



MAR 07 2007

SERIAL: HNP-07-029

United States Nuclear Regulatory Commission  
ATTENTION: Document Control Desk  
Washington, DC 20555

SHEARON HARRIS NUCLEAR POWER PLANT  
DOCKET NO. 50-400/LICENSE NO. NPF-63  
NOTIFICATION OF NPDES PERMIT RENEWAL

Ladies and Gentlemen:

In accordance with Section 3.2 of the Environmental Protection Plan (Nonradiological) issued as Appendix B to the Operating License (NPF-63) for the Harris Nuclear Plant, Carolina Power & Light Company, doing business as Progress Energy Carolinas, Inc., is providing notification of the renewal of the facility's National Pollutant Discharge Elimination System (NPDES) Permit No. NC0039586. The permit renewal was approved February 9, 2007, by the North Carolina Department of Environment and Natural Resources, Division of Water Quality. A copy of the renewed permit is enclosed.

If you have any questions regarding this submittal please contact me at (919) 362-3137.

Sincerely,

A handwritten signature in black ink, appearing to read "D. Corlett".

David H. Corlett  
Supervisor, Licensing/Regulatory Programs  
Harris Nuclear Plant

DCH/mgw

Enclosure

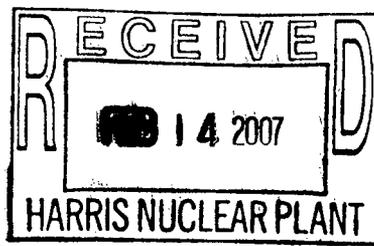
- c: Mr. P. B. O'Bryan (NRC Senior Resident Inspector, HNP)  
Mr. C. P. Patel (NRC Project Manager, HNP)  
Dr. W. D. Travers (NRC Regional Administrator, Region II)

Document Control Desk  
SERIAL: HNP-07-029

Enclosure

NPDES Permit No. NC0039586

(37 pages)



Michael F. Easley, Governor  
State of North Carolina

William G. Ross, Jr., Secretary  
Department of Environment and Natural Resources

Alan W. Klimek, P.E., Director  
Division of Water Quality

February 9, 2007

Mr. Eric McCartney, General Manager  
Harris Nuclear Plant  
P.O. Box 165  
New Hill, North Carolina 27562

Subject: Issuance of NPDES Permit  
Permit No. NC0039586  
Harris Nuclear Plant  
Harris Energy and Environmental Center  
Wake County

Dear Mr. McCartney:

Division personnel have reviewed and approved your application for renewal of the subject permit. Accordingly, we are forwarding the attached NPDES discharge 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 May 9, 1994 (or as subsequently amended).

The following modifications from the draft permit are included in the final permit:

- Data reported in the application for Outfall 006 showed levels of Nickel and Manganese above the water quality standards for WS-V waters. The water quality standards for these parameters are 25  $\mu\text{g/L}$  for Nickel and 200  $\mu\text{g/L}$  for Manganese. Additional data reviewed for nickel show that for the past 20 months all samples were less than detection. The Division will not implement a limit for nickel at this time. The Division will implement monitoring for manganese for this outfall. Only one effluent analysis was available for this parameter. Progress Energy submitted influent data showing high levels of manganese in the intake water. The data collected will be evaluated to determine the need for a limit.
- The name of the permittee was changed to Carolina Power and Light Company doing business as Progress Energy Carolinas, Inc.
- Monitoring requirements for ammonia at outfall 002 can not be eliminated. Ammonia is an indicator of treatment plant performance and is a standard parameter monitored in WWTP treating domestic wastes.
- Part IV, Standard Conditions, Section D.2 specifies that the DMR shall be postmarked no later than the 30th day following the completed reporting period.
- The cooling water intake structure information submitted with the permit application meets the requirements of Section 316(b).
- Part II.4. Stormwater Pollution Prevention Plan of the Special Conditions was modified to specify that the Plan does not have to be submitted to the Division. The facility should have a copy available for review during inspections or if requested by the public.

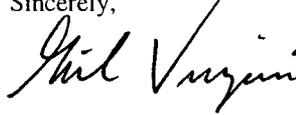
If any parts, measurement frequencies or sampling requirements contained in this permit are unacceptable to you, you have the right to an adjudicatory hearing upon written request within thirty (30) days following receipt of this letter. This request must be in the form of a written petition, conforming 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 Quality or permits required by the Division of Land Resources, the Coastal Area Management Act or any other Federal or Local governmental permit that may be required.

Permit No. NC0039586  
Harris Nuclear Plant  
Page 2

If you have any questions concerning this permit, please contact Teresa Rodriguez at telephone number (919) 733-5083, extension 553.

Sincerely,



for: Alan W. Klimek, P.E.

Cc: NPDES files  
Central files  
U.S. EPA Region 4  
Raleigh Regional Office – Surface Water Protection  
Aquatic Toxicology Unit

**STATE OF NORTH CAROLINA  
DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES  
DIVISION OF WATER QUALITY**

**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,

**Carolina Power and Light Company doing business as Progress Energy Carolinas, Inc.**

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, V and VI hereof.

