



Michael F. Easley  
Governor  
William G. Ross, Jr., Secretary  
North Carolina Department of Environment and Natural Resources  
Alan W. Klimek, P.E., Director  
Division of Water Quality

February 16, 2004

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FEB 26 2004

H.R. STRICKLER

Herbert Strickler, Mgr. Site EHS  
Global Nuclear Fuel-Americas LLC  
P.O.Box 780, M/C G26  
Wilmington, North Carolina 28402-0780

Subject: NPDES Permit Issuance  
Permit No. NC0001228  
GNF-A Wilmington Plant  
New Hanover County

Dear Mr. Strickler:

Division staff have reviewed and approved your application for an NPDES discharge permit. Accordingly, the Division is forwarding the subject 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 May 9, 1994 (or as subsequently amended).

The following items from the DRAFT permit have been modified in this FINAL permit, based on comments received from GNF-A and EPA:

Outfall 001 (Process Wastewater)

- EPA objected to the BPJ limits determination used for TSS, TN, and fluoride in the draft permit, which incorporated the maximum mass loading rates for monthly average and daily max values over the period 1996-2000. EPA subsequently agreed to revised BPJ limits for TSS, TN, and fluoride based on the 95% confidence limit of monthly average loadings, and 99% confidence limit of daily max loadings.
- Per GNF-A request, the monitoring frequency for TSS was changed from daily to weekly. This is consistent with the monitoring frequency for other parameters.
- Per GNF-A request, the sample location for nitrosamines was changed to the FCO Building discharge, and monitoring type was changed from composite to grab. These changes reflect actual sampling protocols.
- Per GNF-A request, clarified that TN should be expressed as N in Effluent Sheet A(1).
- Per GNF-A request, references to GNF were changed to GNF-A.
- Per GNF-A request, the permit expiration date was changed from 12/31/2006 to 2/28/2009. This change affords the permittee a full five years to the permit cycle.

Outfall 002 (Domestic Wastewater)

- Per GNF-A request, clarified that TN should be expressed as N in Effluent Sheet A(2).
- During permit finalization it was realized that the current DO effluent limit of  $\geq 5$  mg/l was inadvertently left off the Draft permit. This limit has been placed back into the final permit.

The following items from the DRAFT permit have been retained in this FINAL permit:

Outfall 001 (Process Wastewater)

- The effluent guideline limits for process wastewater were updated using projected production levels provided by GNF through 2006.
- The monitoring frequency for total phosphorus was decreased from monthly to quarterly, based on the low TP values reported.
- The monitoring frequency for several parameters (total fluoride, total chromium, total copper, total nickel, total silver, total zinc) was decreased from weekly to monthly, based on effluent data well below permit limits. Monthly data will still provide a robust data set to evaluate at the next permit renewal.
- Using cadmium effluent data collected for 2001/2002, the maximum predicted effluent concentration (35 ug/l) exceeds both the allowable chronic effluent concentration (21.4 ug/l) as well as the EPA acute criterion (15 ug/l). Therefore, the effluent cadmium data shows reasonable potential to exceed applicable criteria, and a water quality based limit of 15 ug/l was imposed in

NPDES Permit Issuance  
Permit No. NC0001228  
GNF-A Wilmington Plant  
Page 2

the permit to protect for acute impacts. The monitoring frequency was increased from monthly to weekly.

- Both the AE/SCO and FCO operations are regulated for cyanide by Federal Effluent Guidelines (40 CFR 433 and 40 CFR 471). Whenever Effluent Guidelines are applicable, the state must apply the more stringent limit from Effluent Guidelines limitations and water quality-based limitations. For cyanide, the water quality-based limitation is more stringent, and thus was applied to this permit. The cyanide limit of 22 ug/l is based on protection of the EPA acute criterion. The monitoring frequency remains at a monthly frequency.
- The AE/SCO operation is regulated for lead by Federal Effluent Guidelines (40 CFR 433). Whenever Effluent Guidelines are applicable, the state must apply the more stringent limit from Effluent Guidelines limitations and water quality-based limitations. For lead, the water quality-based limitation is more stringent, and thus was applied to this permit. The lead limit of 34 ug/l is based on protection of the EPA acute criterion. The monitoring frequency remains at a monthly frequency.
- For clarification purposes, quarterly sampling for nitrosamines was added to the Effluent Sheet, in addition to Special Condition A (4).
- Although GNF-A requested flexibility in their quarterly toxicity testing requirement, this request cannot be granted. All facilities with quarterly toxicity testing have defined months when samples must be collected, and this has not presented any noticeable problems to date.

