

ROY COOPER  
Governor

ELIZABETH S. BISER  
Secretary

RICHARD E. ROGERS, JR.  
Director



NORTH CAROLINA  
Environmental Quality

September 15, 2022

Mr. Brian Long, Plant Manager  
The Chemours Company  
Fayetteville Works  
22828 NC Highway 87 W  
Fayetteville, North Carolina 28306

Subject: Final NPDES Permit  
Permit NC0090042  
Fayetteville Works  
Bladen County  
Facility Physical-Chemical Grade II

Dear Mr. Long:

The Division of Water Resources is forwarding herewith the Final NPDES permit for the Chemours Company. This permit is issued pursuant to the requirements of North Carolina General Statute 143-215.1 and the Memorandum of Agreement between North Carolina and the U.S. Environmental Protection Agency dated October 15, 2007 (or as subsequently amended).

**The final permit contains the following significant changes from your draft permit:**

- The requirement for an operations and maintenance plan was expanded to include the barrier wall. Please see page 5 of the permit.
- The initial limits for PFMOAA were reduced from 640 ng/L to 320 ng/L, and for PMPA from 130 ng/L to 100 ng/L.
- After a 6-month optimization period, the limits for the 3 indicator parameters shall be reduced to <10.0 ng/L for GenX, 10 ng/L for PMPA, and < 20.0 ng/L for PFMOAA
- Footnote 9 and 10 added to state when above limits are effective. Please see page 5 of the permit.
- Footnote 3 was modified, see page 4 of the permit.
- Condition A.(6.) was revised to make the PQL for PMPA – 2 ng/L. Please see page 12 of the permit.
- Reasons this permit can be re-opened have all been moved to condition A.(3.).



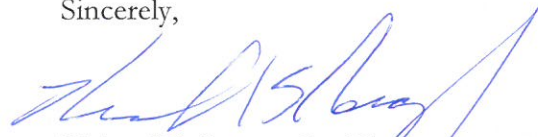
North Carolina Department of Environmental Quality | Division of Water Resources  
512 North Salisbury Street | 1611 Mail Service Center | Raleigh, North Carolina 27699-1611  
919.707.9000

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

If you have any questions or need additional information, please contact Sergei Chernikov, telephone number (919) 707-3606 or email: [sergei.chernikov@ncdenr.gov](mailto:sergei.chernikov@ncdenr.gov).

Sincerely,



Richard E. Rogers, Jr., Director  
Division of Water Resources

cc: Central Files  
NPDES Files  
Fayetteville Regional Office/Water Quality  
WSS/Aquatic Toxicology Unit (e-copy)  
EPA Region IV (e-copy)



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

**NPDES PERMIT**

TO DISCHARGE WASTEWATER UNDER THE

**NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM**

In compliance with the provisions 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,

**The Chemours Company FC, LLC**

is hereby authorized to discharge treated groundwater, treated filter backwash, treated stormwater, and treated seep water from a facility located at

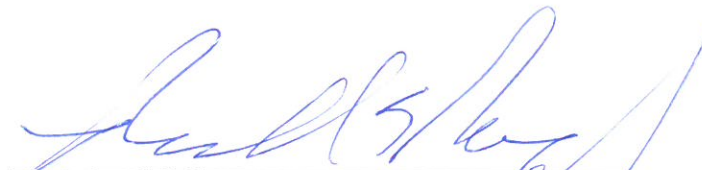
**Chemours Company- Fayetteville Works  
22828 NC Highway 87 W  
Fayetteville  
Bladen County**

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

The permit shall become effective November 1, 2022.

This permit and the authorization to discharge shall expire at midnight on October 31, 2027.

Signed this day September 15, 2022.