The permit shall become effective March 1, 2007

This permit and the authorization to discharge shall expire at midnight on July 31, 2011.

Signed this day February 9, 2007

for:   
\_\_\_\_\_  
Alan W. Klimek, P.E., Director  
Division of Water Quality  
By Authority of the Environmental Management Commission

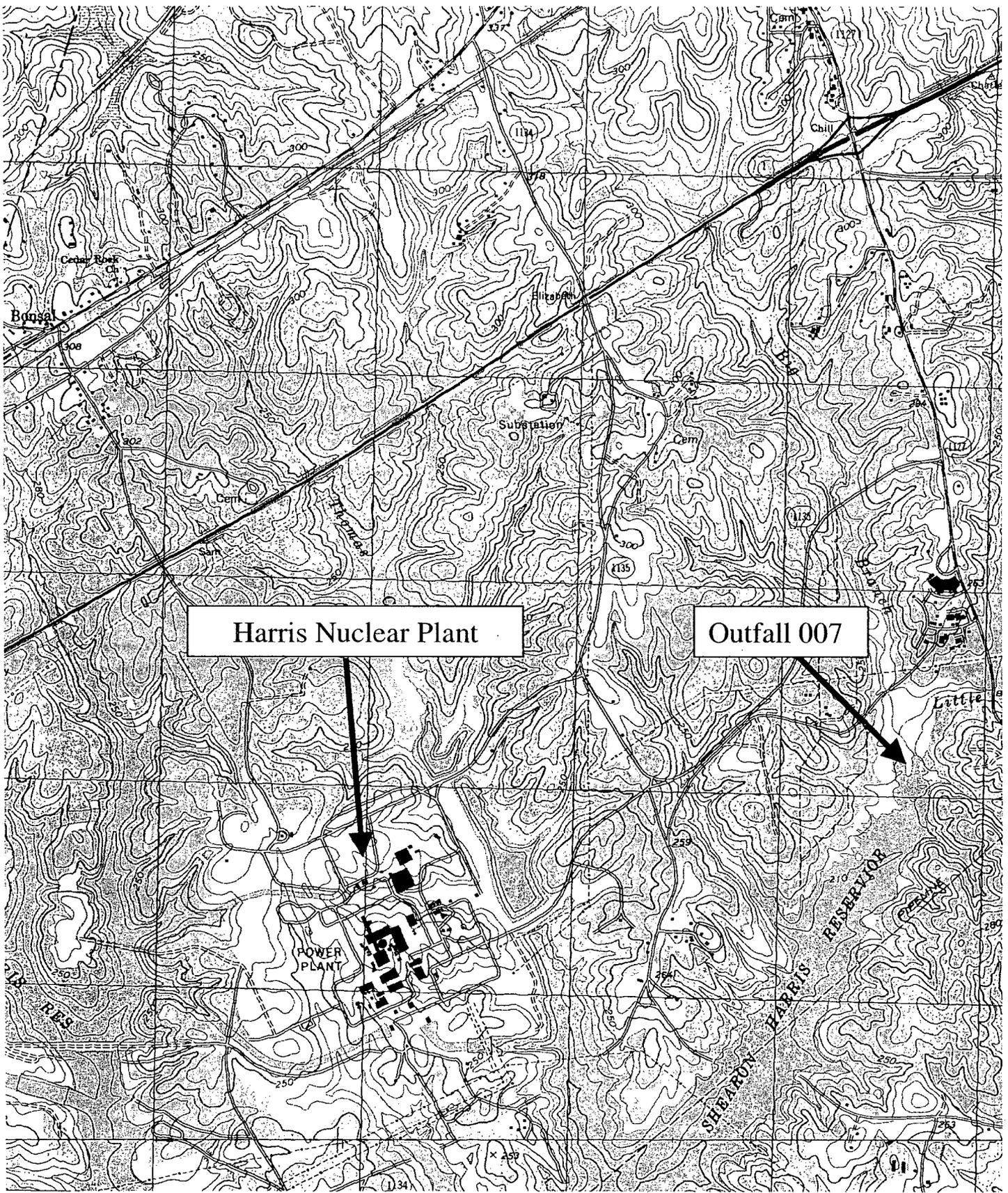
## SUPPLEMENT TO PERMIT COVER SHEET

*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.*

### Carolina Power and Light Company doing business as Progress Energy Carolinas Inc.

is hereby authorized to:

1. Continue to discharge cooling tower blowdown through outfall 001; and
2. Continue to operate a 0.025 MGD extended aeration wastewater treatment plant consisting of dual package plants with the following components:
  - equalization basin
  - aeration basin
  - sludge holding tanks
  - clarifiers
  - chlorine contact tanks
 discharging through outfall 002; and
3. Continue to operate a metal cleaning waste treatment system consisting of dual neutralization basins discharging through 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 outfall 004; and
5. Continue to operate a radwaste treatment system consisting of a Modular Fluidized Transfer Demineralization System discharging through 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:
  - holding tanks
  - comminutor
  - bar screen
  - influent pump station
  - aerated pond
  - stabilization pond
  - polishing pond
  - sand filter,
  - 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. Continue to discharge stormwater, normal service water, emergency service water, circulating water, potable water, demineralized water, hydrostatic flushing of system piping and wash water from outfalls SW-001, SW-002, SW-003, SW-004, SW-005, SW-006, SW-007, SW-008, SW-009, SW-A and SW-B.
9. 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.



