a reasonable likelihood of adversely affecting human health or the environment [40 CFR 122.41(d)].

3. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Part II.C.4), "Upsets" (Part II.C.5) and "Power Failures" (Part II.C.7), nothing in this permit shall be construed to relieve the Permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6 or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

4. Oil and Hazardous Substance Liability

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 to which the Permittee is or may be subject to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USC 1321. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

5. 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 [40 CFR 122.41(g)].

6. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

7. Severability

The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby [NCGS 150B-23].

8. Duty to Provide Information

The Permittee shall furnish to the Permit Issuing Authority, within a reasonable time, any information which the Permit Issuing Authority 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 to the Permit Issuing Authority upon request, copies of records required by this permit [40 CFR 122.41(h)].

9. Duty to Reapply

If the Permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the Permittee must apply for and obtain a new permit [40 CFR 122.41(b)].

10. Expiration of Permit

The Permittee is not authorized to discharge after the expiration date. In order to receive automatic 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 no later than 180 days prior to the expiration date unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.) [40 CFR 122.21(d)] Any Permittee that has not requested renewal at least 180 days prior to expiration, or any Permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will subject the Permittee to enforcement procedures as provided in NCGS 143-215.6 and 33 USC 1251 et. seq.

11. Signatory Requirements

All applications, reports, or information submitted to the Permit Issuing Authority shall be signed and certified [40 CFR 122.41(k)].

a. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures .
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].

b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;
- (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Issuing Authority [40 CFR 122.22]

- c. Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22]
- d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:
"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

12. Permit Actions

This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition [40 CFR 122.41(f)].

13. Permit Modification, Revocation and Reissuance, or Termination

The issuance of this permit does not prohibit the permit issuing authority from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 02H .0100; and North Carolina General Statute 143.215.1 et. al.

14. Annual Administering and Compliance Monitoring Fee Requirements

The Permittee must pay the annual administering and compliance monitoring fee within thirty days after being billed by the Division. Failure to pay the fee in a timely manner in accordance with 15A NCAC 02H .0105(b)(2) may cause this Division to initiate action to revoke the permit.

Section C. Operation and Maintenance of Pollution Controls

1. Certified Operator

Owners of classified water pollution control systems must designate operators, certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC), of the appropriate type and grade for the system, and, for each classification must [15A NCAC 08G .0201]:

- a. designate one Operator In Responsible Charge (ORC) who possesses a valid certificate of the type and grade at least equivalent to the type and grade of the system;
- b. designate one or more Back-up Operator(s) in Responsible Charge (Back-up ORCs) who possesses a valid certificate of the type of the system and no more than one grade less than the grade of the system, with the exception of no backup operator in responsible charge is required for systems whose minimum visitation requirements are twice per year; and
- c. submit a signed completed "Water Pollution Control System Operator Designation Form" to the Commission (or to the local health department for owners of subsurface systems) countersigned by the designated certified operators, designating the Operator in Responsible Charge (ORC) and the Back-up Operator in Responsible Charge (Back-up ORC):
 - (1) 60 calendar days prior to wastewater or residuals being introduced into a new system; or
 - (2) within 120 calendar days following:
 - receiving notification of a change in the classification of the system requiring the designation of a new Operator in Responsible Charge (ORC) and Back-up Operator in Responsible Charge (Back-up ORC) of the proper type and grade; or
 - a vacancy in the position of Operator in Responsible Charge (ORC) or Back-up Operator in Responsible Charge (Back-up ORC).

- (3) within seven calendar days of vacancies in both ORC and Back-up ORC positions replacing or designating at least one of the responsibilities.

The ORC of each Class I facility (or the Back-up ORC, when acting as surrogate for the ORC) must:

- Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least weekly
- Comply with all other conditions of 15A NCAC 08G .0204.

The ORC of each Class II, III and IV facility (or the Back-up ORC, when acting as surrogate for the ORC) must:

- Visit the facility as often as is necessary to insure proper operation of the treatment system; the treatment facility must be visited at least five days per week, excluding holidays
- Properly manage and document daily operation and maintenance of the facility
- Comply with all other conditions of 15A NCAC 08G .0204.

2. Proper Operation and Maintenance

The Permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the Permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the Permittee to install and operate backup or auxiliary facilities only when necessary to achieve compliance with the conditions of the permit [40 CFR 122.41(e)].

NOTE: Properly and officially designated operators are fully responsible for all proper operation and maintenance of the facility, and all documentation required thereof, whether acting as a contract operator [subcontractor] or a member of the Permittee's staff.

3. Need to Halt or Reduce 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 condition of this permit [40 CFR 122.41(c)].

4. Bypassing of Treatment Facilities

a. Bypass not exceeding limitations [40 CFR 122.41(m)(2)]

The Permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of Paragraphs b. and c. of this section.

b. Notice [40 CFR 122.41(m)(3)]

- (1) Anticipated bypass. If the Permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass.
- (2) Unanticipated bypass. The Permittee shall submit notice of an unanticipated bypass as required in Part II.E.6. (24-hour notice).

c. Prohibition of Bypass

- (1) Bypass from the treatment facility is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for bypass, unless:
 - (A) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
 - (B) 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 adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
 - (C) The Permittee submitted notices as required under Paragraph b. of this section.
- (2) Bypass from the collection system is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for a bypass as provided in any current or future system-wide collection system permit associated with the treatment facility.

- (3) The Permit Issuing Authority may approve an anticipated bypass, after considering its adverse effects, if the Permit Issuing Authority determines that it will meet the three conditions listed above in Paragraph c. (1) of this section.

5. Upsets

- a. Effect of an upset [40 CFR 122.41(n)(2)]: An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph b. of this condition are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.
- b. Conditions necessary for a demonstration of upset: Any Permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:
- (1) An upset occurred and that the Permittee can identify the cause(s) of the upset;
 - (2) The Permittee facility was at the time being properly operated; and
 - (3) The Permittee submitted notice of the upset as required in Part II.E.6.(b) of this permit.
 - (4) The Permittee complied with any remedial measures required under Part II.B.2. of this permit.
- c. Burden of proof [40 CFR 122.41(n)(4)]: The Permittee seeking to establish the occurrence of an upset has the burden of proof in any enforcement proceeding.

6. Removed Substances

Solids, sludges, filter backwash, or other pollutants removed in the course of treatment or control of wastewaters shall be utilized/disposed of in accordance with NCGS 143-215.1 and in a manner such as to prevent any pollutant from such materials from entering waters of the State or navigable waters of the United States except as permitted by the Commission. The Permittee shall comply with all applicable state and Federal regulations governing the disposal of sewage sludge, including 40 CFR 503, Standards for the Use and Disposal of Sewage Sludge; 40 CFR Part 258, Criteria For Municipal Solid Waste Landfills; and 15A NCAC Subchapter 2T, Waste Not Discharged To Surface Waters. The Permittee shall notify the Permit Issuing Authority of any significant change in its sludge use or disposal practices.

7. Power Failures

The Permittee is responsible for maintaining adequate safeguards (as required by 15A NCAC 02H .0124) to prevent the discharge of untreated or inadequately treated wastes during electrical power failures either by means of alternate power sources, standby generators or retention of inadequately treated effluent.

Section D. Monitoring and Records

1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be representative of the permitted discharge. Samples collected at a frequency less than daily shall be taken on a day and time that is representative of the discharge for the period the sample represents. All samples shall be taken at the monitoring points specified in this permit and, unless otherwise specified, before the effluent joins or is diluted by any other wastestream, body of water, or substance. Monitoring points shall not be changed without notification to and the approval of the Permit Issuing Authority [40 CFR 122.41(j)].

2. Reporting

Monitoring results obtained during the previous month(s) shall be summarized for each month and reported on a monthly Discharge Monitoring Report (DMR) Form (MR 1, 1.1, 2, 3) or alternative forms approved by the Director, postmarked no later than the last calendar day of the month following the completed reporting period.

The first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the following address:

NC DENR / Division of Water Quality / Surface Water Protection Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

3. Flow Measurements

Appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than 10% from the true discharge rates throughout the range of expected discharge volumes. Flow measurement devices shall be accurately calibrated at a minimum of once per year and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. The Director shall approve the flow measurement device and monitoring location prior to installation.

Once-through condenser cooling water flow monitored by pump logs, or pump hour meters as specified in Part I of this permit and based on the manufacturer's pump curves shall not be subject to this requirement.

4. Test Procedures

Laboratories used for sample analysis must be certified by the Division. Permittees should contact the Division's Laboratory Certification Section (919 733-3908 or <http://portal.ncdenr.org/web/wq/lab/cert>) for information regarding laboratory certifications.

Facilities whose personnel are conducting testing of field-certified parameters only must hold the appropriate field parameter laboratory certifications.

Test procedures for the analysis of pollutants shall conform to the EMC regulations (published pursuant to NCGS 143-215.63 et. seq.), the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the CWA (as amended), and 40 CFR 136; or in the case of sludge use or disposal, approved under 40 CFR 136, unless otherwise specified in 40 CFR 503, unless other test procedures have been specified in this permit [40 CFR 122.41].

To meet the intent of the monitoring required by this permit, all test procedures must produce minimum detection and reporting levels that are below the permit discharge requirements and all data generated must be reported down to the minimum detection or lower reporting level of the procedure. If no approved methods are determined capable of achieving minimum detection and reporting levels below permit discharge requirements, then the most sensitive (method with the lowest possible detection and reporting level) approved method must be used.

5. Penalties for Tampering

The CWA provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR 122.41].

6. Records Retention

Except for records of monitoring information required by this permit related to the Permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR 503), the Permittee shall retain records of all monitoring information, including:

- all calibration and maintenance records
- all original strip chart recordings for continuous monitoring instrumentation
- copies of all reports required by this permit
- copies of all data used to complete the application for this permit

These records or copies shall be maintained for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time [40 CFR 122.41].

7. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information [40 CFR 122.41]:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

8. Inspection and Entry

The Permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), upon the presentation of credentials and other documents as may be required by law, to;

- a. Enter, at reasonable times, upon the Permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the CWA, any substances or parameters at any location [40 CFR 122.41(i)].

Section E Reporting Requirements

1. Change in Discharge

All discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any pollutant identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit.

2. Planned Changes

The Permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility [40 CFR 122.41(l)]. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
- c. 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.

3. Anticipated Noncompliance

The Permittee shall give advance notice to the Director of any planned changes to the permitted facility or other activities that might result in noncompliance with the permit [40 CFR 122.41(l)(2)].

4. Transfers

This permit is not transferable to any person without prior written notice to and approval from the Director in accordance with 40 CFR 122.61. The Director may condition approval in accordance with NCGS 143-215.1, in particular NCGS 143-215.1(b)(4)b.2., and may require modification or revocation and reissuance of the permit, or a minor modification, to identify the new permittee and incorporate such other requirements as may be necessary under the CWA [40 CFR 122.41(l)(3), 122.61] or state statute.

5. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit [40 CFR 122.41(l)(4)].

- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) (See Part II.D.2) or forms provided by the Director for reporting results of monitoring of sludge use or disposal practices.
- b. If the Permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 and at a sampling location specified in this permit or other appropriate instrument governing the discharge, the results of such monitoring shall be included in the calculation and reporting of the data submitted on the DMR.

6. Twenty-four Hour Reporting

- a. The Permittee shall report to the Director or the appropriate Regional Office any noncompliance that potentially threatens public health or the environment. Any information shall be provided orally within 24 hours from the time the Permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance, and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR 122.41(l)(6)].
- b. The Director may waive the written report on a case-by-case basis for reports under this section if the oral report has been received within 24 hours.
- c. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

7. Other Noncompliance

The Permittee shall report all instances of noncompliance not reported under Part II.E.5 and 6. of this permit at the time monitoring reports are submitted. The reports shall contain the information listed in Part II.E.6. of this permit [40 CFR 122.41(l)(7)].

8. Other Information

Where 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 in any report to the Director, it shall promptly submit such facts or information [40 CFR 122.41(l)(8)].

9. Noncompliance Notification

The Permittee shall report by telephone to either the central office or the appropriate regional office of the Division as soon as possible, but in no case more than 24 hours or on the next working day following the occurrence or first knowledge of the occurrence of any of the following:

- a. Any occurrence at the water pollution control facility which results in the discharge of significant amounts of wastes which are abnormal in quantity or characteristic, such as the dumping of the contents of a sludge digester; the known passage of a slug of hazardous substance through the facility; or any other unusual circumstances.
- b. Any process unit failure, due to known or unknown reasons, that render the facility incapable of adequate wastewater treatment such as mechanical or electrical failures of pumps, aerators, compressors, etc.
- c. Any failure of a pumping station, sewer line, or treatment facility resulting in a by-pass without treatment of all or any portion of the influent to such station or facility.

Persons reporting such occurrences by telephone shall also file a written report within 5 days following first knowledge of the occurrence. Also see reporting requirements for municipalities in Part IV.C.2.c. of this permit.

10. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3 (a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the Division. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.1(b)(2) or in Section 309 of the Federal Act.

11. Penalties for Falsification of Reports

The CWA provides that any person who knowingly 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 of not more than \$25,000 per violation, or by imprisonment for not more than two years per violation, or by both [40 CFR 122.41].

12. Annual Performance Reports

Permittees who own or operate facilities that collect or treat municipal or domestic waste shall provide an annual report to the Permit Issuing Authority and to the users/customers served by the Permittee (NCGS 143-215.1C). The report shall summarize the performance of the collection or treatment system, as well as the extent to which the facility was compliant with applicable Federal or State laws, regulations and rules pertaining to water quality. The report shall be provided no later than sixty days after the end of the calendar or fiscal year, depending upon which annual period is used for evaluation.

The report shall be sent to:

NC DENR / Division of Water Quality / Surface Water Protection Section
ATTENTION: Central Files
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

PART III OTHER REQUIREMENTS

Section A. Construction

- a. The Permittee shall not commence construction of wastewater treatment facilities, nor add to the plant's treatment capacity, nor change the treatment process(es) utilized at the treatment plant unless (1) the Division has issued an Authorization to Construct (AtC) permit or (2) the Permittee is exempted from such AtC permit requirements under Item b. of this Section.
- b. In accordance with NCGS 143-215.1(a5) [SL 2011-394], no permit shall be required to enter into a contract for the construction, installation, or alteration of any treatment work or disposal system or to construct, install, or alter any treatment works or disposal system within the State when the system's or work's principle function is to conduct, treat, equalize, neutralize, stabilize, recycle, or dispose of industrial waste or sewage from an industrial facility and the discharge of the industrial waste or sewage is authorized under a permit issued for the discharge of the industrial waste or sewage into the waters of the State. Notwithstanding the above, the permit issued for the discharge may be modified if required by federal regulation.
- c. Issuance of an AtC will not occur until Final Plans and Specifications for the proposed construction have been submitted by the Permittee and approved by the Division.

Section B. Groundwater Monitoring

The Permittee shall, upon written notice from the Director, conduct groundwater monitoring as may be required to determine the compliance of this NPDES permitted facility with the current groundwater standards.

Section C. Changes in Discharges of Toxic Substances

The Permittee shall notify the Permit Issuing Authority as soon as it knows or has reason to believe (40 CFR 122.42):

- a. That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
 - (1) One hundred micrograms per liter (100 µg/L);
 - (2) Two hundred micrograms per liter (200 µg/L) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/L) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/L) for antimony;
 - (3) Five times the maximum concentration value reported for that pollutant in the permit application.
- b. That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels";
 - (1) Five hundred micrograms per liter (500 µg/L);
 - (2) One milligram per liter (1 mg/L) for antimony;
 - (3) Ten times the maximum concentration value reported for that pollutant in the permit application.

Section D. Facility Closure Requirements

The Permittee must notify the Division at least 90 days prior to the closure of any wastewater treatment system covered by this permit. The Division may require specific measures during deactivation of the system to prevent adverse impacts to waters of the State. This permit cannot be rescinded while any activities requiring this permit continue at the permitted facility.

PART IV

SPECIAL CONDITIONS FOR MUNICIPAL FACILITIES

Section A. Definitions

In addition to the definitions in Part II of this permit, the following definitions apply to municipal facilities:

Indirect Discharge or Industrial User

Any non-domestic source that discharges wastewater containing pollutants into a POTW regulated under section 307(b), (c) or (d) of the CWA. [40 CFR 403.3 (i) and (j) and 15A NCAC 02H .0903(b)(11)]

Interference

Inhibition or disruption of the POTW treatment processes; operations; or its sludge process, use, or disposal which causes or contributes to a violation of any requirement of the Permittee's (or any satellite POTW's if different from the Permittee) NPDES, collection system, or non-discharge permit or prevents sewage sludge use or disposal in compliance with specified applicable State and Federal statutes, regulations, or permits. [15A NCAC 02H .0903(b)(14)]

Pass Through

A discharge which exits the POTW into waters of the State in quantities or concentrations which, alone or with discharges from other sources, causes a violation, including an increase in the magnitude or duration of a violation, of the Permittee's (or any satellite POTW's, if different from the Permittee) NPDES, collection system, or non-discharge permit. [15A NCAC 02H .0903(b)(23)]

Publicly Owned Treatment Works (POTW)

A treatment works as defined by Section 212 of the CWA, which is owned by a State or local government organization. This definition includes any devices and systems used in the storage, treatment, recycling and reclamation of municipal sewage or industrial wastes of a liquid nature. It also includes the collection system, as defined in 15A NCAC 2T .0402, only if it conveys wastewater to a POTW treatment plant. The term also means the local government organization, or municipality, as defined in section 502(4) of the CWA, which has jurisdiction over indirect discharges to and the discharges from such a treatment works. In this context, the organization may be the owner of the POTW treatment plant or the owner of the collection system into which an indirect discharger discharges. This second type of POTW may be referred to as a "satellite POTW organization." [15A NCAC 02H .0903(b)(26)]

"Significant Industrial User" or "SIU"

An Industrial User that discharges wastewater into a publicly owned treatment works and that [15A NCAC 02H .0903(b)(33)]:

1. Discharges an average of 25,000 gallons per day or more of process wastewater to the POTW (excluding sanitary, noncontact cooling and boiler blowdown wastewaters); or
2. Contributes process wastewater which makes up five percent or more of the NPDES or non-discharge permitted flow limit or organic capacity of the POTW treatment plant. In this context, organic capacity refers to BOD, TSS and ammonia; or
3. Is subject to categorical standards under 40 CFR Part 403.6 and 40 CFR Parts 405-471; or
4. Is designated as such by the Permittee on the basis that the Industrial User has a reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, or the POTW's effluent limitations and conditions in its NPDES or non-discharge permit, or to limit the POTW's sludge disposal options;
5. Subject to approval under 15A NCAC 02H .0907(b), the Permittee may determine that an Industrial User meeting the criteria in paragraphs 1 or 2 of this definition above has no reasonable potential for adversely affecting the POTW's operation or for violating any pretreatment standard or requirement, the POTW's effluent limitations and conditions in its NPDES or non-discharge permit, or to limit the POTW's sludge disposal options, and thus is not a Significant Industrial User (SIU); or
6. Subject to approval under 15A NCAC 02H .0907(b), the Permittee may determine that an Industrial User meeting the criteria in paragraph 3 of this definition above meets the requirements of 40 CFR Part 403.3(v)(2) and thus is a non-significant categorical Industrial User.

Section B. Publicly Owned Treatment Works (POTWs)

All POTWs must provide adequate notice to the Director of the following [40 CFR 122.42(b)]:

1. Any new introduction of pollutants into the POTW from an indirect discharger, regardless of the means of transport, which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; and
2. Any substantial change in the volume or character of pollutants being introduced by an indirect discharger as influent to that POTW at the time of issuance of the permit.
3. For purposes of this paragraph, adequate notice shall include information on (1) the quality and quantity of effluent introduced into the POTW, and (2) any anticipated impact that may result from the change of the quantity or quality of effluent to be discharged from the POTW.

Section C. Municipal Control of Pollutants from Industrial Users.

1. Effluent limitations are listed in Part I of this permit. Other pollutants attributable to inputs from Industrial Users discharging to the POTW may be present in the Permittee's discharge. At such time as sufficient information becomes available to establish limitations for such pollutants, this permit may be revised to specify effluent limitations for any or all of such other pollutants in accordance with best practicable technology or water quality standards.
2. Prohibited Discharges
 - a. The Permittee shall develop and enforce their Pretreatment Program to implement the prohibition against the introduction of pollutants or discharges into the waste treatment system or waste collection system which cause or contribute to Pass Through or Interference as defined in 15A NCAC 02H .0900 and 40 CFR 403. [40 CFR 403.5(a)(1)]
 - b. The Permittee shall develop and enforce their Pretreatment Program to implement the prohibitions against the introduction of the following wastes in the waste treatment or waste collection system [40 CFR 403.5(b)]:
 - (1) Pollutants which create a fire or explosion hazard in the POTW, including, but not limited to, wastestreams with a closed cup flashpoint of less than 140 degrees Fahrenheit or 60 degrees Centigrade using the test methods specified in 40 CFR 261.21;
 - (2) Pollutants which cause corrosive structural damage to the POTW, but in no case discharges with pH lower than 5.0, unless the works is specifically designed to accommodate such discharges;
 - (3) Solid or viscous pollutants in amounts which cause obstruction to the flow in the POTW resulting in Interference;
 - (4) Any pollutant, including oxygen demanding pollutants (BOD, etc.) released in a Discharge at a flow rate and/or pollutant concentration which will cause Interference with the POTW;
 - (5) Heat in amounts which will inhibit biological activity in the POTW resulting in Interference, but in no case heat in such quantities that the temperature at the POTW Treatment Plant exceeds 40°C (104°F) unless the Division, upon request of the POTW, approves alternate temperature limits;
 - (6) Petroleum oil, non-biodegradable cutting oil, or products of mineral oil origin in amounts that will cause Interference or Pass Through;
 - (7) Pollutants which result in the presence of toxic gases, vapors, or fumes within the POTW in a quantity that may cause acute worker health and safety problems; or
 - (8) Any trucked or hauled pollutants, except at discharge points designated by the POTW.
 - c. The Permittee shall investigate the source of all discharges into the POTW, including slug loads and other unusual discharges, which have the potential to adversely impact the Permittee's Pretreatment Program and/or the operation of the POTW.