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Richard E. Rogers Jr., Director  
Division of Water Resources  
By Authority of the Environmental Management Commission

## **SUPPLEMENT TO PERMIT COVER SHEET**

### **The Chemours Company FC, LLC**

is hereby authorized to:

1. Operate a 2.38 MGD wastewater treatment facilities consisting of:
  - chemical oxidation/precipitation
  - pH adjustment to precipitate metals
  - ultrafiltration membranes to remove total suspended solids and other constituents
  - granulated active carbon (GAC) system to remove PFAS compounds
  - waste solids generation
  - associated equipment
  
2. Discharge treated groundwater, treated filter backwash, treated stormwater, and treated seep water through Outfall 004 routed to Outfall 002 at the location specified on the attached map into the Cape Fear River, a class C, WS-IV water in the Cape Fear River Basin.



## Part I

## A. (1.) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - OUTFALL 004

[15A NCAC 02B .0400 et seq., 02B .0500 et seq.] Facility Physical-Chemical Grade II

Beginning on the effective date of this permit and lasting until expiration, the Permittee is authorized to discharge from **Outfall 004 (treated groundwater, treated filter backwash, treated stormwater, and treated seep water)**. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER CHARACTERISTICS	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
Flow <i>50050</i>	2.38 MGD		Continuous	Recording	Effluent
Total Monthly Flow <i>82220</i>	Monitor and Report (MG/mo)		Monthly	Recording or Calculation	Effluent
Temperature (°C) <i>00010</i>	See Note 2		Weekly	Grab	Effluent, Upstream, Downstream
BOD, 5-day, 20°C <i>CO310</i>	30.0 mg/L	45.0 mg/L	Monthly	Composite	Effluent
TSS <i>CO530</i>	30.0 mg/L	45.0 mg/L	Weekly	Composite	Effluent
Dissolved Oxygen, mg/L <i>00300</i>			Weekly	Grab	Upstream, Downstream
HFPO-DA (GenX) <i>52612</i>	0.120 µg/L <sup>9</sup>	0.120 µg/L <sup>9</sup>	Weekly	Grab	Effluent
HFPO-DA (GenX) <i>52612</i>	<0.010 µg/L <sup>10</sup>	<0.010 µg/L <sup>10</sup>	Weekly	Grab	Effluent
HFPO-DA (GenX) <sup>3</sup> <i>QM612</i>	Monitor and Report (lb/mo)		Monthly	Calculation	Effluent
HFPO-DA (GenX) <sup>3</sup> <i>QY612</i>	Monitor and Report (lb/yr)		Annually	Calculation	Effluent
PFMOAA <i>52613</i>	0.320 µg/L <sup>9</sup>	0.320 µg/L <sup>9</sup>	Weekly	Grab	Effluent
PFMOAA <i>52613</i>	<0.020 µg/L <sup>10</sup>	<0.020 µg/L <sup>10</sup>	Weekly	Grab	Effluent
PFMOAA <sup>3</sup> <i>QM613</i>	Monitor and Report (lb/mo)		Monthly	Calculation	Effluent
PFMOAA <sup>3</sup> <i>QY613</i>	Monitor and Report (lb/yr)		Annually	Calculation	Effluent
PMPA <i>52620</i>	0.100 µg/L <sup>9</sup>	0.100 µg/L <sup>9</sup>	Weekly	Grab	Effluent
PMPA <i>52620</i>	0.010 µg/L <sup>10</sup>	0.010 µg/L <sup>10</sup>	Weekly	Grab	Effluent
PMPA <sup>3</sup> <i>QM620</i>	Monitor and Report (lb/mo)		Monthly	Calculation	Effluent
PMPA <sup>3</sup> <i>QY620</i>	Monitor and Report (lb/yr)		Annually	Calculation	Effluent