Progress Energy Carolinas, Inc. – Harris Nuclear Plant

**State Grid/Quad:** New Hill

**006: Latitude:** 35° 34' 47" **Longitude:** 78° 58' 07"

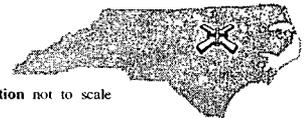
**Receiving Stream:** Harris Reservoir

**007: Latitude:** 35° 38' 05" **Longitude:** 78° 55' 05"

**Stream Class:** WS-V

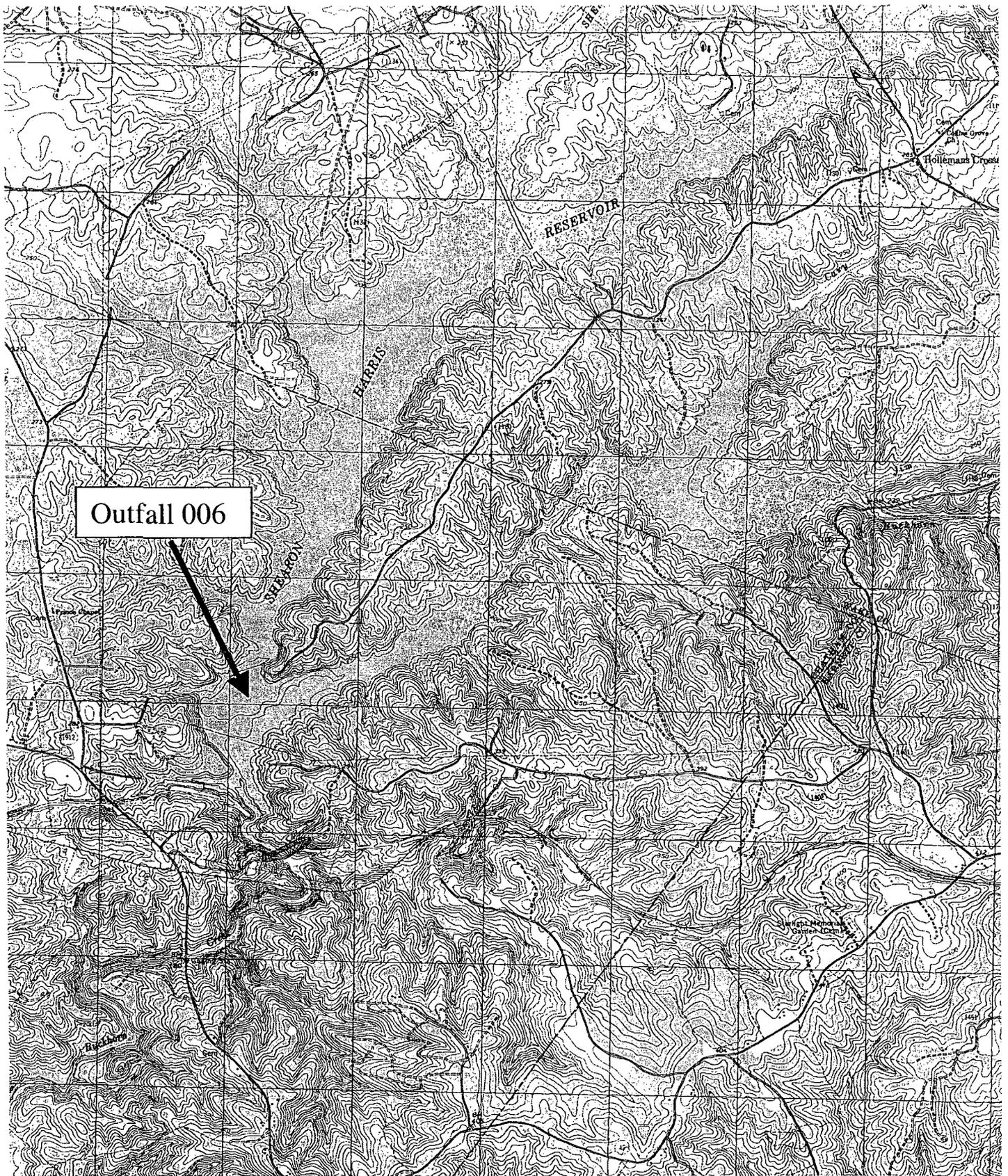
**Drainage Basin:** Cape Fear River

**Sub-Basin:** 03-06-07



Facility Location not to scale

NPDES Permit No. NC0039586  
Wake County



Progress Energy Carolinas, Inc. – Harris Nuclear Plant

State Grid/Quad: Cokesbury

006: Latitude: 35° 34' 47" Longitude: 78° 58' 07"