The Permittee shall report such discharges into the POTW to the Director or the appropriate Regional Office. Any information shall be provided orally within 24 hours from the time the Permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the Permittee becomes aware of the circumstances. The written submission shall contain a description of the discharge; the investigation into possible sources; the period of the discharge, including exact dates and times; if the discharge has not ceased, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance,

3. With regard to the effluent requirements listed in Part I of this permit, it may be necessary for the Permittee to supplement the requirements of the Federal Pretreatment Standards (40 CFR, Part 403) to ensure compliance by the Permittee with all applicable effluent limitations. Such actions by the Permittee may be necessary regarding some or all of the industries discharging to the municipal system.
4. The Permittee shall require any Industrial User (IU) discharging to the POTW to meet Federal Pretreatment Standards developed under Section 307(b) of the Act as amended (which includes categorical standards and specific local limits, best management practices and narrative requirements). Prior to accepting wastewater from any Significant Industrial User (SIU), the Permittee shall either develop and submit to the Division a new Pretreatment Program or, as necessary, a modification of an existing Pretreatment Program, for approval as required under section D below as well as 15A NCAC 02H .0907(a) and (b). [40 CFR 122.44(j)(2)]
5. This permit shall be modified, or alternatively, revoked and reissued, to incorporate or modify an approved POTW Pretreatment Program or to include a compliance schedule for the development of a POTW Pretreatment Program as required under Section 402 (b)(8) of the CWA and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.

Section D. Pretreatment Programs

Under authority of sections 307 (b) and (c) and 402(b)(8) of the CWA and implementing regulations 40 CFR 403, North Carolina General Statute 143-215.3(14) and implementing regulations 15A NCAC 02H .0900, and in accordance with the approved pretreatment program, all provisions and regulations contained and referenced in the pretreatment program submittal are an enforceable part of this permit. [40 CFR 122.44(j)(2)]

The Permittee shall operate its approved pretreatment program in accordance with Section 402(b)(8) of the CWA, 40 CFR 403, 15A NCAC 02H .0900, and the legal authorities, policies, procedures, and financial provisions contained in its pretreatment program submission and Division approved modifications thereof. Such operation shall include but is not limited to the implementation of the following conditions and requirements. Terms not defined in Part II or Part IV of this permit are as defined in 15A NCAC 02H .0903 and 40 CFR 403.3.

1. **Sewer Use Ordinance (SUO)**
The Permittee shall maintain adequate legal authority to implement its approved pretreatment program. [15A NCAC 02H .0903(b)(32), .0905 and .0906(b)(1); 40 CFR 403.8(f)(1) and 403.9(b)(1) and (2)]
2. **Industrial Waste Survey (IWS)**
The Permittee shall implement an IWS consisting of the survey of users of the POTW collection system or treatment plant, as required by 40 CFR 403.8(f)(2)(i-iii) and 15A NCAC 02H .0905 [also 40 CFR 122.44(j)(1)], including identification of all Industrial Users that may have an impact on the POTW and the character and amount of pollutants contributed to the POTW by these Industrial Users and identification of those Industrial Users meeting the definition of SIU. Where the Permittee accepts wastewater from one or more satellite POTWs, the IWS for the Permittee shall address all satellite POTW service areas, unless the pretreatment program in those satellite service areas is administered by a separate Permittee with an approved Pretreatment Program. The Permittee shall submit a summary of its IWS activities to the Division at least once every five years, and as required by the Division. The IWS submission shall include a summary of any investigations conducted under paragraph C.2.c. of this Part. [15A NCAC 02H .0903(b)(13), .0905 and .0906(b)(2); 40 CFR 403.8(f)(2) and 403.9]
3. **Monitoring Plan**
The Permittee shall implement a Division-approved Monitoring Plan for the collection of facility specific data to be used in a wastewater treatment plant Headworks Analysis (HWA) for the development of specific pretreatment local limits. Effluent data from the Plan shall be reported on the DMRs (as required by Parts II.D and II.E.5.). [15A NCAC 02H .0903(b)(16), .0906(b)(3) and .0905]
4. **Headworks Analysis (HWA) and Local Limits**
The Permittee shall obtain Division approval of a HWA at least once every five years, and as required by the Division. Within 180 days of the effective date of this permit (or any subsequent permit modification) the Permittee shall submit to the Division a written technical evaluation of the need to revise local limits (i.e., an updated HWA or documentation of why one is not needed) [40 CFR 122.44]. The Permittee shall develop, in accordance with 40 CFR 403.5(c) and 15A NCAC 02H .0909, specific Local Limits to implement the prohibitions listed in 40 CFR 403.5(a) and (b) and 15A NCAC 02H .0909. Pursuant to 40 CFR 403.5, local limits are

enforceable Pretreatment Standards as defined by 40 CFR 403.3(1). [15A NCAC 02H .0903(b)(10), .0905, and .0906(b)(4)]

5. Industrial User Pretreatment Permits (IUP) & Allocation Tables

In accordance with NCGS 143-215.1, the Permittee shall issue to all Significant Industrial Users, permits for operation of pretreatment equipment and discharge to the Permittee's collection system or treatment works. These permits shall contain limitations, sampling protocols, reporting requirements, appropriate standard and special conditions, and compliance schedules as necessary for the installation of treatment and control technologies to assure that their wastewater discharge will meet all applicable pretreatment standards and requirements. The Permittee shall maintain a current Allocation Table (AT) which summarizes the results of the HWA and the limits from all IUPs. Permitted IUP loadings for each parameter cannot exceed the treatment capacity of the POTW as determined by the HWA. [15A NCAC 02H .0906(b)(6), .0909, .0916, and .0917; 40 CFR 403.5, 403.8(f)(1)(iii); NCGS 143-215.67(a)]

6. Authorization to Construct (AtC)

The Permittee shall ensure that an Authorization to Construct permit (AtC) is issued to all applicable Industrial Users for the construction or modification of any pretreatment facility. Prior to the issuance of an AtC, the proposed pretreatment facility and treatment process must be evaluated for its capacity to comply with all Industrial User Pretreatment Permit (IUP) limitations. [15A NCAC 02H .0906(b)(7) and .0905; NCGS 143-215.1(a)(8)]

7. POTW Inspection & Monitoring of their IUs

The Permittee shall conduct inspection, surveillance, and monitoring activities as described in its Division approved pretreatment program in order to determine, independent of information supplied by Industrial Users, compliance with applicable pretreatment standards. [15A NCAC 02H .0908(e); 40 CFR 403.8(f)(2)(v)] The Permittee must:

- a. Inspect all Significant Industrial Users (SIUs) at least once per calendar year;
- b. Sample all Significant Industrial Users (SIUs) at least once per calendar year for all SIU permit-limited parameters including flow except as allowed under 15A NCAC .0908(e); and
- c. At least once per year, document an evaluation of any non-significant categorical Industrial User for compliance with the requirements in 40 CFR 403.3(v)(2), and either continue or revoke the designation as non-significant.

8. IU Self Monitoring and Reporting

The Permittee shall require all Industrial Users to comply with the applicable monitoring and reporting requirements outlined in the Division-approved pretreatment program, the industry's pretreatment permit, or in 15A NCAC 02H .0908. [15A NCAC 02H .0906(b)(5) and .0905; 40 CFR 403.8(f)(1)(v) and (2)(iii); 40 CFR 122.44(j)(2) and 40 CFR 403.12]

9. Enforcement Response Plan (ERP)

The Permittee shall enforce and obtain appropriate remedies for violations of all pretreatment standards promulgated pursuant to section 307(b) and (c) of the CWA (40 CFR 405 et. seq.), prohibitive discharge standards as set forth in 40 CFR 403.5 and 15A NCAC 02H .0909, specific local limitations, and other pretreatment requirements. All remedies, enforcement actions and other, shall be consistent with the Enforcement Response Plan (ERP) approved by the Division. [15A NCAC 02H .0903(b)(7), .0906(b)(8) and .0905; 40 CFR 403.8(f)(5)]

10. Pretreatment Annual Reports (PAR)

The Permittee shall report to the Division in accordance with 15A NCAC 02H .0908. In lieu of submitting annual reports, Modified Pretreatment Programs developed under 15A NCAC 02H .0904 (b) may be required to submit a partial annual report or to meet with Division personnel periodically to discuss enforcement of pretreatment requirements and other pretreatment implementation issues.

For all other active pretreatment programs, the Permittee shall submit two copies of a Pretreatment Annual Report (PAR) describing its pretreatment activities over the previous calendar year to the Division at the following address:

NC DENR / Division of Water Quality / Surface Water Protection Section
Pretreatment, Emergency Response, and Collection Systems (PERCS) Unit
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

These reports shall be submitted by March 1 of each year and shall contain the following:

- a. Narrative
A narrative summary detailing actions taken, or proposed, by the Permittee to correct significant non-compliance and to ensure compliance with pretreatment requirements;
 - b. Pretreatment Program Summary (PPS)
A pretreatment program summary (PPS) on forms or in a format provided by the Division;
 - c. Significant Non-Compliance Report (SNCR)
A list of Industrial Users (IUs) in significant noncompliance (SNC) with pretreatment requirements, and the nature of the violations on forms or in a format provided by the Division;
 - d. Industrial Data Summary Forms (IDSF)
Monitoring data from samples collected by both the POTW and the Significant Industrial Users (SIUs). These analytical results must be reported on Industrial Data Summary Forms (IDSF) or on other forms or in a format provided by the Division;
 - e. Other Information
Copies of the POTW's allocation table, new or modified enforcement compliance schedules, public notice of IUs in SNC, a summary of data or other information related to significant noncompliance determinations for IUs that are not considered SIUs, and any other information, upon request, which in the opinion of the Director is needed to determine compliance with the pretreatment implementation requirements of this permit;
11. Public Notice
The Permittee shall publish annually a list of Industrial Users (IUs) that were in significant noncompliance (SNC) as defined in the Permittee's Division-approved Sewer Use Ordinance with applicable pretreatment requirements and standards during the previous twelve month period. This list shall be published within four months of the applicable twelve-month period. [15A NCAC 02H .0903(b)(34), .0908(b)(5) and .0905 and 40 CFR 403.8(f)(2)(viii)]
12. Record Keeping
The Permittee shall retain for a minimum of three years records of monitoring activities and results, along with support information including general records, water quality records, and records of industrial impact on the POTW and shall retain all other Pretreatment Program records as required by 15A NCAC 02H .0908(f). [15A NCAC 02H .0908(f); 40 CFR 403.12(o)]
13. Pretreatment Program Resources
The Permittee shall maintain adequate funding and qualified personnel to accomplish the objectives of its approved pretreatment program. and retain a written description of those current levels of inspection. [15A NCAC 02H .0906(b)(9) and (10) and .0905; 40 CFR 403.8(f)(3), 403.9(b)(3)]
14. Modification to Pretreatment Programs
Modifications to the approved pretreatment program including but not limited to local limits modifications, POTW monitoring of their Significant Industrial Users (SIUs), and Monitoring Plan modifications, shall be considered a permit modification and shall be governed by 40 CFR 403.18, 15 NCAC 02H .0114 and 15A NCAC 02H .0907.