PARAMETER CHARACTERISTICS	EFFLUENT LIMITS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location <sup>1</sup>
PFAS compounds, ng/L			See A. (5.)	Grab	See A. (5.)
Total Organic Fluorine, ng/L <sup>6</sup>			Monthly	Grab	Effluent
Total Phosphorus, mg/L <i>CO665</i>			Monthly	Composite	Effluent
Total Nitrogen, mg/L (NO <sub>2</sub> +NO <sub>3</sub> +TKN) <i>CO600</i>			Monthly	Composite	Effluent
Conductivity <i>00094</i>			Monthly	Grab	Upstream, Downstream
Chronic Toxicity <i>TGP3B</i>	See Note 4		Quarterly	Composite	Effluent
pH <i>00400</i>	Between 6.0 and 9.0 Standard Units		Weekly	Grab	Effluent
Total Silver <sup>7,8</sup> , µg/L <i>01077</i>			Quarterly	Composite	Effluent
Total Cadmium <sup>8</sup> , µg/L <i>01027</i>			Quarterly	Composite	Effluent
Total Lead <sup>8</sup> , µg/L <i>01051</i>			Quarterly	Composite	Effluent
Total Thallium <sup>8</sup> , µg/L <i>00982</i>			Quarterly	Composite	Effluent
Total Hardness [as CaCO <sub>3</sub> ] (mg/L) <sup>5</sup> <i>00900</i>			Quarterly	Composite	Upstream Effluent

**Notes:**

- Upstream monitoring shall be at the Permittee's river pump station; Downstream shall be approximately 6400 feet downstream of Outfall 002.  
As a participant in the Middle Cape Fear River Basin Association, the instream monitoring requirements for conventional parameters (DO, temperature, conductivity, and hardness) as stated above are waived. This waiver for instream monitoring does not apply to instream monitoring required in Special Condition A. (6.). Should your membership in the agreement be terminated, you shall notify the Division immediately and the instream monitoring requirements specified in your permit shall be reinstated.  
Influent – influent to the Treatment System.  
Effluent – effluent from the Treatment System.
- The temperature of the effluent shall be such as not to cause an increase in the temperature of the receiving stream of more than 2.8°C and in no case cause the ambient water temperature to exceed 32°C.
- In addition to complying with the applicable effluent limits, the Permittee shall remove indicator parameters HFPO-DA, PFMOAA, and PMPA at an efficiency of at least 99%. The Permittee may request revision of the 99% removal efficiency requirement upon a demonstration that influent concentrations of PFAS have been reduced to such a level that 99% removal is no longer technically feasible. Notwithstanding any such revision, Chemours shall continue to operate the Treatment System at optimal efficiency.
- Chronic Toxicity (*Ceriodaphnia*) P/F @ 12.5%; quarterly during February, May, August, November; see condition A. (2.) of this permit.
- The permittee shall sample instream hardness upstream of the facility's discharge. The sample shall be representative of the hardness in the stream. If the permittee is a member of the Monitoring Coalition Program, sampling for instream hardness may be waived as long as the Monitoring Coalition agrees to sample hardness at the nearest upstream location, at a minimum frequency of quarterly, and the permittee has obtained approval from

DWR -NPDES Permitting Unit that the upstream station being monitored by the coalition is representative of the receiving stream for this discharge. The permittee is responsible for submitting instream hardness test results with its DMRs as results are received from the coalition. If coalition membership is cancelled or the Monitoring Coalition terminates instream hardness sampling at the approved station, the permittee will immediately notify the Division and resume sampling for instream hardness, upstream of its discharge, as required in Section A. (1.).

6. Upon Notice from NCDEQ the facility shall commence monitoring Total Organic Fluorine using an NCDEQ approved analytical test method.
7. Sufficiently sensitive test methods shall be used to analyze for silver. The Division shall consider all effluent silver values reported below the PQL to be in compliance with the Monthly Average silver limit. As of the effective date of this permit, DWR recommends a target PQL of 1.0 µg/L for silver.
8. After 12 months of sampling the facility can apply for a reduction in sampling if all the sampling results demonstrate concentrations below detection levels. The facility shall be employing the sufficiently sensitive test methods.
9. The limit is effective from day 1 through day 180 of discharge from Outfall 004 (approximately 6-months).
10. The limit becomes effective as of day 181 of discharge from Outfall 004 (after 6-month optimization period).