Receiving Stream: Harris Reservoir

007: Latitude: 35° 38' 05" Longitude: 78° 55' 05"

Stream Class: WS-V

Drainage Basin: Cape Fear River

Sub-Basin: 03-06-07



Facility Location not to scale

NPDES Permit No. NC0039586  
Wake County

**PART I**  
**MONITORING CONTROLS AND LIMITATIONS FOR PERMITTED DISCHARGES**

**SECTION A (1). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
Flow <sup>2</sup>			Continuous	Recorder	Effluent
Free Available Chlorine <sup>3</sup>	0.2 mg/L	0.5 mg/L	Weekly	See Note 4	See Note 4
Total Residual Chlorine			Weekly	See Note 4	See Note 4
Time of TRC <sup>3</sup> (min/day/unit)		120.0 min	Weekly	Calculations	Effluent
Total Chromium <sup>5</sup>	0.2 mg/L	0.2 mg/L	Weekly	Grab	Effluent
Total Zinc <sup>5</sup>	1.0 mg/L	1.0 mg/L	Weekly	Grab	Effluent
The 126 Priority Pollutants <sup>5</sup>			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 Part II.2 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.
4. Free available chlorine shall be a daily average and daily maximum. Samples shall be multiple grabs at the tower which shall consist 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.

**SECTION A (2). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
Flow	0.025 MGD		Continuous	Recording <sup>2</sup>	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
NH3 as N			Monthly	Composite	E
Fecal Coliform (geometric mean)	200/100 ml	400/100 ml	Weekly	Grab	E
Total Residual Chlorine			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.

**SECTION A (3). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge treated wastewater from outfall 003, Metal Cleaning Wastes<sup>1</sup>. Such discharges shall be limited and monitored by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>2</sup>
Flow <sup>3</sup>	0.05 MGD		See Note 3	See Note 3	Effluent
Total Copper		1.0 mg/L	Daily <sup>4</sup>	Grab	Effluent
Total Iron		1.0 mg/L	Daily <sup>4</sup>	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.

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

**SECTION A (4). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>2</sup>
Flow	1.5 MGD		Weekly	Estimate <sup>3</sup>	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.

**SECTION A (5). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
Flow			Monthly	Estimate <sup>2</sup>	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.

**SECTION A (6). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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 monitored by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations			Monitoring Requirements		
	Monthly Average	Weekly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
Hydrazine <sup>2</sup>			60.0 µg/L	Weekly	Grab	Effluent
Temperature (April 1 – October 31) <sup>3</sup>				Weekly	Grab	Effluent
Acute Toxicity <sup>4</sup>				Quarterly	Composite <sup>5</sup>	Effluent
pH <sup>6</sup>				Monthly	Grab	Effluent
Total Copper				Monthly	Composite <sup>5</sup>	Effluent
Total Iron				Monthly	Composite <sup>5</sup>	Effluent
Total Nickel				Monthly	Composite <sup>5</sup>	Effluent
Total Manganese				2/Month	Composite <sup>5</sup>	Effluent
NH <sub>3</sub> as N				Monthly	Composite <sup>5</sup>	Effluent
Total Suspended Solids				Monthly	Composite <sup>5</sup>	Effluent
Total Nitrogen				Monthly	Composite <sup>5</sup>	Effluent
Total Phosphorus				Monthly	Composite <sup>5</sup>	Effluent

## Notes:

1. Effluent after combination of all waste streams from outfalls 001 through 005 and prior to discharge into Harris Reservoir.
2. 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, Carolina Power & Light may elect to meet these limits at outfall 004, in which case sampling for hydrazine at outfall 006 is not required.
3. 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 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.
4. Acute toxicity (Pimephales) P/F at 90%: August, November, February and May: See Part I A (9).
5. A composite sample consisting of 24 or more grab samples of equal volumes taken at equal intervals over a 24 hour period.
6. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.

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

There shall be no discharge of polychlorinated byphenyl (PCB) compounds such as those commonly used for transformer fluid.