PART V STANDARD CONDITIONS FOR NPDES STORMWATER INDIVIDUAL PERMITS

SECTION A: COMPLIANCE AND LIABILITY

1. Compliance Schedule

The permittee shall comply with Limitations and Controls specified for stormwater discharges in accordance with the following schedule:

Existing Facilities already operating but applying for permit coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented within 12 months of the effective date of the initial permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit, shall be accomplished within 12 months of the effective date of the initial permit issuance.

New Facilities applying for coverage for the first time: The Stormwater Pollution Prevention Plan shall be developed and implemented prior to the beginning of discharges from the operation of the industrial activity and be updated thereafter on an annual basis. Secondary containment, as specified in Part II, Section A, Paragraph 2(b) of this permit shall be accomplished prior to the beginning of stormwater discharges from the operation of the industrial activity.

Existing facilities previously permitted and applying for renewal: All requirements, conditions, limitations, and controls contained in this permit (except new SPPP elements in this permit renewal) shall become effective immediately upon issuance of this permit. New elements of the Stormwater Pollution Prevention Plan for this permit renewal shall be developed and implemented within 6 months of the effective date of this permit and updated thereafter on an annual basis. Secondary containment, as specified in Part II, Paragraph 2(b) of this permit shall be accomplished prior to the beginning of stormwater discharges from the operation of the industrial activity.

2. Duty to Comply

The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act (CWA) and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit upon renewal application [40 CFR 122.41].

- a. The permittee shall comply with standards or prohibitions established under section 307(a) of the CWA for toxic pollutants 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 [40 CFR 122.41].
- b. The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$37,500 per day for each violation [33 USC 1319(d) and 40 CFR 122.41(a)(2)].
- c. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both [33 USC 1319(c)(1) and 40 CFR 122.41(a)(2)].

- d. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both [33 USC 1319(c)(2) and 40 CFR 122.41(a)(2)].
 - e. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions [40 CFR 122.41(a)(2)].
 - f. Under state law, a civil penalty of not more than \$25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit [North Carolina General Statutes § 143-215.6A].
 - g. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500. Penalties for Class II violations are not to exceed \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500 [33 USC 1319(g)(2) and 40 CFR 122.41(a)(3)].
3. Duty to Mitigate
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 [40 CFR 122.41(d)].
4. Civil and Criminal Liability
Except as provided in Part III, Section C of this permit regarding bypassing of stormwater control facilities, nothing in this permit shall be construed to relieve the permittee from any responsibilities, liabilities, or penalties for noncompliance pursuant to NCGS 143-215.3, 143-215.6, or Section 309 of the Federal Act, 33 USC 1319. Furthermore, the permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.
5. Oil and Hazardous Substance Liability
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 to which the permittee is or may be subject to under NCGS 143-215.75 et seq. or Section 311 of the Federal Act, 33 USC 1321.
6. 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 [40 CFR 122.41(g)].
7. 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 circumstances, is held invalid, the application of such provision to other circumstances, and the remainder of this permit, shall not be affected thereby [NCGS 150B-23].

8. Duty to Provide Information

The permittee shall furnish to the Permit Issuing Authority, within a reasonable time, any information which the Permit Issuing Authority may request to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit issued pursuant to this permit or to determine compliance with this permit. The permittee shall also furnish to the Permit Issuing Authority upon request, copies of records required to be kept by this permit [40 CFR 122.41(h)].

9. Penalties for Tampering

The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate, any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both [40 CFR 122.41].

10. Penalties for Falsification of Reports

The Clean Water Act provides that any person who knowingly 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 of not more than \$10,000 per violation, or by imprisonment for not more than two years per violation, or by both [40 CFR 122.41].

11. Onshore or Offshore Construction

This permit does not authorize or approve the construction of any onshore or offshore physical structures or facilities or the undertaking of any work in any navigable waters.

12. Duty to Reapply

If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit [40 CFR 122.41(b)].

SECTION B: GENERAL CONDITIONS

1. Permit Expiration

The permittee is not authorized to discharge after the expiration date. In order to receive automatic authorization to discharge beyond the expiration date, the permittee shall submit forms and fees as are required by the agency authorized to issue permits **no later than 180 days prior to the expiration date**, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit) [40 CFR 122.21(d)]. Any permittee that has not requested renewal at least 180 days prior to expiration, or any permittee that does not have a permit after the expiration and has not requested renewal at least 180 days prior to expiration, will be subjected to enforcement procedures as provided in NCGS §143-215.36 and 33 USC 1251 et. seq.

2. Transfers

This permit is not transferable to any person without prior written notice to and approval from the Director in accordance with 40 CFR 122.61. The Director may condition approval in accordance with NCGS 143-215.1, in particular NCGS 143-215.1(b)(4)b.2., and may require modification or revocation and reissuance of the permit, or a minor modification, to identify the new permittee and incorporate such other requirements as may be necessary under the CWA [40 CFR 122.41(l)(3), 122.61] or state statute. **The Permittee is required to notify the Division in writing in the event the permitted facility is sold or closed.**

3. **Signatory Requirements**

All applications, reports, or information submitted to the Permitting Issuing Authority shall be signed and certified [40 CFR 122.41(k)].

a. All permit applications shall be signed as follows:

- (1) For a corporation: by a responsible corporate officer. For the purpose of this Section, a responsible corporate officer means: (a) a president, secretary, treasurer or vice president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision making functions for the corporation, or (b) the manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures .
- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
- (3) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].

b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person. A person is a duly authorized representative only if:

- (1) The authorization is made in writing by a person described above;
- (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
- (3) The written authorization is submitted to the Permit Issuing Authority [40 CFR 122.22].

c. Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22].

d. Certification. Any person signing a document under paragraphs a. or b. of this section, or submitting an electronic report (e.g., eDMR), shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:

"I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."

- e. Electronic Reports. All electronic reports (e.g., eDMRs) submitted to the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person as described in paragraph b. A person, and not a position, must be delegated signatory authority for eDMR or other electronic reporting purposes.

The Permit Issuing Authority may require the permittee to begin reporting monitoring data electronically during the term of this permit. The permittee may be required to use North Carolina's Electronic Discharge Monitoring Report (eDMR) internet application for that purpose. For eDMR submissions, the person signing and submitting the eDMR must obtain an eDMR user account and login credentials to access the eDMR system.

4. Permit Modification, Revocation and Reissuance, or Termination

The issuance of this permit does not prohibit the Permit Issuing Authority from reopening and modifying the permit, revoking and reissuing the permit, or terminating the permit as allowed by the laws, rules, and regulations contained in Title 40, Code of Federal Regulations, Parts 122 and 123; Title 15A of the North Carolina Administrative Code, Subchapter 2H .0100; and North Carolina General Statute 143-215.1 et al.

5. Permit Actions

The permit may be modified, revoked and reissued, or terminated for cause. The notification of planned changes or anticipated noncompliance does not stay any permit condition [40 CFR 122.41(f)].

6. Annual Administering and Compliance Monitoring Fee Requirements

The permittee must pay the administering and compliance monitoring fee within 30 (thirty) days after being billed by the Division. Failure to pay the fee in timely manner in accordance with 15A NCAC 2H .0105(b)(2) may cause the Division to initiate action to revoke the permit.

SECTION C: OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Proper Operation and Maintenance

The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of this permit [40 CFR 122.41(e)].

2. Need to Halt or Reduce 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 condition of this permit [40 CFR 122.41(c)].

3. Bypassing of Stormwater Control Facilities

Bypass is prohibited and the Director may take enforcement action against a permittee for bypass unless:

- a. Bypass was unavoidable to prevent loss of life, personal injury or severe property damage; and
- b. There were no feasible alternatives to the bypass, such as the use of auxiliary control facilities, retention of stormwater, or maintenance during normal periods of equipment downtime or dry weather. This condition is not satisfied if adequate backup controls should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
- c. The permittee submitted notices as required under, Part III, Section E of this permit.

If the Director determines that it will meet the three conditions listed above, the Director may approve an anticipated bypass after considering its adverse effects.

SECTION D: MONITORING AND RECORDS

1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be characteristic of the volume and nature of the permitted discharge. Analytical sampling shall be performed during a measureable storm event. Samples shall be taken on a day and time that is characteristic of the discharge. All samples shall be taken before the discharge joins or is diluted by any other waste stream, body of water, or substance. Monitoring points as specified in this permit shall not be changed without notification to and approval of the Permit Issuing Authority [40 CFR 122.41(j)].

2. Recording Results

For each measurement or sample taken pursuant to the requirements of this permit, the permittee shall record the following information [40 CFR 122.41]:

- a. The date, exact place, and time of sampling or measurements;
- b. The individual(s) who performed the sampling or measurements;
- c. The date(s) analyses were performed;
- d. The individual(s) who performed the analyses;
- e. The analytical techniques or methods used; and
- f. The results of such analyses.

3. Flow Measurements

Where required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges.

4. Test Procedures

Test procedures for the analysis of pollutants shall conform to the EMC regulations published pursuant to NCGS 143-215.63 et. seq, the Water and Air Quality Reporting Acts, and to regulations published pursuant to Section 304(g), 33 USC 1314, of the Federal Water Pollution Control Act, as Amended, and Regulation 40 CFR 136.

To meet the intent of the monitoring required by this permit, all test procedures must produce minimum detection and reporting levels and all data generated must be reported down to the minimum detection or lower reporting level of the procedure. If no approved methods are determined capable of achieving minimum detection and reporting levels below permit discharge requirements, then the most sensitive (method with the lowest possible detection and reporting level) approved method must be used.

5. Representative Outfall

If a facility has multiple discharge locations with substantially identical stormwater discharges that are required to be sampled, the permittee may petition the Director for representative outfall status. If it is established that the stormwater discharges are substantially identical and the permittee is

granted representative outfall status, then sampling requirements may be performed at a reduced number of outfalls.

6. Records Retention

Visual monitoring shall be documented and records maintained at the facility along with the Stormwater Pollution Prevention Plan. Copies of analytical monitoring results shall also be maintained on-site. The permittee shall retain records of all monitoring information, including

- all calibration and maintenance records,
- all original strip chart recordings for continuous monitoring instrumentation,
- copies of all reports required by this permit, including Discharge Monitoring Reports (DMRs) and eDMR or other electronic DMR report submissions,
- copies of all data used to complete the application for this permit

These records or copies shall be maintained for a period of at least 5 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time [40 CFR 122.41].

7. Inspection and Entry

The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Director), or in the case of a facility which discharges through a municipal separate storm sewer system, an authorized representative of a municipal operator or the separate storm sewer system receiving the discharge, upon the presentation of credentials and other documents as may be required by law, to:

- a. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and
- d. Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location [40 CFR 122.41(i)].