The facility shall complete and submit EPA Form 2C for this Outfall no later than 6 months from the effective date of the permit.

The facility shall maintain at least a 2 ft. freeboard in the main surge pond, as provided in the Operations and Maintenance Plan. The facility shall verify freeboard depth daily.

The facility shall submit a Sludge Management Plan, Operations and Maintenance Plan (including Barrier Wall Maintenance) for all surge ponds within 60 days from the permit effective date.

The facility shall submit a closure plan 180 days prior to the decommissioning of the surge ponds.

The facility shall use stand-by power capability for all pumps and treatment plant equipment.

**THERE SHALL BE NO DISCHARGE OF FLOATING SOLIDS OR VISIBLE FOAM IN OTHER THAN TRACE AMOUNTS.**

**A. (2.) CHRONIC TOXICITY PERMIT LIMIT P/F (QUARTERLY) – OUTFALL 004**  
[15A NCAC 02B.0500]

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* at an effluent concentration of **12.5%**.

The permit holder shall perform at a minimum, **quarterly** monitoring using test procedures outlined in the “North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure,” (Revised December 2010, or subsequent versions) or “North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure” (Revised December 2010, or subsequent versions). The tests will be performed **during the months of February, May, August, and November**. These months signify the first month of each three-month toxicity testing quarter assigned to the facility. Effluent sampling for this testing must be obtained during representative effluent discharge and shall be performed at the NPDES permitted final effluent discharge below all treatment processes.

**If the test procedure performed as the first test of any single quarter results in a failure or ChV below the permit limit, then multiple-concentration testing shall be performed at a minimum, in each of the two following months as described in “North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure” (Revised-December 2010, or subsequent versions).**

All toxicity testing results required as part of this permit condition will be entered electronically using the Division’s eDMR system for the months in which tests were performed, using the parameter code **TGP3B** for the pass/fail results and **THP3B** for the Chronic Value. Additionally, DWR Form AT-3 (original) is to be sent to the following address:

North Carolina Division of Water Resources  
Water Sciences Section/Aquatic Toxicology Branch  
1621 Mail Service Center  
Raleigh, NC 27699-1621

Or, results can be sent to the email, [ATForms.ATB@ncdenr.gov](mailto:ATForms.ATB@ncdenr.gov).

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

Test data shall be complete, accurate, include all supporting chemical/physical measurements and all concentration/response data, and be certified by laboratory supervisor and ORC or approved designate signature. Total residual chlorine of the effluent toxicity sample must be measured and reported if chlorine is employed for disinfection of the waste stream.

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

Should the permittee fail to monitor during a month in which toxicity monitoring is required, monitoring will be required during the following month. Assessment of toxicity compliance is based on the toxicity testing quarter, which is the three-month time interval that begins on the first day of the month in which toxicity testing is required by this permit and continues until the final day of the third month.



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

NOTE: Failure to achieve test conditions as specified in the cited document, such as minimum control organism survival, minimum control organism reproduction, 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.

Sampling for the Whole Effluent Toxicity shall be conducted at the Outfall 002 sampling point.

### **A. (3.) RE-OPENER CONDITION**

[NCGS 143-215.1, 15A NCAC 2H .0112 & .0114, and NCGS 143-215.66]

The Division may re-evaluate the performance of the facility after 12 months of operation and adjust the limits accordingly. Other reasons the permit may be re-opened include:

- a. This permit shall be modified or revoked and reissued to incorporate additional limitations and monitoring requirements in the event toxicity testing or other studies indicate that detrimental effects may be expected as a result of this discharge.
- b. If EPA develops PFAS criteria or the State adopts standards for any of the compounds generated by Chemours, the Division will conduct a reasonable potential analysis and reopen the permit to include the new limits, if they are more stringent than the TBELs.
- c. This permit may be modified or revoked and reissued to incorporate more stringent PFAS limits if the Division determines that the technology consistently achieves concentrations of the indicator PFAS that are lower than the limits established in this permit.
- d. If it is found that another PFAS breaks through more quickly than the indicator parameters GenX, PFMOAA, and PMPA, this permit may be modified, or revoked and reissued to incorporate a limit for that PFAS.