**SECTION A (7). EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS**

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 monitored by the Permittee as specified below:

Effluent Characteristics	Effluent Limitations		Monitoring Requirements		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
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 Residue	30.0 mg/L	45.0 mg/L	Weekly	Grab	Effluent
NH <sub>3</sub> as N (April 1 – October 31)	4.0 mg/L	20.0 mg/L	Weekly	Grab	Effluent
NH <sub>3</sub> 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 <sup>2</sup>			Weekly	Grab	Effluent
Temperature			Weekly	Grab	Effluent
TKN <sup>3</sup>	Monitor and report		Quarterly	Grab	Effluent
NO <sub>2</sub> -N + NO <sub>3</sub> -N <sup>3</sup>	Monitor and report		Quarterly	Grab	Effluent
Total Nitrogen			Quarterly	Grab	Effluent
Total Phosphorus			Quarterly	Grab	Effluent
Dissolved Oxygen <sup>4</sup>			Weekly	Grab	Effluent
Acute Toxicity <sup>5</sup>			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. Quarterly monitoring and reporting shall begin on January 1, 2009.
4. The daily average dissolved oxygen effluent concentration shall not be less than 5 mg/L.
5. Acute Toxicity (Pimephales) P/F at 90%: August, November, February and May: See Part I A(9).

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

**SECTION A (8). STORMWATER MONITORING REQUIREMENTS/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.

<b>Stormwater Discharge Characteristics</b>	<b>Monitoring Frequency<sup>1</sup></b>	<b>Sample Location<sup>2</sup></b>
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.

**SECTION A (9). ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (QUARTERLY) OUTFALLS 006 AND 007**

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-July, 1992 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). Effluent samples for self-monitoring purposes must be obtained during representative effluent discharge below all waste treatment. The tests will be performed during the months of August, November, February and May.

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, DWQ Form AT-2 (original) is to be sent to the following address:

Attention: North Carolina Division of Water Quality  
Environmental Sciences Section  
1621 Mail Service Center  
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental 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 Environmental Sciences Section at the address cited above.

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.

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.

Should any test data from either these monitoring requirements or tests performed by the North Carolina Division of Water Quality 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.

**PART II**  
**SPECIAL CONDITIONS**

1. Biocide Condition

The permittee shall not use any biocides except those approved in conjunction with the permit application. The permittee shall notify the Director in writing no later than ninety (90) days prior to instituting use of any additional biocide used in the cooling system which may be toxic to aquatic life than those previously reported to the Division. Such notification shall include completion of Biocide Worksheet Form 101 and a map locating the discharge point and receiving stream.

2. 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.

3. Domestic Wastewater Treatment Plant

The domestic wastewater treatment plant shall be properly operated and maintained to ensure treatment of domestic waste to secondary levels.

4. 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.

#### 5. Stormwater Minimum Monitoring and Reporting Requirements

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

- 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.

**PART III  
SCHEDULE OF COMPLIANCE**

Section A. Schedule of Compliance

1. The permittee shall comply with Final Effluent Limitations and monitoring requirements, stormwater monitoring and stormwater controls specified for discharges in accordance with the following schedule:

Permittee shall comply with Final Effluent Limitations by the effective date of the permit unless specified below.

The Stormwater Pollution Prevention Plan shall be updated on an annual basis.

2. No later than 14 calendar days following a date identified in the above schedule of compliance, the permittee shall submit either a report of progress or, in the case of specific actions being required by identified dates, a written notice of compliance or noncompliance. In the latter case, the notice shall include the cause of noncompliance, any remedial actions taken, and the probability of meeting the next schedule requirements.

**PART IV  
STANDARD CONDITIONS FOR NPDES PERMITS**

SECTION A. DEFINITIONS

1. Permit Issuing Authority

The Director of the Division of Water Quality.

2. DENR or "the Division"

Means the Division of Water Quality, Department of Environment and Natural Resources.

3. EMC

Used herein means the North Carolina Environmental Management Commission.

4. Act or "the Act"

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

5. Mass/Day Measurements

a. The "monthly average discharge" is defined as the total mass of all daily discharges sampled and/or measured during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such month. It is therefore, an arithmetic mean found by adding the weights of the pollutant found each day of the month and then dividing this sum by the number of days the tests were reported. The limitation is identified as "Monthly Average" in Part I of the permit.

b. The "weekly average discharge" is defined as the total mass of all daily discharges sampled and/or measured during the calendar week (Sunday - Saturday) on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such week. It is, therefore, an arithmetic mean found by adding the weights of pollutants found each day of the week and then dividing this sum by the number of days the tests were reported. This limitation is identified as "Weekly Average" in Part I of the permit.

c. The "maximum daily discharge" is the total mass (weight) of a pollutant discharged during a calendar day. If only one sample is taken during any calendar day the weight of pollutant calculated from it is the "maximum daily discharge." This limitation is identified as "Daily Maximum," in Part I of the permit.

d. The "average annual discharge" is defined as the total mass of all daily discharges sampled and/or measured during the calendar year on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such year. It is, therefore, an arithmetic mean found by adding the weights of pollutants found each day of the year and then dividing this sum by the number of days the tests were reported. This limitation is defined as "Annual Average" in Part I of the permit.

6. Concentration Measurement

a. The "average monthly concentration," other than for fecal coliform bacteria, is the sum of the concentrations of all daily discharges sampled and/or measured during a calendar month on which daily discharges are sampled and measured, divided by the number of daily discharges sampled and/or measured during such month (arithmetic mean of the daily concentration values). The daily concentration value is equal to the concentration of a composite sample or in the case of grab samples is the arithmetic mean (weighted by flow value) of all the samples collected during that calendar day. The average monthly count for fecal coliform bacteria is the geometric mean of the counts for samples collected during a calendar month. This limitation is identified as "Monthly Average" under "Other Limits" in Part I of the permit.