SECTION E: REPORTING REQUIREMENTS

1. Discharge Monitoring Reports

Samples analyzed in accordance with the terms of this permit shall be submitted to the Division on Discharge Monitoring Report (DMR) forms provided by the Director or submitted electronically to the appropriate authority using an approved electronic DMR reporting system (e.g., eDMR). DMR forms are available on the Division's website (<http://portal.ncdenr.org/web/lr/npdes-stormwater>). Regardless of the submission method (paper or electronic), submittals shall be delivered to the Division or appropriate authority **no later than 30 days from the date the facility receives the sampling results from the laboratory.**

When no discharge has occurred from the facility during the report period, the permittee is required to submit a discharge monitoring report, within 30 days of the end of the specified sampling period, giving all required information and indicating "NO FLOW" as per NCAC T15A 02B .0506.

If the permittee monitors any pollutant more frequently than required by this permit using test procedures approved under 40 CFR Part 136 and at a sampling location specified in this permit or

other appropriate instrument governing the discharge, the results of such monitoring shall be included in the data submitted on the DMR.

The permittee shall record the required qualitative monitoring observations on the SDO Qualitative Monitoring Report form provided by the Division and shall retain the completed forms on site. Qualitative monitoring results should not be submitted to the Division, except upon the Division's specific requirement to do so. Qualitative Monitoring Report forms are available at the website above.

2. Submitting Reports

Two signed copies of Discharge Monitoring Reports (DMRs) shall be submitted to:

Central Files
Division of Water Resources
1617 Mail Service Center
Raleigh, North Carolina 27699-1617

The Permit Issuing Authority may require the permittee to begin reporting monitoring data electronically during the term of this permit. The permittee may be required to use North Carolina's eDMR internet application for that purpose. Until such time that the state's eDMR application is compliant with EPA's Cross-Media Electronic Reporting Regulation (CROMERR), permittees will be required to submit all discharge monitoring data to the state *electronically* using eDMR and will be required to complete the eDMR submission by printing, signing, and **submitting one signed original and a copy of the computer printed eDMR** to the address above.

3. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3(a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms of this permit shall be available for public inspection at the offices of the Division. As required by the Act, analytical data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143-215.6B or in Section 309 of the Federal Act.

4. Non-Stormwater Discharges

If the storm event monitored in accordance with this permit coincides with a non-stormwater discharge, the permittee shall separately monitor all parameters as required under all other applicable discharge permits and provide this information with the stormwater discharge monitoring report.

5. Planned Changes

The permittee shall give notice to the Director as soon as possible of any planned changes at the permitted facility which could significantly alter the nature or quantity of pollutants discharged [40 CFR 122.41(l)]. This notification requirement includes pollutants which are not specifically listed in the permit or subject to notification requirements under 40 CFR Part 122.42 (a).

6. Anticipated Noncompliance

The permittee shall give advance notice to the Director of any planned changes at the permitted facility which may result in noncompliance with the permit [40 CFR 122.41(l)(2)].

7. Spills

The permittee shall report to the local DEMLR Regional Office, within 24 hours, all significant spills as defined in Part IV of this permit. Additionally, the permittee shall report spills including: any oil spill of 25 gallons or more, any spill regardless of amount that causes a sheen on surface waters, any oil spill regardless of amount occurring within 100 feet of surface waters, and any oil spill less than

25 gallons that cannot be cleaned up within 24 hours.

8. Bypass

Notice [40 CFR 122.41(m)(3)]:

- a. Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass; including an evaluation of the anticipated quality and effect of the bypass .
- b. Unanticipated bypass. The permittee shall submit notice within 24 hours of becoming aware of an unanticipated bypass.

9. Twenty-four Hour Reporting

- a. The permittee shall report to the central office or the appropriate regional office any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee became aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances.

The written submission shall contain a description of the noncompliance, and its causes; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time compliance is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance [40 CFR 122.41(l)(6)].

- b. The Director may waive the written report on a case-by-case basis for reports under this section if the oral report has been received within 24 hours.
- c. Occurrences outside normal business hours may also be reported to the Division's Emergency Response personnel at (800) 662-7956, (800) 858-0368 or (919) 733-3300.

10. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under 24 hour reporting at the time monitoring reports are submitted [40 CFR 122.41(l)(7)].

11. Other Information

Where 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 in any report to the Director, it shall promptly submit such facts or information [40 CFR 122.41(l)(8)].

SECTION F: DEFINITIONS

1. Act
See Clean Water Act.
2. Adverse Weather
Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical. When adverse weather conditions prevent the collection of samples during the sample period, the permittee must take a substitute sample or perform a visual assessment during the next qualifying storm event. Documentation of an adverse event (with date, time and written narrative) and the rationale must be included with your SPPP records. Adverse weather does not exempt the permittee from having to file a monitoring report in accordance with the sampling schedule. Adverse events and failures to monitor must also be explained and reported on the relevant DMR.
3. Allowable Non-Stormwater Discharges
This permit regulates stormwater discharges. However, non-stormwater discharges which shall be allowed in the stormwater conveyance system include:
 - a. All other discharges that are authorized by a non-stormwater NPDES permit.
 - b. Uncontaminated groundwater, foundation drains, air-conditioner condensate without added chemicals, springs, discharges of uncontaminated potable water, waterline and fire hydrant flushings, water from footing drains, flows from riparian habitats and wetlands.
 - c. Discharges resulting from fire-fighting or fire-fighting training, or emergency shower or eye wash as a result of use in the event of an emergency.
4. Best Management Practices (BMPs)
Measures or practices used to reduce the amount of pollution entering surface waters. BMPs may take the form of a process, activity, or physical structure. More information on BMPs can be found at: <http://cfpub.epa.gov/npdes/stormwater/menuofbmps/index.cfm>.
5. Bypass
A bypass is the known diversion of stormwater from any portion of a stormwater control facility including the collection system, which is not a designed or established operating mode for the facility.
6. Bulk Storage of Liquid Products
Liquid raw materials, intermediate products, manufactured products, waste materials, or by-products with a single above ground storage container having a capacity of greater than 660 gallons or with multiple above ground storage containers located in close proximity to each other having a total combined storage capacity of greater than 1,320 gallons.
7. Certificate of Coverage
The Certificate of Coverage (COC) is the cover sheet which accompanies a General Permit upon issuance and lists the facility name, location, receiving stream, river basin, effective date of coverage under any General Permit and is signed by the Director.
8. Clean Water Act
The Federal Water Pollution Control Act, also known as the Clean Water Act (CWA), as amended, 33 USC 1251, et. seq.
9. Division or DEMLR
The Division of Energy, Mineral, and Land Resources, Department of Environment and Natural Resources.

10. Director
The Director of the Division of Energy, Mineral, and Land Resources, the permit issuing authority.
11. EMC
The North Carolina Environmental Management Commission.
12. Grab Sample
An individual sample collected instantaneously. Grab samples that will be analyzed (quantitatively or qualitatively) must be taken within the first 30 minutes of discharge.
13. Hazardous Substance
Any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.
14. Landfill
A disposal facility or part of a disposal facility where waste is placed in or on land and which is not a land treatment facility, a surface impoundment, an injection well, a hazardous waste long-term storage facility or a surface storage facility.
15. Measureable Storm Event
A storm event that results in an actual discharge from the permitted site outfall. The previous measurable storm event must have been at least 72 hours prior. The 72-hour storm interval may not apply if the permittee is able to document that a shorter interval is representative for local storm events during the sampling period, and obtains approval from the local DEMLR Regional Office. Two copies of this information and a written request letter shall be sent to the local DEMLR Regional Office. After authorization by the DEMLR Regional Office, a written approval letter must be kept on site in the permittee's SPPP.
16. Municipal Separate Storm Sewer System (MS4)
A stormwater collection system within an incorporated area of local self-government such as a city or town.
17. No Exposure
A condition of no exposure means that all industrial materials and activities are protected by a storm resistant shelter or acceptable storage containers to prevent exposure to rain, snow, snowmelt, or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products [40 CFR 122.26 (b)(14)]. DEMLR may grant a No Exposure Exclusion from NPDES Stormwater Permitting requirements only if a facility complies with the terms and conditions described in 40 CFR §122.26(g).
18. Notice of Intent
The state application form which, when submitted to the Division, officially indicates the facility's notice of intent to seek coverage under a General Permit.
19. Permit Issuing Authority
The Director of the Division of Energy, Mineral, and Land Resources (see "Director" above).
20. Permittee
The owner or operator issued this permit.
21. Point Source Discharge of Stormwater

Any discernible, confined and discrete conveyance including, but not specifically limited to, any pipe, ditch, channel, tunnel, conduit, well, or discrete fissure from which stormwater is or may be discharged to waters of the state.

22. Representative Outfall Status

When it is established that the discharge of stormwater runoff from a single outfall is representative of the discharges at multiple outfalls, the Division may grant representative outfall status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

23. Secondary Containment

Spill containment for the contents of the single largest tank within the containment structure plus sufficient freeboard to contain the 25-year, 24-hour storm event.

24. Section 313 Water Priority Chemical

A chemical or chemical category which:

- b. Is listed in 40 CFR 372.65 pursuant to Section 313 of Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986, also titled the Emergency Planning and Community Right-to-Know Act of 1986;
- c. Is present at or above threshold levels at a facility subject to SARA title III, Section 313 reporting requirements; and
- d. Meets at least one of the following criteria:
 - i. Is listed in appendix D of 40 CFR part 122 on Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain toxic pollutants and hazardous substances);
 - ii. Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
 - iii. Is a pollutant for which EPA has published acute or chronic water quality criteria.

25. Severe Property Damage

Substantial physical damage to property, damage to the control facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which 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.

26. Significant Materials

Includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with stormwater discharges.

27. Significant Spills

Includes, but is not limited to: releases of oil or hazardous substances in excess of reportable quantities under section 311 of the Clean Water Act (Ref: 40 CFR 110.3 and 40 CFR 117.3) or section 102 of CERCLA (Ref: 40 CFR 302.4).

28. Stormwater Discharge Outfall (SDO)

The point of departure of stormwater from a discernible, confined, or discrete conveyance, including but not limited to, storm sewer pipes, drainage ditches, channels, spillways, or channelized collection areas, from which stormwater flows directly or indirectly into waters of the State of North Carolina.

29. Stormwater Runoff

The flow of water which results from precipitation and which occurs immediately following rainfall or as a result of snowmelt.

30. Stormwater Associated with Industrial Activity
The discharge from any point source which is used for collecting and conveying stormwater and which is directly related to manufacturing, processing or raw material storage areas at an industrial site. Facilities considered to be engaged in "industrial activities" include those activities defined in 40 CFR 122.26(b)(14). The term does not include discharges from facilities or activities excluded from the NPDES program.
31. Stormwater Pollution Prevention Plan
A comprehensive site-specific plan which details measures and practices to reduce stormwater pollution and is based on an evaluation of the pollution potential of the site.
32. Total Maximum Daily Load (TMDL)
TMDLs are written plans for attaining and maintaining water quality standards, in all seasons, for a specific water body and pollutant. A list of approved TMDLs for the state of North Carolina can be found at <http://portal.ncdenr.org/web/wq/ps/mtu/tmdl>.
33. Toxic Pollutant
Any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.
34. Vehicle Maintenance Activity
Vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations.
35. Visible Sedimentation
Solid particulate matter, both mineral and organic, that has been or is being transported by water, air, gravity, or ice from its site of origin which can be seen with the unaided eye.
36. 25-year, 24 hour Storm Event
The maximum 24-hour precipitation event expected to be equaled or exceeded, on the average, once in 25 years.