### **A. (4.) ELECTRONIC REPORTING OF MONITORING REPORTS**

[G.S. 143-215.1(b)]

Federal regulations require electronic submittal of all discharge monitoring reports (DMRs) and program reports. The final NPDES Electronic Reporting Rule was adopted and became effective on December 21, 2015.

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

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

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

The permittee shall report discharge monitoring data electronically using the NC DWR's Electronic Discharge Monitoring Report (eDMR) internet application.

Monitoring results obtained during the previous month(s) shall be summarized for each month and submitted electronically using eDMR. The eDMR system allows permitted facilities to enter monitoring data and submit DMRs electronically using the internet. The eDMR system may be accessed at:

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

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

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

See “How to Request a Waiver from Electronic Reporting” section below.

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

Starting on **December 21, 2025**, the permittee must electronically report the following compliance monitoring data and reports, when applicable:

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

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

## 2. **Electronic Submissions**

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

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

EPA plans to establish a website that will also link to the appropriate electronic reporting tool for each type of electronic submission and for each state. Instructions on how to access and use the appropriate electronic reporting tool will be available as well. Information on EPA’s NPDES Electronic Reporting Rule is found at: <https://www.federalregister.gov/documents/2015/10/22/2015-24954/national-pollutant-discharge-elimination-system-npdes-electronic-reporting-rule>

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

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

The permittee may seek a temporary electronic reporting waiver from the Division. To obtain an electronic reporting waiver, a permittee must first submit an electronic reporting waiver request to the Division. Requests for temporary electronic reporting waivers must be submitted in writing to the Division for written approval at least sixty (60) days prior to the date the facility would be required under this permit to begin submitting monitoring data and reports. The duration of a temporary waiver shall not exceed 5 years and shall thereupon



expire. At such time, monitoring data and reports shall be submitted electronically to the Division unless the permittee re-applies for and is granted a new temporary electronic reporting waiver by the Division. Approved electronic reporting waivers are not transferrable. Only permittees with an approved reporting waiver request may submit monitoring data and reports on paper to the Division for the period that the approved reporting waiver request is effective.

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

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

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

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

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

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

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

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

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

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

### **A. (5.) PFAS MONITORING REQUIREMENTS**

[NCGS 143-215.3 (a) (2) and NCGS 143-215.66]

The permittee shall monitor for PFAS compounds at the monitoring frequencies described below. The lists of compounds follow. Note that not all required compounds have eDMR parameter codes. Those with parameter codes should be reported using the applicable codes, and all other results for PFAS compounds should be reported in the comment section of the eDMR or added as supplemental information. In addition, a complete copy of all PFAS sampling results shall be submitted to NPDES Permitting via email at [svc\\_deq\\_npdes-ec@ncdenr.gov](mailto:svc_deq_npdes-ec@ncdenr.gov), with the Facility permit number and name in the Subject heading.

The Permittee shall use the following analytical methods when testing for the PFAS compounds.

**Method description:** Approved methods and SOPs referred to as “EPA 537 Modified” and “Table 3” shall be used as described in supporting material and approved by DEQ Division of Waste Management in a letter dated May 8th 2019. For this permit, Eurofins Lancaster and Eurofins Test America shall use these same approved methods and update all method revisions with the referenced methods for consistency across all work projects for Chemours Company Fayetteville Works.

Upon EPA approval of method 1633 and notification by DEQ the facility shall employ this analysis for PFAS compounds covered under this method. The conversion to the new method shall be achieved within 60 days. The facility shall continue to employ method 537 Modified for parameters that will not be covered by method 1633.