Outfall 002 (Domestic Wastewater)

- A footnote was added to the bottom of the Effluent Sheet, indicating that instream monitoring is waived as long as GNF-A maintains membership in the LCFRB monitoring coalition.

Due to the complexity of operations at this facility and the significant effort required on part of the permittee as well as regulatory authorities, it is recommended that the permittee request a conference call or meeting with the EPA/DWQ prior to beginning the next permit renewal application. The objective of such a call would be to have all parties agree on an accepted methodology to develop production numbers and permit limits.

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 a demand is made, this permit shall be final and binding.

Please take notice that this permit is not transferable except after notice to the Division. Part II, E.4, addresses the requirements to be followed in case of change in ownership or control of this discharge. 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, the Division of Land Resources, the Coastal Area Management Act, or any other federal or local governmental permit.

If you have any questions concerning this permit, please contact Tom Belnick at telephone number (919) 733-5083, ext. 543.

Sincerely,

  
for Alan W. Klimek, P.E.

Enclosure: NPDES Permit No. NC0001228  
cc: EPA, Madolyn Dominy  
Wilmington Regional Office, Water Quality  
Point Source Compliance Enforcement Unit  
Central Files  
NPDES Unit

Permit No. NC0001228

**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**

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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,

**Global Nuclear Fuel- Americas LLC (GNF-A)**

is hereby authorized to discharge wastewater from a facility located at

**GNF-A Wilmington Plant**

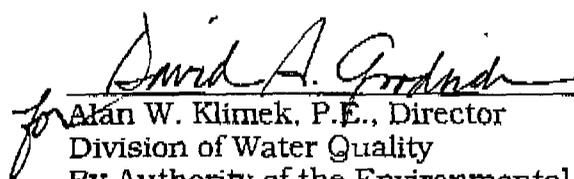
3901 Castle Hayne Road  
Wilmington, North Carolina  
New Hanover County

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

The permit shall become effective April 1, 2004

This permit and the authorization to discharge shall expire at midnight on February 28, 2009

Signed this day February 16, 2004

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

Permit No. NC0001228

**SUPPLEMENT TO PERMIT COVER SHEET****Global Nuclear Fuel- Americas LLC**

The exclusive authority to operate this facility arises under this NPDES permit. The conditions, requirements, terms and provisions of this NPDES permit governs surface water discharges from this facility. All previous NPDES Permits issued to this facility bearing this permit number, whether for operation or discharge, are hereby revoked.

Global Nuclear Fuel- Americas LLC is hereby authorized to:

1. Continue to operate the following wastewater treatment systems located at the **GNF-A Wilmington Plant**, 3901 Castle Hayne Road, Wilmington, New Hanover County:

**Outfall 001- (1.8 MGD Process Wastewater Treatment System)**

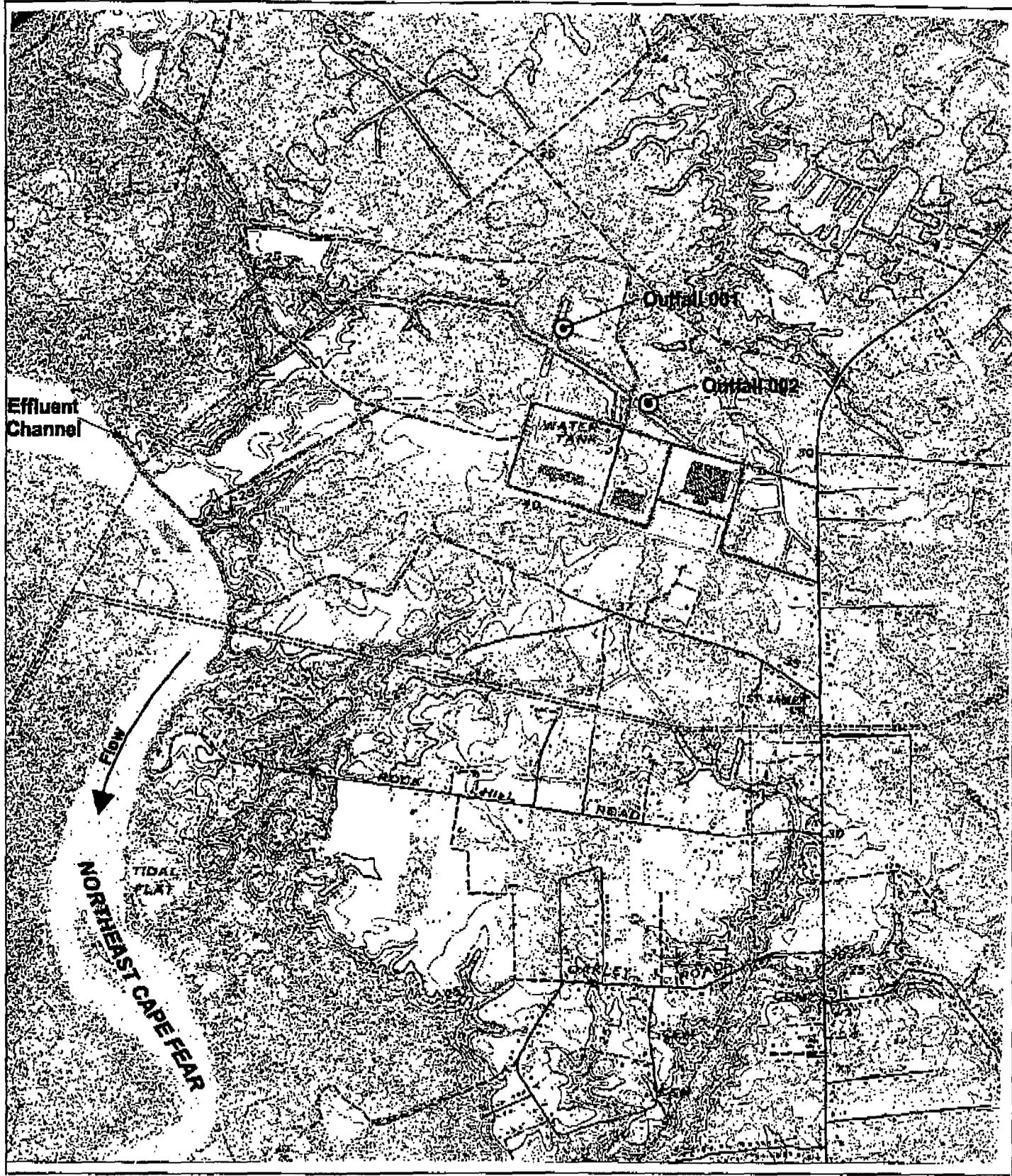
- ◆ Treatment tanks and instruments
- ◆ Centrifuge at waste treatment
- ◆ Lime slurry preparation and addition system; lime slurry tank
- ◆ Flocculation addition
- ◆ Clarifier
- ◆ Filter presses and dryers
- ◆ Fluoride and nitrate settling basins
- ◆ Truck loading stations for nitrate liquid and etch acid neutralization solids
- ◆ Waste collection system and lift station
- ◆ Mixing tank for pH adjustment
- ◆ Mixing basin
- ◆ Final process settling basins with pH measurement and adjustment
- ◆ Instrumented flow measurement
- ◆ Two receiving/storage tanks for hydrofluoric acid (HF)
- ◆ Two neutralization tanks
- ◆ HF neutralization scrubber

**Outfall 002 - ( 0.075 MGD Domestic Wastewater Treatment System)**

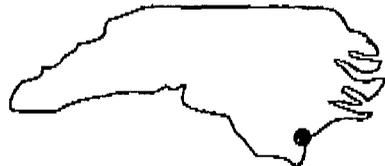
- ◆ Wastewater collection system and pump stations
- ◆ Equalization tank and pumps
- ◆ Bar screen
- ◆ Manual grit removal
- ◆ Extended aeration basins
- ◆ Clarifiers with sludge return
- ◆ Instrumented influent and effluent flow measurement
- ◆ Dual incoming power service with manual switching capability
- ◆ Chlorination/dechlorination
- ◆ Aerobic sludge digester, sludge thickening, and sludge drying beds

2. Discharge from said treatment works into the Northeast Cape Fear River, a Class C-Swamp water in the Cape Fear River Basin, at the location specified on the attached map.