Document Control Desk
Serial: HNP-16-074

Enclosure 2

NPDES Permit Application Amendment Request
(19 pages including cover)



Tanya M. Hamilton
Plant Manager
Harris Nuclear Plant
5413 Shearon Harris Rd
New Hill, NC 27562-9300

919-362-2000

MAY 24 2016
Serial: HNP-16-041

Mr. Tom Belnick, Supervisor
NPDES Complex Permitting
North Carolina Department of Environmental Quality
Division of Water Resources
1617 Mail Service Center
Raleigh, NC 27699-1617

Subject: Duke Energy Progress, Inc.- Harris Nuclear Plant
NPDES Permit No. NC0039586
Wake County
Permit Application Amendment

Dear Mr. Belnick:

The current NPDES permit for the Harris Nuclear Plant (HNP) expired on July 31, 2011. In January 2011, Duke Energy Progress (DEP) submitted a timely renewal application which is currently under review by your staff. DEP submitted an NPDES permit application amendment request on May 22, 2014 to address a power uprate, sewage treatment plant improvements, and changes to wastewater management practices. DEP hereby amends the NPDES permit application to reflect several additional changes since the May 22, 2014 permit application amendment notification.

I. Corporate Name Update

The current Corporate name is Duke Energy Progress, LLC and DEP requests that all permit documents and NPDES related electronic datasets be updated to reflect this name.

II. Sewage Treatment Plant Improvements (Outfall 002)

The existing HNP sewage treatment plant is permitted to discharge 25,000 gpd of domestic wastewater; however it was upgraded to process 40,000 gpd as explained in the May 22, 2014 permit application amendment notification. Subsequent to this upgrade to 40,000 gpd, it has become apparent that additional capacity is needed to accommodate hydraulic and organic loadings associated with episodic facility maintenance activities such as outages for refueling and/or equipment maintenance. DEP is requesting Outfall 002 be permitted for a monthly average flow value of 0.065 MGD.

The upgrade will involve the installation of two primary treatment tanks, three AX-Max treatment units, two AdvanTex polishing units, ultraviolet disinfection, and an effluent pump station serving the combined sanitary treatment units to discharge to Outfall 006. This treatment is expected to be operational by August 1, 2016. DEP is diligently working to complete this sewage treatment plant expansion ahead of a planned early October 2016 outage. Our desire is to avoid the need for any temporary storage of raw or treated wastewater during this upcoming outage. DEP understands that an Authorization to Construct (ATC) is not



Tanya M. Hamilton
Plant Manager
Harris Nuclear Plant
5413 Shearon Harris Rd
New Hill, NC 27562-9300

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required to install this treatment system upgrade and the discharge from Outfall 002 may not exceed a monthly average flow of 25,000 gpd under the current NPDES permit.

In support of DEP's request to increase the permitted flow at Outfall 002, we have modified and attached the affected portions of Form 2C Attachment 3 and Attachment 4 from our application package.

If there are any questions regarding the enclosed information, please contact Mr. Don Safrit at (919) 546-6146.

I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations.

Sincerely,



Tanya M. Hamilton
Plant Manager
Harris Nuclear Plant

Enclosure: Permit Application Amended Pages

cc: Danny Smith, Supervisor, Water Quality Operations Section, Raleigh Regional Office
Don Safrit, P.E., Permitting and Compliance – Carolina, EHS Raleigh Regional HQ

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Sincerely,

Tanya M. Hamilton
Plant Manager
Harris Nuclear Plant

Enclosure: Permit Application Amended Pages

cc: Mr. Danny Smith, Supervisor, Water Quality Operations Section, Raleigh Regional Office
Mr. Don Safrit, P.E., Permitting and Compliance – Carolina, EHS Raleigh Regional HQ

Division of Water Resources
Serial: HNP-16-041
Enclosure

Enclosure

Harris Nuclear Plant and Harris Energy and Environmental Center
NPDES Permit Number NC0039586 Amended Pages

(13 total pages)

FORM 1 GENERAL		U.S. ENVIRONMENTAL PROTECTION AGENCY GENERAL INFORMATION Consolidated Permits Program (Read the "General Instructions" before starting.)		I. EPA I.D. NUMBER	
				S	T/A
				F	C
				1	2
				13	14
				15	
LABEL ITEMS		PLEASE PLACE LABEL IN THIS SPACE		GENERAL INSTRUCTIONS	
I. EPA I.D. NUMBER				If a preprinted label has been provided, affix it in the designated space. Review the information carefully; if any of it is incorrect, cross through it and enter the correct data in the appropriate fill-in area below. Also, if any of the preprinted data is absent (the area to the left of the label space lists the information that should appear), please provide it in the proper fill-in area(s) below. If the label is complete and correct, you need not complete Items I, III, V, and VI (except VI-B which must be completed regardless). Complete all items if no label has been provided. Refer to the instructions for detailed item descriptions and for the legal authorizations under which this data is collected.	
III. FACILITY NAME					
V. FACILITY MAILING ADDRESS					
VI. FACILITY LOCATION					
II. POLLUTANT CHARACTERISTICS					
INSTRUCTIONS: Complete A through J to determine whether you need to submit any permit application forms to the EPA. If you answer "yes" to any questions, you must submit this form and the supplemental form listed in the parenthesis following the question. Mark "X" in the box in the third column if the supplemental form is attached. If you answer "no" to each question, you need not submit any of these forms. You may answer "no" if your activity is excluded from permit requirements; see Section C of the instructions. See also, Section D of the instructions for definitions of bold-faced terms .					
SPECIFIC QUESTIONS		Mark "X"		SPECIFIC QUESTIONS	
		YES	NO	FORM ATTACHED	
A. Is this facility a publicly owned treatment works which results in a discharge to waters of the U.S.? (FORM 2A)			X		B. Does or will this facility (either existing or proposed) include a concentrated animal feeding operation or aquatic animal production facility which results in a discharge to waters of the U.S.? (FORM 2B)
		16	17	18	
C. Is this a facility which currently results in discharges to waters of the U.S. other than those described in A or B above? (FORM 2C)		X		X	D. Is this a proposed facility (other than those described in A or B above) which will result in a discharge to waters of the U.S.? (FORM 2D)
		22	23	24	
E. Does or will this facility treat, store, or dispose of hazardous wastes? (FORM 3)			X		F. Do you or will you inject at this facility industrial or municipal effluent below the lowermost stratum containing, within one quarter mile of the well bore, underground sources of drinking water? (FORM 4)
		28	29	30	
G. Do you or will you inject at this facility any produced water or other fluids which are brought to the surface in connection with conventional oil or natural gas production, inject fluids used for enhanced recovery of oil or natural gas, or inject fluids for storage of liquid hydrocarbons? (FORM 4)			X		H. Do you or will you inject at this facility fluids for special processes such as mining of sulfur by the Frasch process, solution mining of minerals, in situ combustion of fossil fuel, or recovery of geothermal energy? (FORM 4)
		34	35	36	
I. Is this facility a proposed stationary source which is one of the 28 industrial categories listed in the instructions and which will potentially emit 100 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)			X		J. Is this facility a proposed stationary source which is NOT one of the 28 industrial categories listed in the instructions and which will potentially emit 250 tons per year of any air pollutant regulated under the Clean Air Act and may affect or be located in an attainment area? (FORM 5)
		40	41	42	
III. NAME OF FACILITY					
C SKIP Harris Nuclear Plant and Harris Energy and Environmental Center					
15 16 - 29 30 69					
IV. FACILITY CONTACT					
A. NAME & TITLE (last, first, & title)					
C 2 Hamilton, Tanya M., Plant Manager					
15 16 45 46 48 49 51 52 55					
B. PHONE (area code & no.)					
919 362-2000					
V. FACILITY MAILING ADDRESS					
A. STREET OR P.O. BOX					
C 3 5413 Shearon Harris Road					
15 16 45					
B. CITY OR TOWN					
C 4 New Hill					
15 16 40 41 42 47 51					
C. STATE					
NC					
D. ZIP CODE					
27562					
VI. FACILITY LOCATION					
A. STREET, ROUTE NO. OR OTHER SPECIFIC IDENTIFIER					
C 5 5413 Shearon Harris Road					
15 16 45					
B. COUNTY NAME					
Wake					
46 70					
C. CITY OR TOWN					
C 6 New Hill					
15 16 40 41 42 47 51 52 -54					
D. STATE					
NC					
E. ZIP CODE					
27562					
F. COUNTY CODE (if known)					

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND														
C	7	4	9	1	1	(specify)					C	7	(specify)											
15	16	17	18	19	Electric Power Service										15	16	17	18	19					
C. THIRD										D. FOURTH														
C	7	(specify)								C	7	(specify)												
15	16	17	18	19											15	16	17	18	19					

VIII. OPERATOR INFORMATION

A. NAME															B. Is the name listed in Item VIII-A also the owner?																			
C	8	Duke Energy Progress, LLC													<input checked="" type="checkbox"/> YES <input type="checkbox"/> NO																			
15	16														55	56																		
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify)															D. PHONE (area code & no.)																			
F = FEDERAL S = STATE P = PRIVATE M = PUBLIC (other than federal or state) O = OTHER (specify)															P (specify) Public Utility										919 362 - 2000									
															56										15 16 17 18 19 20 21 22 23 24 25 26									

E. STREET OR P.O. BOX																													
P. O. Box 1551																													
															55														
F. CITY OR TOWN															G. STATE					H. ZIP CODE					IX. INDIAN LAND				
B Raleigh															NC					27602					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
15 16 17 18 19 20 21 22 23 24 25 26															40 41 42 43 44 45 46 47 48 49 50					51 52 53 54 55 56 57 58 59 60									

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)										D. PSD (Air Emissions from Proposed Sources)																									
C	T	I	9	N	See Attachment 1						C	T	I	9	P																				
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
B. UIC (Underground Injection of Fluids)										E. OTHER (specify)																									
C	T	I	9	U							C	T	I	9		(specify)																			
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50
C. RCRA (Hazardous Wastes)										E. OTHER (specify)																									
C	T	I	9	R							C	T	I	9		(specify)																			
15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48	49	50

XI. MAP


Attach to this application a topographic map of the area extending to at least one mile beyond property boundaries. The map must show the outline of the facility, the location of each of its existing and proposed intake and discharge structures, each of its hazardous waste treatment, storage, or disposal facilities, and each well where it injects fluids underground. Include all springs, rivers, and other surface water bodies in the map area. See instructions for precise requirements.

XII. NATURE OF BUSINESS (provide a brief description)

The Harris Nuclear Plant (HNP) consists of a 930 megawatt generating unit and associated facilities. The Harris Energy and Environmental Center (HEEC) includes facilities that provide support services (laboratories and training) for the HNP and other Duke Energy Progress, LLC facilities.