- b. The "average weekly concentration," other than for fecal coliform bacteria, is the sum of the concentrations of all daily discharges sampled and/or measured during a calendar week (Sunday/Saturday) on which daily discharges are sampled and measured divided by the number of daily discharges sampled and/or measured during such week (arithmetic mean of the daily concentration values). The daily concentration value is equal to the concentration of a composite sample or in the case of grab samples is the arithmetic mean (weighted by flow value) of all the samples collected during that calendar day. The average weekly count for fecal coliform bacteria is the geometric mean of the counts for samples collected during a calendar week. This limitation is identified as "Weekly Average" under "Other Limits" in Part I of the permit.
- c. The "maximum daily concentration" is the concentration of a pollutant discharge during a calendar day. If only one sample is taken during any calendar day the concentration of pollutant calculated from it is the "Maximum Daily Concentration". It is identified as "Daily Maximum" under "Other Limits" in Part I of the permit.
- d. The "average annual concentration," other than for fecal coliform bacteria, is the sum of the concentrations of all daily discharges sampled and/or measured during a calendar year on which daily discharges are sampled and measured divided by the number of daily discharges sampled and/or measured during such year (arithmetic mean of the daily concentration values). The daily concentration value is equal to the concentration of a composite sample or in the case of grab samples is the arithmetic mean (weighted by flow value) of all the samples collected during that calendar day. The average yearly count for fecal coliform bacteria is the geometric mean of the counts for samples collected during a calendar year. This limitation is identified as "Annual Average" under "Other Limits" in Part I of the permit.
- e. The "daily average concentration" (for dissolved oxygen) is the minimum allowable amount of dissolved oxygen required to be available in the effluent prior to discharge averaged over a calendar day. If only one dissolved oxygen sample is taken over a calendar day, the sample is considered to be the "daily average concentration" for the discharge. It is identified as "daily average" in the text of Part I.
- f. The "quarterly average concentration" is the average of all samples taken over a calendar quarter. It is identified as "Quarterly Average Limitation" in the text of Part I of the permit.
- g. A calendar quarter is defined as one of the following distinct periods: January through March, April through June, July through September, and October through December.

#### 7. Other Measurements

- a. Flow, (MGD): The flow limit expressed in this permit is the 24 hours average flow, averaged monthly. It is determined as the arithmetic mean of the total daily flows recorded during the calendar month.
- b. An "instantaneous flow measurement" is a measure of flow taken at the time of sampling, when both the sample and flow will be representative of the total discharge.
- c. A "continuous flow measurement" is a measure of discharge flow from the facility which occurs continually 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.

#### 8. Types of Samples

- a. Composite Sample: A composite sample shall consist of:
  - (1) 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
  - (2) 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 present gallon interval between sample collection fixed at no greater than 1/24 of the expected total daily flow at the treatment system, or  
(3) a single, continuous sample collected over a 24 hour period proportional to the rate of flow.

In accordance with (1) above, the time interval between influent grab samples shall be no greater than once per hour, and the time interval between effluent grab samples shall be no greater than once per hour except at wastewater treatment systems having a detention time of greater than 24 hours. In such cases, effluent grab samples may be collected at time intervals evenly spaced over the 24 hour period which are equal in number of hours to the detention time of the system in number of days. However, in no case may the time interval between effluent grab samples be greater than six (6) hours nor the number of samples less than four (4) during a 24 hour sampling period.

- b. **Grab Sample:** Grab samples are individual samples collected over a period of time not exceeding 15 minutes; the grab sample can be taken manually. Grab samples must be representative of the discharge or the receiving waters.

9. Calculation of Means

- a. **Arithmetic Mean:** The arithmetic mean of any set of values is the summation of the individual values divided by the number of individual values.
- b. **Geometric Mean:** The geometric mean of any set of values is the Nth root of the product of the individual values where N is equal to the number of individual values. The geometric mean is equivalent to the antilog of the arithmetic mean of the logarithms of the individual values. For purposes of calculating the geometric mean, values of zero (0) shall be considered to be one (1).
- c. **Weighted by Flow Value:** Weighted by flow value means the summation of each concentration times its respective flow divided by the summation of the respective flows.

10. Calendar Day

A calendar day is defined as 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.

11. Point Source Discharge

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

12. Hazardous Substance

A hazardous substance means any substance designated under 40 CFR Part 116 pursuant to Section 311 of the Clean Water Act.

13. Toxic Pollutant

A toxic pollutant is any pollutant listed as toxic under Section 307(a)(1) of the Clean Water Act.

14. 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.

15. Bulk Storage of Liquid Products

Liquid raw materials (excluding water), 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.