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Latitude: 34° 19' 42"  
 Longitude: 77° 56' 11"  
 USGS Quad #: J27SW  
 River Basin #: 03-06-17  
 Receiving Stream: NE Cape Fear R.  
 Stream Class: C-Swamp



GNF- Wilmington Plant  
 New Hanover County  
 NC0001228

Permit No. NC0001228

**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 **treated process wastewater** from **Outfall 001**. 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>
Flow	1.8 MGD			Continuous	Recording	I or E
Total Suspended Solids	178 lbs/d		390 lbs/d	Weekly	Composite	E
BOD, 5-day, 20°C				Weekly	Composite	E
Oil and Grease	57.7 lbs/d		118.4lbs/d	Weekly	Grab	E
Total Nitrogen (NO <sub>2</sub> +NO <sub>3</sub> +NH <sub>3</sub> ) <sup>2</sup>	86 lbs/d		183 lbs/d	Weekly	Composite	E
Dissolved Oxygen				Weekly	Grab	E
Temperature				Weekly	Grab	E
pH <sup>3</sup>				Weekly	Grab	E
Total Cadmium			15 ug/l	Weekly	Composite	E
Total Cyanide			22 ug/l	Monthly	Grab	E
Total Lead			34 ug/l	Monthly	Composite	E
Total Fluoride	23 lbs/d		45 lbs/d	Monthly	Composite	E
Total Chromium	2.41 lbs/d		4.49 lbs/d	Monthly	Composite	E
Total Copper	2.86 lbs/d		5.34 lbs/d	Monthly	Composite	E
Total Nickel	3.63 lbs/d		6.79 lbs/d	Monthly	Composite	E
Total Silver	0.33 lbs/d		0.68 lbs/d	Monthly	Composite	E
Total Zinc	2.05 lbs/d		4.12 lbs/d	Monthly	Composite	E
Trichloroethene				Monthly	Grab	E
TTO <sup>4</sup>			3.36 lbs/d	Quarterly	Grab	E
Acute Toxicity <sup>5</sup>				Quarterly	Composite	E
Total Phosphorus				Quarterly	Composite	E
Nitrosamine Compounds <sup>6</sup>				Quarterly	Grab	FCO

## Notes:

1. Sample locations: E- Effluent, I- Influent, FCO- Fuel Components Operation building discharge
2. No organic nitrogen is present in the process wastewater, thus Total Nitrogen(as N) = NO<sub>2</sub> + NO<sub>3</sub> + NH<sub>3</sub>.
3. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
4. TTO= Total Toxic Organics. In lieu of monitoring for TTO, the permittee may submit the following certification statement: "Based on my inquiry of the person(s) directly responsible for managing compliance with the permit limitation for TTO, I certify that, to the best of my knowledge and belief, no dumping of concentrated toxic organics into the wastewater has occurred since the filing of the last discharge monitoring report."
5. Acute Toxicity (Fathead Minnow) at 90%; January, April, July, and October; refer to **Special Condition A (3)**.
6. Nitrosamine compounds shall be limited and monitored at the FCO building discharge in accordance with **Special Condition A (4)**.

lbs/d = pounds/day

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

Permit No. NC0001228

**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 domestic wastewater** from **Outfall 002**. 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>
Flow	0.075 MGD			Continuous	Recording	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 <sub>3</sub> as N				Weekly	Composite	E
Fecal coliform (geometric mean)	200/100 ml		400/100 ml	Weekly	Grab	E
Total Residual Chlorine <sup>2</sup>			28 ug/l	2/Week	Grab	E
Dissolved Oxygen <sup>3</sup>				Weekly	Grab	E
Temperature				Daily	Grab	E
PH <sup>4</sup>				Weekly	Grab	E
Total Nitrogen (TN, as N = NO <sub>2</sub> +NO <sub>3</sub> +TKN)				Quarterly	Composite	E
Total Phosphorus				Quarterly	Composite	E
Dissolved Oxygen <sup>5</sup>				Weekly	Grab	U, D
Temperature <sup>5</sup>				Weekly	Grab	U, D
Conductivity <sup>5</sup>				Weekly	Grab	U, D

**Notes:**

1. Sample locations: E- Effluent, I- Influent, U- Upstream at public boat launch adjacent to US Hwy 117 bridge. D- Downstream at GE dock.
2. TRC limit and monitoring required only if chlorine is used for disinfection.
3. The daily average DO effluent concentration shall not be less than 5.0 mg/l.
4. The pH shall not be less than 6.0 standard units nor greater than 9.0 standard units.
5. Instream monitoring requirements are waived as long as GNF-A maintains membership in the LCFRB Monitoring Coalition.