### Monitoring Locations and Frequency

Location	Compounds	Frequency
Influent to the Treatment System	Table 3+ Lab SOP	Monthly
	Full suite	Quarterly
Effluent from the Treatment System	Table 3+ Lab SOP	Monthly
	Full suite	Quarterly

### PFAS Compounds: Full Suite / Method 537 Modified Compounds:

Analytical Method	Common Name	Chemical Name	CASN	Chemical Formula	Parameter code
<b>Table 3+ Lab SOP</b>	HFPO-DA	Hexafluoropropylene oxide dimer acid	13252-13-6	C6HF11O3	52612
	PEPA	Perfluoroethoxypropyl carboxylic acid	26729-61-2	C5HF9O3	52618
	PFECA-G	Perfluoro-4-isopropoxybutanoic acid	801212-59-9	C12H9F9O3S	52619
	PFMOAA	Perfluoro-2-methoxyacetic acid	674-13-5	C3HF5O3	52613
	PFO2HxA	Perfluoro(3,5-dioxahexanoic) acid	39492-88-1	C4HF7O4	52617
	PFO3OA	Perfluoro(3,5,7-trioxaoctanoic) acid	39492-89-2	C5HF9O5	52616
	PFO4DA	Perfluoro(3,5,7,9-tetraoxadecanoic) acid	39492-90-5	C6HF11O6	52615
	PMPA	Perfluoromethoxypropyl carboxylic acid	13140-29-9	C4HF7O3	52620
	Hydro-EVE Acid	Perfluoroethoxypropanoic acid	773804-62-9	C8H2F14O4	52621
	EVE Acid	Perfluoroethoxypropionic acid	69087-46-3	C8HF13O4	52622
	PFECA-B	Perfluoro-3,6-dioxaheptanoic acid	151772-58-6	C5HF9O4	52626
	R-EVE	R-EVE	N/A	C8H2F12O5	52640
	PFO5DA	Perfluoro-3,5,7,9,11-pentaoxadodecanoic acid	39492-91-6	C7HF13O7	52627
	Byproduct 4	Byproduct 4	N/A	C7H2F12O6S	52643
	Byproduct 5	Byproduct 5	N/A	C7H3F11O7S	52644
Byproduct 6	Byproduct 6	N/A	C6H2F12O4S	52645	