16. Representative Storm Event

A storm event that measures greater than 0.1 inches of rainfall and that is preceded by at least 72 hours in which no storm event measuring greater than 0.1 inches has occurred. A single storm event may contain up to 10 consecutive hours of no precipitation. For example, if it rains for 2 hours without producing any collectable discharge, and then stops, a sample may be collected if a rain producing a discharge begins again within the next 10 hours.

17. 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 DWQ may grant representative outfall status. Representative outfall status allows the permittee to perform analytical monitoring at a reduced number of outfalls.

18. Rinse Water Discharge

The discharge of rinse water from equipment cleaning areas associated with industrial activity. Rinse waters from vehicle and equipment cleaning areas are process wastewaters and do not include washwaters utilizing any type of detergent or cleaning agent.

19. Secondary Containment

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

20. Section 313 Water Priority Chemical

A chemical or chemical category which:

- a. 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;
- b. Is present at or above threshold levels at a facility subject to SARA title III, Section 313 reporting requirements; and
- c. That meet at least one of the following criteria:
  - (1) Is listed in Appendix D of 40 CFR part 122 on either Table II (organic priority pollutants), Table III (certain metals, cyanides, and phenols) or Table IV (certain toxic pollutants and hazardous substances);
  - (2) Is listed as a hazardous substance pursuant to section 311(b)(2)(A) of the CWA at 40 CFR 116.4; or
  - (3) Is a pollutant for which EPA has published acute or chronic water quality criteria.

21. Stormwater Runoff

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

22. 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.

23. 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.

24. Ten Year Design Storm

The maximum 24 hour precipitation event expected to be equaled or exceeded on the average once in ten years. Design storm information can be found in the State of North Carolina Erosion and Sediment Control Planning and Design Manual.

25. Total Flow

The flow corresponding to the time period over which the entire storm event occurs. Total flow shall be either; (a) measured continuously, (b) calculated based on the amount of area draining to the outfall, the amount of built-upon (impervious) area, and the total amount of rainfall, or (c) estimated by the measurement of flow at 20 minute intervals during the rainfall event.

26. Vehicle Maintenance Activity

Vehicle rehabilitation, mechanical repairs, painting, fueling, lubrication, vehicle cleaning operations, or airport deicing operations.

27. 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.

28. 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 ejection well, a hazardous waste long-term storage facility or a surface storage facility.

29. Waste Pile

Any non-containerized accumulation of solid, non-flowing waste that is used for treatment and storage.

SECTION B. GENERAL CONDITIONS

1. Duty to Comply

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

- a. The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the Clean Water Act 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 Clean Water Act provides that any person who violates a permit condition is subject to a civil penalty not to exceed \$25,000 per day for each violation. Any person who negligently violates any permit condition is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment for not more than 1 year, or both. Any person who knowingly violates permit conditions 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. Also, any person who violates a permit condition may be assessed an administrative penalty not to exceed \$10,000 per violation with the maximum amount not to exceed \$125,000. [Ref: Section 309 of the Federal Act 33 U.S.C. 1319 and 40 CFR 122.41 (a)]
- c. Under state law, a civil penalty of not more than ten thousand dollars (\$10,000) 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. [Ref: North Carolina General Statutes § 143-215.6A]
- d. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 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. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$125,000.

## 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 which has a reasonable likelihood of adversely affecting human health or the environment.

## 3. Civil and Criminal Liability

Except as provided in permit conditions on "Bypassing" (Part IV, C-4) and "Power Failures" (Part IV, 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.

## 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, 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.

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 to be kept by this permit.

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.

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. 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.

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 employing more than 250 persons or having gross annual sales or expenditures exceeding 25 million (in second quarter 1980 dollars), if 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.

b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described 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.

- c. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification:

"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.

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 2H .0100; and North Carolina General Statute 143-215.1 et. al.

14. Previous Permits

All previous National Pollutant Discharge Elimination System Permits issued to this facility, whether for operation or discharge, are hereby revoked by issuance of this permit. [The exclusive authority to operate this facility arises under this permit. The authority to operate the facility under previously issued permits bearing this number is no longer effective. ] The conditions, requirements, terms, and provisions of this permit authorizing discharge under the National Pollutant Discharge Elimination System govern discharges from this facility.

SECTION C. OPERATION AND MAINTENANCE OF POLLUTION CONTROLS

1. Certified Operator

Pursuant to Chapter 90A-44 of North Carolina General Statutes, and upon classification of the facility by the Certification Commission, the permittee shall employ a certified wastewater treatment plant operator in responsible charge (ORC) of the wastewater treatment facilities. Such operator must hold a certification of the grade equivalent to or greater than the classification assigned to the wastewater treatment facilities by the Certification Commission. The permittee must also employ a certified back-up operator of the appropriate type and any grade to comply with the conditions of Title 15A NCAC Chapter 8G .0200. The ORC of the facility must visit each Class I facility at least weekly and each Class II, III, and IV facility at least daily, excluding weekends and holidays, and must properly manage and document daily operation and maintenance of the facility and must comply with all other conditions of Title 15A, NCAC Chapter 8G .0200. Once the facility is classified, the permittee shall submit a letter to the Certification Commission which designates the operator in responsible charge within thirty days after the wastewater treatment facilities are 50% complete.