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

Permit No. NC0001228

**SUPPLEMENT TO EFFLUENT LIMITATIONS  
AND MONITORING REQUIREMENTS****SPECIAL CONDITIONS****A (3). ACUTE TOXICITY PASS/FAIL PERMIT LIMIT (QTRLY)  
(Outfall 001)**

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 January, April, July, and October.*

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 Branch  
1621 Mail Service Center  
Raleigh, North Carolina 27699-1621

Completed Aquatic Toxicity Test Forms shall be filed with the Environmental Sciences Branch 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 Branch 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.

Permit No. NC0001228

**A (4). TUBE REDUCING SPENT LUBRICANT WASTEWATER REQUIREMENTS  
(Outfall 001)**

Additional permit requirements (per 40 CFR 471, Subpart I) for the tube reducing spent lubricant wastewater generated from the Fuel Components Operation include:

1. Discharge and Concentration Limits. Process wastewater pollutants may be discharged, with no allowance for any pollutants discharged, provided the permittee demonstrates, on the basis of analytical methods set forth in or approved pursuant to 40 CFR Part 136, that the concentrations of nitrosamine compounds (listed below) in the wastewater discharged from the tube reducing process do not exceed the following:

<u>Listed Nitrosamine Compounds</u>	<u>Concentration Limit</u>
N-nitrosodimethylamine	0.050 mg/l
N-nitrosodiphenylamine	0.020 mg/l
N-nitrosodi-n-propyl-amine	0.020 mg/l

These concentration limits apply at the point of discharge from the tube reducing process. However, sampling after the tube reducing wastewater has been commingled with other wastewaters is permitted if:

- ◆ Any dilution caused by the other wastewaters is taken into account in determining the appropriate (i.e., lower) allowable discharge concentration; and
  - ◆ An analytical method of sufficient sensitivity is used to measure the levels of each of the listed nitrosamine compounds in the wastewaters being sampled.
2. Sampling Frequency. The sampling demonstration shall be conducted quarterly. However, if a sample is found to contain any of the listed nitrosamine compounds exceeding their respective limit, then the permittee must implement remedial actions described in (3) below, and the demonstration sampling shall be increased to monthly until results for all listed nitrosamine compounds are below applicable limits for six consecutive months.
  3. Remedial Actions. Within 30 days of receiving written notification of sampling results for any listed nitrosamine compound exceeding applicable limits, the permittee shall ensure that there is no further discharge of tube reducing spent lubricant wastewater until the permittee conducts the following:
    - ◆ Perform a subsequent analysis which demonstrates that the concentrations of the listed nitrosamine compounds do not exceed the limits; or
    - ◆ Substitute a new tube reducing lubricant and thereafter comply with the sampling requirements above; or
    - ◆ Determine the source of the pollutant that exceeded its limit, and demonstrate to the satisfaction of the NPDES issuing authority that such source has been eliminated.

## 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.

#### 3/Week

Samples are collected three times per week on three separate calendar days.

#### Act or "the Act"

The Federal Water Pollution Control Act, also known as the Clean Water Act, 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 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. This method may only be used in situations where effluent flow rates vary less than 15 percent. The grab samples shall be taken at intervals of no greater than 20 minutes apart during any 24-hour period and must be of equal size and of no less than 100 milliliters. Use of this method requires prior approval by the Director.

In accordance with (4) above, influent grab samples shall not be collected more than once per hour.

Effluent grab samples shall not be collected more 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 intervals evenly spaced over the 24-hour period that are equal in number of hours to the detention time of the system in number of days. However, the interval between effluent grab samples may not exceed six hours nor the number of samples less than four 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. The "daily discharge" concentration comprises the mean concentration for a 24-hour sampling period as either a composite sample concentration or the arithmetic mean of all grab samples collected during that period. (40 CFR 122.3)

#### 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. The Division expects that 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).

#### DWO or "the Division"

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

#### EMC

The North Carolina Environmental Management Commission.

#### Facility Closure

The cessation of wastewater treatment at a permitted facility, or the cessation of all activities that require coverage under the NPDES. 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 Clean Water Act.

#### Instantaneous flow measurement

A measure of flow taken at the time of sampling, when both the sample and flow will be representative of the total discharge.

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, the geometric mean of such discharges.