	NVHOS	Perfluoroethoxysulfonic acid	1132933-86-86-8	C4H2F8O4S	52628
	PES	Perfluoroethoxyethanesulfonic acid	113507-82-7	C4HF9O4S	52629
	PFESA-BP1	Byproduct 1	29311-67-9	C7HF13O5S	52630
	PFESA-BP2	Byproduct 2	749836-20-2	C7H2F14O5S	52614
<b>EPA Method 537 Mod</b>	PFBA	Perfluorobutanoic acid	375-22-4	C4HF7O2	51522
	PFDA	Perfluorodecanoic acid	335-76-2	C10HF19O2	51627
	PFDoA	Perfluorododecanoic acid	307-55-1	C12HF23O2	51629
	PFHpA	Perfluoroheptanoic acid	375-85-9	C7HF13O2	51625
	PFNA	Perfluorononanoic acid	375-95-1	C9HF17O2	51626
	PFOA	Perfluorooctanoic acid	335-67-1	C8HF15O	51521
	PFHxA	Perfluorohexanoic acid	307-24-4	C6HF11O2	51624
	PFPeA	Perfluoropentanoic acid	2706-90-3	C5HF9O2	51623
	PFTeA	Perfluorotetradecanoic acid	376-06-7	C14HF27O2	51531
	PFTriA	Perfluorotridecanoic acid	72629-94-8	C13HF25O2	51630
	PFUnA	Perfluoroundecanoic acid	2058-94-8	C11HF21O2	51628
	PFBS	Perfluorobutanesulfonic acid	375-73-5	C4HF9SO	52602
	PFDS	Perfluorodecanesulfonic acid	335-77-3	C10HF21O3S	52603
	PFHpS	Perfluoroheptanesulfonic acid	375-92-8	C7HF15O3S	52604
	PFHxS	Perfluorohexanesulfonic acid	355-46-4	C6HF13SO3	52605
	PFNS	Perfluorononanesulfonic acid	68259-12-1	C9HF19O3S	52611
	PFOS	Perfluorooctanesulfonic acid	1763-23-1	C8HF17SO3	52606
	PFPeS	Perfluoropentanesulfonic acid	2706-91-4	C5HF11O3S	52610
	10:2 FTS	10:2 fluorotelomersulfonic acid	120226-60-0	C12H5F21O3	52631
	4:2 FTS	4:2 fluorotelomersulfonic acid	757124-72-4	C6H5F9O3S	52607
	6:2 FTS	6:2 fluorotelomersulfonic acid	27619-97-2	C8H5F13SO3	52608
	8:2 FTS	8:2 fluorotelomersulfonic acid	39108-34-4	C10H5F17O3S	52609
	NEtFOSAA	NEtFOSAA	2991-50-6	C12H8F17NO4S	51643
	NEtPFOSA	NEtPFOSA	4151-50-2	C10H6F17NO2S	52642
	NEtPFOSAE	NEtPFOSAE	1691-99-2	C12H10F17NO3S	51641
	NMeFOSAA	NMeFOSAA	2355-31-9	C11H6F17NO4S	51644
	NMePFOSA	NMePFOSA	31506-32-8	C9H4F17NO2S	52641
	NMePFOSAE	NMePFOSAE	24448-09-7	C11H8F17NO3S	51642
	PFDOS	Perfluorododecanesulfonic acid	79780-39-5	C12HF25O3S	52632
	PFHxDA	Perfluorohexadecanoic acid	67905-19-5	C16HF31O2	52633
	PFODA	Perfluorooctadecanoic acid	16517-11-6	C18HF35O2	52634
	PFOSA	Perfluorooctanesulfonamide	754-91-6	C8H2F17NO2S	51525
	F-53B Major	F-53B Major	73606-19-6	C8HCIF16O4S	52638
F-53B Minor	F-53B Minor	83329-89-9	C10HCIF20O4S	52639	
DONA	4,8-Dioxa-3H-perfluorononanoic acid	919005-14-4	C7H2F12O4	52636	

**A. (6.) CALCULATION OF HFPO-DA, PMPA, & PFMOAA REMOVAL/LOADS**

a. The Permittee shall calculate monthly removal efficiency for HFPO-DA, PMPA, and PFMOAA as follows:

$$\% \text{ Removal} = \frac{\text{Influent} - \text{Effluent}}{\text{Influent}} * 100$$

Where:

Influent = monthly average influent concentration  
Effluent = monthly average effluent concentration

b. The Permittee shall calculate monthly load for HFPO-DA, PMPA, and PFMOAA as follows:

$$\text{Monthly } C \text{ Load} = C \times TMF \times 8.34$$

Where:

C = monthly average effluent concentration for each compound (mg/L)  
TMF = Total Monthly Flow of wastewater discharged during the month (MG/month)  
8.34 = conversion factor from (mg/L x MG) to pounds

$$\text{Annual } C \text{ Load} = \text{Sum of the 12 Monthly Loads for each compound for the calendar year}$$

c. The Permittee shall report monthly HFPO-DA, PMPA, and PFMOAA results [% removal (ng/L), and loading (pounds/month)] in the discharge monitoring report for each month and shall report each calendar year's Annual Load (pounds/year) with the December report for that year. Percent removal shall be listed in the comment section of the eDMR since it has no parameter code.