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 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 the permit.

### 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.

### 4. Bypassing of Treatment Facilities

#### a. Definitions

- (1) "Bypass" means the intentional 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.
- (2) "Severe property damage" means 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 does not mean economic loss caused by delays in production.

#### b. Bypass not exceeding limitations.

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 c. and d. of this section.

#### c. Notice

- (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 affect of the bypass.
- (2) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in Part IV, E. 6. of this permit. (24 hour notice).

#### d. Prohibition of Bypass

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

### 5. Upsets

#### a. Definition.

"Upset " means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

## b. Effect of an upset.

An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph c. 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.

## c. Conditions necessary for a demonstration of upset.

A 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 IV, E. 6. (b) (B) of this permit.
- (4) The permittee complied with any remedial measures required under Part IV, B. 2. of this permit.

## d. Burden of proof.

In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

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. The permittee shall comply with all existing federal regulations governing the disposal of sewage sludge. Upon promulgation of 40 CFR Part 503, any permit issued by the Permit Issuing Authority for the utilization/disposal of sludge may be reopened and modified, or revoked and reissued, to incorporate applicable requirements at 40 CFR Part 503. The permittee shall comply with applicable 40 CFR Part 503 Standards for the Use and Disposal of Sewage Sludge (when promulgated) within the time provided in the regulation, even if the permit is not modified to incorporate the requirement. 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 DEM Regulation, Title 15A, North Carolina Administrative Code, Subchapter 2H, .0124 Reliability, 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 RECORDS1. Representative Sampling

Samples collected and measurements taken, as required herein, shall be characteristic of the volume and nature of the permitted discharge. Samples collected at a frequency less than daily shall be taken on a day and time that is characteristic of the discharge over the entire period which 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.

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 (DEM No. MR 1, 1.1, 2, 3) or alternative forms approved by the Director, postmarked no later than the 30th day 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:

Division of Water Quality  
Water Quality 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 are 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. Once-through condenser cooling water flow which is 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

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; 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.

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 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.

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 and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, 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.

7. Recording Results

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

- 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 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.

### 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. Notice is required only when:

- a. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in 40 CFR Part 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 which are subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR Part 122.42 (a) (1).
- c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alternation, 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 in the permitted facility or activity which may result in noncompliance with permit requirements.

#### 4. Transfers

This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act.

5. Monitoring Reports

Monitoring results shall be reported at the intervals specified elsewhere in this permit.

- a. Monitoring results must be reported on a Discharge Monitoring Report (DMR) (See Part II. D. 2 of this permit) 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 the permit, using test procedures specified in Part IIV D. 4. of this permit or in the case of sludge use or disposal, approved under 40 CFR 503, or as specified in this permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR.
- c. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

6. 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 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.
- b. The following shall be included as information which must be reported within 24 hours under this paragraph:
  - (1) Any unanticipated bypass which exceeds any effluent limitation in the permit.
  - (2) Any upset which exceeds any effluent limitation in the permit.
  - (3) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours.
- c. The Director may waive the written report on a case-by-case basis for reports under paragraph b. above of this condition if the oral report has been received within 24 hours.

7. Other Noncompliance

The permittee shall report all instances of noncompliance not reported under Part IV. E. 5 and 6. of this permit at the time monitoring reports are submitted. The reports shall contain the information listed in Part IV. E. 6. of this permit.

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.

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 directly to receiving waters 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 in letter form within 5 days following first knowledge of the occurrence.

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 of Water Quality. 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 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.

**PART V  
OTHER REQUIREMENTS**

1. Construction

No construction of wastewater treatment facilities or additions to add to the plant's treatment capacity or to change the type of process utilized at the treatment plant shall be begun until Final Plans and Specifications have been submitted to the Division of Water Quality and written approval and Authorization to Construct has been issued.

2. Groundwater Monitoring

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

3. Changes in Discharges of Toxic Substances

The permittee shall notify the Permit Issuing Authority as soon as it knows or has reason to believe:

- 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 ug/l);

(2) Two hundred micrograms per liter (200 ug/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 ug/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(3) Five (5) 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 ug/l);

(2) One milligram per liter (1 mg/l) for antimony;

(3) Ten (10) times the maximum concentration value reported for that pollutant in the permit application.

**PART VI  
ANNUAL ADMINISTERING AND COMPLIANCE MONITORING FEE REQUIREMENTS**

1. Fee Requirements

The permittee must pay the annual administering and compliance monitoring fee within 30 (thirty) days after being billed by the Division. Failure to pay the fee in a timely manner in accordance with 15A NCAC 2H .0105(b)(4) may cause this Division to initiate action to revoke the permit.