XIII. CERTIFICATION (see instructions)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

A. NAME & OFFICIAL TITLE (type or print)															B. SIGNATURE															C. DATE SIGNED									
Tanya M. Hamilton Plant Manager																														5/24/16									

COMMENTS FOR OFFICIAL USE ONLY

C																														
C																														
15	16															55														

CONTINUED FROM THE FRONT

VII. SIC CODES (4-digit, in order of priority)

A. FIRST										B. SECOND													
C	7	4	9	1	1	(specify)					C	7	(specify)										
15	16	-	19	Electric Power Service										15	16	-	19						
C. THIRD										D. FOURTH													
C	7	(specify)								C	7	(specify)											
15	16	-	19									15	16	-	19								

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15	16																																																	55	66																				
C. STATUS OF OPERATOR (Enter the appropriate letter into the answer box: if "Other," specify.)																																																		D. PHONE (area code & no.)																					
F = FEDERAL S = STATE P = PRIVATE																									M = PUBLIC (other than federal or state) O = OTHER (specify)																									P		(specify) Public Utility										C	A	919 362 - 2000							
																																																		56												15	6	-	18	19	-	21	22	-	26

E. STREET OR P.O. BOX																																																		
P. O. Box 1551																																																		
26																																																		55

F. CITY OR TOWN																																								G. STATE					H. ZIP CODE					IX. INDIAN LAND				
C	B	Raleigh																																						NC					27602					Is the facility located on Indian lands? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO				
15	16																																							40	41				42	47	-	51	52					

X. EXISTING ENVIRONMENTAL PERMITS

A. NPDES (Discharges to Surface Water)																														D. PSD (Air Emissions from Proposed Sources)																													
C	T	I	9 N See Attachment 1																											C	T	I	9 P																										
15	16	17	18	30																								15	16	17	18	30																											
B. UIC (Underground Injection of Fluids)																														E. OTHER (specify)																													
C	T	I	9 U																											C	T	I	9																										
15	16	17	18	30																								15	16	17	18	30																											
C. RCRA (Hazardous Wastes)																														E. OTHER (specify)																													
C	T	I	9 R																											C	T	I	9																										
15	16	17	18	30																								15	16	17	18	30																											

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A. NAME & OFFICIAL TITLE (type or print)																																								B. SIGNATURE																				C. DATE SIGNED																			
Tanya M. Hamilton Plant Manager																																																																															

COMMENTS FOR OFFICIAL USE ONLY

C																																																		
15	16																																																	55

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Attachment 3

Form 2C - Item II-A Flows, Sources of Pollution, and Treatment Technologies

Stream	Flow @ Maximum Power*	Flow @ Temperature Shutdown*	Notes
1	21,000 gpm	21,000 gpm	Emergency/Testing/ Intermittent use
2	510 MGM	0 – 5 MGM	Varies with dissolved solids
3	864 MGM	9 MGM	Cooling tower make-up
4	648 MGM	4 MGM	Average meteorological condition
5	0 – 14,000 gpm	0 – 14,000 gpm	Cooling tower bypass line
6	500,000 gpm	0 – 284,000 gpm	–
7	500,000 gpm	0 – 284,000 gpm	–
8	300 gpm	0 – 176 gpm	–
9	20,800	0 – 10,000	Intermittent operation
10	300 gpm	0 – 176 gpm	–
11	1.2 MGM	210,000	Condensate polisher regenerations and rinse (Intermittent operation)
12	24,000 gpm	0 – 16,500 gpm	–
13	24,000 gpm	0 – 16,500 gpm	–
14	315,900 gpm	0 – 185,000 gpm	–
15	315,900 gpm	0 – 185,000 gpm	–
16	6 MGM	5 MGM	–
17	208,300	208,300	–
18	0	0	Very infrequent operation
19	666,600	666,600	–
20	500	500	Auxiliary boiler drains
21	50,000 gpm	50,000 gpm	Service water system
22	1,220,800	220,000	Secondary waste (Nonradiological), alternate route
23	0	0	Secondary waste (Radiological), not normally used
24	0 – 1 MGM	–	Make-up as needed
25	7,645,000	7,645,000	–
26	4,000,000	4,000,000	–
27	300 lbs/month	300 lbs/month	Settling basin sludge
28	3,033	3,033	Treated water tank drains
29	11,000	11,000	Fire pump test
30	8,786,200	8,786,2000	Storm drains includes rainwater and firewater

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31	1.2 MGM	1.2 MGM	Potable water
32	2,445,000	2,445,000	–
33	39,000	39,000	Reactor coolant system
34	1,200,000	1,200,000	Demineralized water
35	500	500	Demineralized water to auxiliary boilers
36	11,000	11,000	Fire pump test
37	1,167	1,167	Hydrant and drain tests
38	693,000	693,000	Plant and HE&EC water usage
39	0.2 MGM	0.2 MGM	Sanitary waste
40	–	–	Sludge removal as necessary
41	8,340,000	8,340,000	Yard and roof drains
42	10,000	10,000	–
43	33,300	33,300	–
44	–	–	Makeup as required
45	1,220,800	220,000	Makeup 9 and 11
46	0.065 MGD	0.065 MGD	Sanitary waste (average flow approximately 0.025 MGD with peak flows to 0.065 MGD)
47	413,000	413,000	Radwaste
48	10,000 gpm	10,000 gpm	Boron recycle
49	67,000	67,000	Boron Recycle/CVS letdown
50	30	30	Used oil
51	75,000	75,000	Equipment drains
52	316,000	316,000	Floor drains
53	7,000	7,000	Decontaminated waste
54	6,000	6,000	Laboratory waste (chemistry)
55	4,100	4,100	Varies with number of filter backwashes
56	5 – 10 gpm	5 – 10 gpm	Water treatment steam heater drains
57	120,000	120,000	Condenser water box (approximately two drains/year)
58	6,950,700	6,950,700	Low-volume waste

* Units: Gallons per month unless otherwise noted

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Attachment 4
Form 2C – Item II-B Flows, Sources of Pollution, and Treatment Technologies

HARRIS NUCLEAR PLANT

The Harris Nuclear Plant (HNP) consists of a 930 MW generating unit and associated facilities. The HNP systems include a Westinghouse pressurized water reactor, three re-circulating steam generators, a turbine generator, a one-pass condenser, an open re-circulating (cooling tower) cooling water system, and a lake to makeup water lost by evaporation. In a pressurized water reactor design, steam is produced in the secondary system steam generators using hot water from the reactor core. The primary system does not normally come into contact with any other part of the generating system, such as the steam cycle which includes the turbine and the condenser.

Outfall 006 – Combined Outfall to Harris Lake

The HNP operates on an open re-circulating cooling system using a natural draft cooling tower and 4100 acre makeup water storage reservoir. All five major wastewater discharges at the HNP are combined in a 36-inch diameter common pipe which discharges to the Harris Lake 500 feet offshore at 40 feet below the surface (Discharge Serial No. 006 in this application.) The individual waste streams contributing to the common outfall pipe are: cooling tower blowdown, sanitary waste treatment plant effluent, metal cleaning wastes, low-volume wastes, and radwaste system. (These waste streams are enumerated in the present permit as Discharge Serial Numbers 001, 002, 003, 004, and 005, respectively.) Toxicity testing has been conducted on the combined outfall line since February 1990. Each of the waste streams, as well as miscellaneous discharge points, are described in this narrative. Also included is a list of chemicals which are expected to be in waste streams from the HNP (Attachment 5).

Outfall 001 - HNP Cooling Tower Blowdown discharge to Outfall 006

The cooling tower provides the condenser with a supply of water for removing the heat rejected by the condensation of steam. (The circulating water temperature rise across the condenser is 25°F.) This heat is dissipated primarily by evaporation as the water falls through the tower. This evaporation is essentially pure water vapor, with the dissolved and suspended solids remaining to concentrate.

To prevent the solids from causing scale and corrosion problems, some of the concentrated cooling water is discharged from the cooling tower basin, i.e., blowdown. During plant operation, the cooling tower basin continuously discharges for optimum performance. Blowdown currently averages approximately 6 MGD. Makeup water for cooling tower evaporative losses and cooling tower blowdown is provided from the main reservoir. The cooling tower also serves as a partial source of service water, which is used for non-contact cooling of auxiliary equipment throughout the plant. The cooling tower is infrequently drained

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for maintenance. The normal operating procedure includes draining the residual water to the lake via Discharge Serial No. 006.

Occasionally, the condensers are drained for maintenance and repairs. When the condensers are drained, it is necessary to route the residual water (approximately 60,000 gallons per condenser per event) to area storm drains which discharge to the lake. This water is monitored prior to discharge for appropriate parameters required for cooling tower blowdown in accordance with the NPDES permit. Presently, condenser draining events are reported with relevant monitoring data to DWQ on attachments to monthly Discharge Monitoring Reports.

Outfall 002 - HNP Sewage Treatment Facility discharge to Outfall 006

The HNP is served by a 0.015 MGD extended aeration sewage treatment facility (consisting of an equalization basin, aeration basin, sludge holding tanks, raw sewage holding tank, clarifiers, and chlorine contact tanks) and a 0.025 MGD recirculating packed bed filter system consisting of two primary treatment tanks and three AX-Max treatment units. Disinfected effluent is pumped through a sand filter (added to help with TSS issues) to common outfall 006. Currently, sludge is land applied off site by a contract disposal firm (Granville Farms, Inc., Permit No. WQ0000838). Because the HNP sewage treatment facility receives industrial type waste as well as domestic type waste, the land application of the mixed sludge meets the exemption conditions stipulated at 40 CFR Part 503.6.

The existing 0.040 MGD sewage treatment facility is currently being expanded to a firm capacity of 0.065 MGD to accommodate hydraulic and organic loadings associated with episodic facility maintenance activities such as outages for refueling and/or equipment maintenance. The expansion facility components consists of two primary treatment tanks, three AX-Max treatment units, two AdvanTex polishing units, ultraviolet disinfection, and an effluent pump station serving the combined sanitary treatment units to discharge to Outfall 006.

In addition to sanitary waste, HVAC condensate is discharged to the sewage treatment facility.

Outfall 003 - HNP Metal Cleaning Wastes discharge to Outfall 006

Infrequently, cleaning of heat exchanger equipment by chemical solutions may be necessary. Cleaning solutions would be routed to the waste neutralization basin for pH adjustment (or other chemical neutralization) prior to discharge to the settling basin where further treatment by sedimentation occurs. To date, the only metal cleaning which has been conducted was a preoperational flush. If a new system is added in the future or if an existing system is changed out, flushing could be necessary again. Also, metal cleaning may be needed in the future for plant systems (e.g., steam generators, auxiliary boilers, piping, etc.). Chemical solutions used may include phosphates, organic cleaners, citric acid, or oxalic acid.