Permit Issuing Authority:

The Director of the Division of Water Quality.

Quarterly Average (concentration limit)

The average 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 Clean Water Act.

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, the geometric mean of such discharges.

Section B. General Conditions1. 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 [40 CFR 122.41].

- 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 section 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 \$25,000 per day for each violation. [40 CFR 122.41 (a) (2)]
- c. The Clean Water Act 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. [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. [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 \$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. [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 which has 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. 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]:

*"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 2H .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 2H.0105 (b) (4) may cause this Division to initiate action to revoke the permit.

### Section C. Operation and Maintenance of Pollution Controls

#### 1. Certified Operator

Upon classification of the permitted facility by the Certification Commission, the Permittee shall employ a certified water pollution control treatment system operator in responsible charge (ORC) of the water pollution control treatment system. Such operator must hold a certification of the grade equivalent to or greater than the classification assigned to the water pollution control treatment system by the Certification Commission. The Permittee must also employ one or more certified Back-up ORCs who possess a currently valid certificate of the type of the system. Back-up ORCs must possess a grade equal to (or no more than one grade less than) the grade of the system [15A NCAC 8G.0201].

The ORC of each Class I facility must:

- Visit the facility at least weekly
- Comply with all other conditions of 15A NCAC 8G.0204.

The ORC of each Class II, III and IV facility must:

- Visit the facility at least daily, excluding weekends and holidays
- Properly manage and document daily operation and maintenance of the facility
- Comply with all other conditions of 15A NCAC 8G.0204.

Once the facility is classified, the Permittee shall submit a letter to the Certification Commission designating the operator in responsible charge:

- a. Within 60 calendar days prior to wastewater being introduced into a new system

b. Within 120 calendar days of:

- Receiving notification of a change in the classification of the system requiring the designation of a new ORC and back-up ORC
- A vacancy in the position of ORC or back-up ORC.

2. Proper Operation and Maintenance

The Permittee shall at all times provide the operation and maintenance resources necessary to operate the existing facilities at optimum efficiency. 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 (c)].

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: 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 II. E. 6. (b) (B) of this permit.
  - (4) The Permittee complied with any remedial measures required under Part II. B. 2. of this permit.
- d. 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. 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 503. The Permittee shall comply with applicable 40 CFR 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 15A NCAC 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 Records**

1. 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 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, 11, 2, 3) or alternative forms approved by the Director, postmarked no later than the 28th 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:

NC DENR / 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 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

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 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 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].

### 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 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. 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).
- 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 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 except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to document the change of ownership. Any such action may incorporate other requirements as may be necessary under the Clean Water Act [40 CFR 122.41 (l) (3)].

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, 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 (f) (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 (f) (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 (f) (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 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 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 \$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.

## PART III OTHER REQUIREMENTS

### Section A. Construction

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 the Division has issued an Authorization to Construct (AtC) permit. 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 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.

### 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. Evaluation of Wastewater Discharge Alternatives

The Permittee shall evaluate all wastewater disposal alternatives and pursue the most environmentally sound alternative of the reasonably cost effective alternatives. If the facility is in substantial non-compliance with the terms and conditions of the NPDES permit or governing rules, regulations or laws, the Permittee shall submit a report in such form and detail as required by the Division evaluating these alternatives and a plan of action within 60 days of notification by the Division.

### Section E. 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. Publicly Owned Treatment Works (POTWs)

All POTWs must provide adequate notice to the Director of the following:

1. Any new introduction of pollutants into the POTW from an indirect discharger 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 of the change on the quantity or quality of effluent to be discharged from the POTW.

### Section B. Municipal Control of Pollutants from Industrial Users.

1. Effluent limitations are listed in Part I of this permit. Other pollutants attributable to inputs from industries using the municipal system 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. Under no circumstances shall the Permittee allow introduction of the following wastes in the waste treatment system:
  - a. 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;
  - b. Pollutants which will 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;
  - c. Solid or viscous pollutants in amounts which will cause obstruction to the flow in the POTW resulting in Interference;
  - d. 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;
  - e. 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;
  - f. Petroleum oil, nonbiodegradable cutting oil, or products of mineral oil origin in amounts that will cause interference or pass through;
  - g. 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;
  - h. Any trucked or hauled pollutants, except at discharge points designated by the POTW.
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 discharges sending influent to the permitted system to meet Federal Pretreatment Standards promulgated in response to Section 307(b) of the Act. Prior to accepting wastewater from any significant industrial user, the Permittee shall either develop and submit to the

Division a Pretreatment Program for approval per 15A NCAC 2H .0907(a) or modify an existing Pretreatment Program per 15A NCAC 2H .0907(b).

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 Clean Water Act and implementing regulations or by the requirements of the approved State pretreatment program, as appropriate.

### Section C. Pretreatment Programs

Under authority of sections 307(b) and (c) and 402(b)(8) of the Clean Water Act and implementing regulations 40 CFR Part 403, North Carolina General Statute 143-215.3 (14) and implementing regulations 15A NCAC 2H .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.

The Permittee shall operate its approved pretreatment program in accordance with Section 402(b)(8) of the Clean Water Act, the Federal Pretreatment Regulations 40 CFR Part 403, the State Pretreatment Regulations 15A NCAC 2H .0900, and the legal authorities, policies, procedures, and financial provisions contained in its pretreatment program submission and Division approved modifications there of. Such operation shall include but is not limited to the implementation of the following conditions and requirements:

1. Sewer Use Ordinance (SUO)  
The Permittee shall maintain adequate legal authority to implement its approved pretreatment program.
2. Industrial Waste Survey (IWS)  
The Permittee shall update its Industrial Waste Survey (IWS) to include all users of the sewer collection system at least once every five years.
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 Part II, Section D, and Section E.5.).
4. Headworks Analysis (HWA) and Local Limits  
The Permittee shall obtain Division approval of a Headworks Analysis (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 122.42]. The Permittee shall develop, in accordance with 40 CFR 403.5(c) and 15A NCAC 2H .0909, specific Local Limits to implement the prohibitions listed in 40 CFR 403.5(a) and (b) and 15A NCAC 2H .0909.
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 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 Headworks Analysis (HWA) and the limits from all Industrial User Pretreatment Permits (IUP). Permitted IUP loadings for each parameter cannot exceed the treatment capacity of the POTW as determined by the HWA.

6. Authorization to Construct (A to C)

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.

7. POTW Inspection & Monitoring of their SIUs

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. The Permittee must:

- a. Inspect all Significant Industrial Users (SIUs) at least once per calendar year; and
- b. Sample all Significant Industrial Users (SIUs) at least twice per calendar year for all permit-limited pollutants, once during the period from January 1 through June 30 and once during the period from July 1 through December 31, except for organic compounds which shall be sampled once per calendar year;

8. SIU 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 2H .0908.

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 Clean Water Act (40 CFR 405 et. seq.), prohibitive discharge standards as set forth in 40 CFR 403.5 and 15A NCAC 2H .0909, and specific local limitations. All enforcement actions shall be consistent with the Enforcement Response Plan (ERP) approved by the Division.

10. Pretreatment Annual Reports (PAR)

The Permittee shall report to the Division in accordance with 15A NCAC 2H .0908. In lieu of submitting annual reports, Modified Pretreatment Programs developed under 15A NCAC 2H .0904 (b) may be required 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 twelve months to the Division at the following address:

NC DENR / DWQ / Pretreatment Unit  
1617 Mail Service Center  
Raleigh, NC 27699-1617

These reports shall be submitted according to a schedule established by the Director and shall contain the following:

- a.) Narrative  
A brief discussion of reasons for, status of, and actions taken for all Significant Industrial Users (SIUs) in Significant Non-Compliance (SNC);
- b.) Pretreatment Program Summary (PPS)  
A pretreatment program summary (PPS) on specific forms approved by the Division;
- c.) Significant Non-Compliance Report (SNCR)  
The nature of the violations and the actions taken or proposed to correct the violations on specific forms approved by the Division;
- d.) Industrial Data Summary Forms (IDSF)

Monitoring data from samples collected by both the POTW and the Significant Industrial User (SIU). These analytical results must be reported on Industrial Data Summary Forms (IDSF) or other specific format approved by the Division;

e.) Other Information

Copies of the POTW's allocation table, new or modified enforcement compliance schedules, public notice of SIUs in SNC, 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 Significant Industrial Users (SIUs) that were in Significant Non-Compliance (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.

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.

13. Funding and Financial Report

The Permittee shall maintain adequate funding and staffing levels to accomplish the objectives of its approved pretreatment program.

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 15 NCAC 2H .0114 and 15A NCAC 2H .0907.