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Outfall 004 - HNP Low-Volume Wastes discharge to Outfall 006

In the operation of the HNP, there are many processes which result in intermittent low volumes of various waste streams. Low-volume waste is treated by neutralization (for pH adjustment), sedimentation, and separation. These wastes may be treated in the oily waste separator and/or neutralization basin as needed prior to routing to the sedimentation basin, which ultimately discharges to the common outfall line. Annually as a maintenance practice this basin may be physically cleaned using chlorine, a bisulfate is added after cleaning to remove the chlorine before discharge. Chemicals present in these systems may include corrosion products (such as copper and iron) corrosion inhibitors (such as nitrites, molybdates, ammonia, hydrazine, carbohydrazide, and ethanolamine), acids and bases from water treatment processes, and wastewater from ion exchange processes and ammonium bisulfite from dechlorination. Low-volume waste flow from the settling basin averages approximately 0.2 MGD. The various low-volume waste sources are described below:

- a) Water treatment system wastes from processing of demineralized water and potable water.

(The water treatment system includes coagulation, filtration, disinfection, and ion exchange. Wastes from treatment include filter backwash and demineralizer regeneration wastes.)
- b) Non-radioactive oily waste, floor drains, and chemical tank containment drains.

(Turbine building wastes which could contain oil are routed to the oily waste separator for treatment prior to routing to the neutralization basin. Used oil is collected by a contractor for reclamation.)
- c) Steam generator and auxiliary boiler draining following wet layup
- d) Non-radioactive secondary waste from condensate polishers
- e) Miscellaneous drains/leaks from condenser, steam generator, and secondary components
- f) Auxiliary boiler system blowdown
- g) Miscellaneous waste streams not otherwise identified elsewhere in this application.

Outfall 005 - HNP Radwaste Treatment System discharge to Outfall 006

The radwaste system is designed to collect, store, process, and release any radioactive or potentially radioactive liquids associated with operation of the nuclear power plant. The waste

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streams are collected in tanks and sampled for conventional pollutants and radioactivity. The specific batch treatment is selected based on these analytical results. This allows for selection of the proper treatment processes for each individual batch. Most radwaste streams are treated by the Modular Fluidized Transfer Demineralization System (MFTDS) that uses filtration and ion exchange in a manner that minimizes the production of solid wastes. Boric acid is recycled. The secondary waste system (SWS) is for treating radioactively-contaminated water from the secondary steam cycle system; however, since that system is not normally contaminated, those flows are routed to the normal low-volume waste treatment system after radiological monitoring.

After treatment, the radwaste flows are stored in one of four tanks: the secondary waste sample tank, the treated laundry and hot shower tank, the waste monitor tank, or the waste evaporator condensate tank. After monitoring to verify adequate treatment, the tanks are discharged to the common outfall line.

The cooling tower bypass line provides a flow of lake water for radwaste releases, as regulated by the NRC.

Other HNP Discharges

1. Storm Drains

Runoff from parking lots, outside storage areas, roof drains, and other areas on the plant site are collected in storm drains and ultimately routed to release points which discharge to Harris Lake. Flow contributed from those areas is estimated at 8.8 million gallons per month, based on average rainfall of 43 inches per year and a runoff assumption factor of 0.7.

In addition to stormwater, a few miscellaneous sources of water are also intermittently routed to the storm drains. These sources that have a minor contribution to overall storm drain flows are as follows:

a. Upflow filter clear well drains

The upflow filter clearwell stores filtered lake water which is used in the potable water treatment system. Periodically, some of the water from this tank is drained to the storm drains that discharge to Harris Lake. This water may contain low concentrations of chlorine because sodium hypochlorite is added to control biological growth in the tank prior to treatment through the upflow filter.

b. Heat exchanger on the demineralizer feedwater

It is necessary to heat the source water to the demineralized water treatment system to achieve optimum degassification. To accomplish this, steam is used to

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heat the feedwater. The condensed steam is discharged to the storm drains that flow to Harris Lake at approximately 5 - 10 gallons per minute. This steam could contain trace amounts of hydrazine and ammonia used for chemistry control in the auxiliary boiler steam system. Due to the low flow rate and the long retention time, the temperature of the condensed steam should be at ambient temperature upon reaching the lake.

c. Condenser water box drains

Prior to condenser maintenance or repairs it is sometimes (approximately twice/year) necessary to drain circulating water to the storm drains (approximately 60,000 gallons per condenser per event) that discharge to Harris Lake. This water is monitored for selected cooling tower blowdown parameters.

d. Filtered water storage tank

Water from the upflow filter clearwell is treated using a micro-filtration unit for turbidity control and then stored in a tank prior to subsequent filtration (nano-filtration unit) and disinfection. Occasionally, some water from this tank may be drained to the storm drains that discharge to Harris Lake. This water may contain trace amounts of chlorine.

e. Fire protection system

Approximately 5000 gallons of lake water used for annual testing of the fire protection system is routed to most of the storm drains that discharge to Harris Lake. In the event of a fire, additional water could be discharged to storm drains.

f. Condenser hotwell

During outages (approximately once per 18 months) it is necessary to drain the condenser hotwell for condenser maintenance and inspection. Approximately 70,000 gallons of this water resulting from condensed steam is drained to storm drains that discharge to Harris Lake. It may contain trace amounts of ethanolamine, 100 ppb or less of boron, and 100 ppb or less ammonia.

g. Condensate storage tank

Infrequently it is necessary to drain the condensate storage tank for maintenance. Approximately 400,000 gallons per event is drained to storm drains that discharge to Harris Lake. It may contain 200 ppb or less boron, 1000 ppb or less ammonia, and trace hydrazine.

h. Air conditioning system condensate

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The condensate from various building air conditioning systems flows to various storm drains to Harris Lake. The volume is generally low and is greatest in the humid summer months.

i. Service water system strainers

Infrequently, when service water strainers located at the makeup pumps from the cooling tower basin are backwashed to remove biofouling organisms or debris, a small volume of service water overflows the basin and runs to the adjacent storm drain that discharge to Harris Lake.

j. Maintenance Activities

During maintenance activities at the facility it may become necessary to drain all or some portion thereof of the following plant systems; normal service water, emergency service water, circulating water, potable water, and demineralized water. Maintenance activities at the facility may also require the hydrostatic flushing of system piping with discharge to the storm drain system. In addition, the facility may find it necessary to wash equipment with demineralized water with the discharge to storm drains

2. Emergency Service Water System

This system primarily provides non-contact cooling water for nuclear safety-related equipment systems and during emergency conditions. The emergency service water system discharges to the auxiliary reservoir which is used as the plant's heat sink during emergency conditions, a feature required by Nuclear Regulatory Commission regulations to provide a reliable supply of cooling water. Under normal operating conditions, the auxiliary and the main reservoirs are isolated from each other; however, the reservoirs may be connected as necessary. In addition to emergency situations, this system is used periodically for testing purposes or for containment cooling as needed. This water may contain traces of chemicals identified for the cooling tower blowdown.

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HARRIS ENERGY & ENVIRONMENTAL CENTER

The Harris Energy & Environmental Center (HE&EC) includes facilities that provide support services (laboratories and training classrooms) for the HNP and other CP&L operations. The sources of wastewater at the HE&EC are domestic waste, conventional laboratory waste, cooling tower blowdown, and potentially radioactive liquid waste from the radiochemistry and metallurgy laboratories. Additionally, floor drains from several shops and storage buildings are routed to the wastewater treatment facility. All waste streams, with the exception of the radiological wastewater, receive treatment in the 0.020 MGD wastewater facility.

Components of the treatment facility include a bar screen, submersible pump station as an influent pump station, three treatment ponds, sand filtration, chlorination and dechlorination, as well as the various lift stations for the HE&EC's various buildings. The pond portion of the treatment facility consists of an aerated pond with a minimum retention time of 10 days followed by a stabilization pond, also with a minimum retention time of 10 days. The third pond is a polishing pond with a minimum 2-day retention time. Effluent from the treatment facility is discharged via the effluent discharge pipe into Harris Lake.

If necessary sludge from the treatment facility will be removed and land applied by a contractor (a contractor for sludge disposal will be chosen when needed). Because the treatment facility receives industrial type waste as well as domestic type waste, the land application of the mixed sludge meets the exemption conditions stipulated as 40 CFR 503.6

Domestic Waste

The maximum domestic waste flow from the HE&EC sanitary facilities is approximately 0.014 MGD. In addition to the approximately 235 permanent employees on the site, the HE&EC, serving as a company training facility and as a visitors' center for the nearby Harris Nuclear Plant, accommodates a fluctuating population (ranging from 0 to 450 additional people per day). Wastewater from the HNP may also be conveyed to the HE&EC for treatment during times where sanitary flows generated onsite exceed the capacity of the HNP sewage treatment plant.

Laboratory Waste

Laboratory waste flow, consisting primarily of rinse water from the chemical, metallurgical, and biological laboratories, is approximately 0.001 MGD. HE&EC personnel are educated in the proper disposal of laboratory wastes and are encouraged to minimize the use of laboratory drains for chemical disposal. Most laboratory chemical wastes and virtually all oily wastes are drummed for off-site disposal. Laboratory wastes that are not drummed may go to one of two 5,000 gallon holding/neutralization tanks for visual inspection and testing before being discharged to the influent pump station.

Progress Energy Carolinas, LLC
Harris Nuclear Plant and Harris Energy & Environmental Center
National Pollutant Discharge Elimination System Permit Number NC0039586

Cooling Tower Blowdown

Cooling tower blowdown from the HE&EC air conditioning system averages approximately 0.002 MGD. Chemical additives include an algicide (aqueous glutaraldehyde solution) and a suspension agent. The treatment and extended retention time in the ponds should ensure no algicide is discharged to Harris Lake.

Radiological Wastewater

The majority of the radiological wastewater results from the cleaning of laboratory glassware. In addition, small quantities of liquid radiochemistry laboratory samples, radioactive metallurgy laboratory wastewater (which is prefiltered with a paper cartridge to remove particulates before disposal), liquids generated from analyses of plant 10 CFR Part 61 samples, and reagents are disposed via the HE&EC radiochemistry laboratory drains to a holding tank. Approximately 5,000 gallons are discharged annually from the holding tank, as allowed by the radioactive materials License No. 092-0218-4, issued by the N.C. Division of Radiation Protection. The effluent from the radiological holding tank combines with the effluent from the sewage treatment plant and discharges into Harris Lake.

Radiochemical analyses are performed prior to release to calculate the total activity in the waste. These analyses include gamma spectrum analysis using intrinsic germanium gamma spectrometry systems, as well as direct analysis for Tritium, Iron-55, Nickel-63 and Strontium-89/90. Individual radionuclides have different release limits, however, the total Tritium activity discharged per calendar year shall not exceed 20 millicuries, and the total activity excluding Tritium discharge per calendar year shall not exceed 5 millicuries.

Additionally, the pH of the wastewater is determined before release. The pH must be between six and nine and is adjusted, if necessary, using 50% sodium hydroxide. The tank is agitated after addition of the sodium hydroxide, and an additional sample is analyzed to verify that the appropriate pH adjustment is achieved.

Stormwater

Stormwater runoff from the HE&EC is composed of parking lot, roof, and lawn drainage. This non-industrial stormwater is not subject to the Phase I stormwater regulations of 40 CFR Part 122.