This percent removal will be reported monthly with Chemours electronic Discharge Monitoring Report (eDMR) data. If the influent HFPO-DA, PMPA, or PFMOAA concentrations to the water treatment system are equal to or less than 200 ng/L, 1,000 ng/L, and 500 ng/L, respectively, then the water treatment system effluent concentrations of less than the current reporting limits (2 ng/L, 2 ng/L, and 5 ng/L, respectively) shall be considered as achieving 99% removal.

#### A. (7.) PFAS SPECIAL MONITORING REQUIREMENTS

In addition, to the monitoring specified previously the site operator / owner shall commence the following water quality monitoring and sampling regiment within 60 days of approval of the Permit. The monitoring and sampling shall be to the standards provided in Section A. (5.) PFAS Monitoring Requirements noted previously herein. This regiment shall continue until the NCDEQ approves a reduction.

Samples shall be collected at the following four transects (comprising 12 sampling stations) along the Cape Fear River as depicted in Exhibits 1A (Facility Vicinity Maps), 1B (Overview Chemours Intake and Outfall Map) and 1C (Chemours Cape Fear River Water Quality Monitoring Sampling Points) herein.

- Transect 1 (34°51'07.80"N, 78°49'36.12"W): stations 101, 102, and 103 from west to east so station 101 is near Chemours's riverbank, station 102 in the river center, and station 103 towards the eastern riverbank (above Willis Creek)
- Transect 2 (34°50'40.54"N, 78°49'27.10"W): stations 201, 202, and 203 from west to east.
- Transect 3 (34°50'07.23"N, 78°49'22.99"W): stations 301, 302, and 303 from west to east. (Between the William O Huske Dam and Outfall 002)
- Transect 4 (34°48'19.32"N, 78°49'13.94"W): Stations 401, 402, and 403 from west to east. (Outfall 003 downstream sampling point).

All sampling points are evenly spaced at  $\frac{1}{4}$ ,  $\frac{1}{2}$  and  $\frac{3}{4}$  of the distance across the river. Samples should be obtained as grab at  $\frac{1}{2}$  the depth between the river surface to the bottom (according to the depth at each sampling point). All transects should be sampled within the same 48-to-72-hour period, weather permitting.

Sampling shall be performed beginning within sixty (60) days of Permit issuance until six (6) months following final completion of construction of the barrier wall as determined by the NCDEQ. During this time period the following parameters and sampling frequency shall be implemented:

- Temperature (monthly)
- Dissolved Oxygen (monthly)
- pH (monthly)
- Turbidity (monthly)
- HFPO-DA (GenX) (monthly)
- PFMOAA (monthly)
- PMPA (monthly)
- PFAS compounds (Table 3+ SOP) (Quarterly sampling)

Six (6) months following the completion of the barrier wall sampling shall be continued for all of the above parameters on a quarterly basis.

Sampling results and summary of findings, including sampling at the Tar Hill Ferry Bridge shall be submitted monthly on the DMRs and annually in the form of a report. Report should include graphs depicting concentration trends for 3 indicator parameters. Copies of all reports shall be submitted to:

- 1) Electronic Version Only (pdf) [sergei.chernikov@ncdenr.gov](mailto:sergei.chernikov@ncdenr.gov)
- 2) Electronic Version Only (pdf) [trent.allen@ncdenr.gov](mailto:trent.allen@ncdenr.gov)
- 3) Electronic Version Only (pdf) [julie.grzyb@ncdenr.gov](mailto:julie.grzyb@ncdenr.gov)

Specified water quality monitoring and sampling locations noted below are reflected in Exhibits 1B and 1C herein.

- Transect 1 (34°51'07.80"N, 78°49'36.12"W): stations 101, 102, and 103 (above Willis Creek).
- Transect 2 (34°50'40.54"N, 78°49'27.10"W): stations 201, 202, and 203.
- Transect 3 (34°50'07.23"N, 78°49'22.99"W): stations 301, 302, and 303 (between William O Huske Dam and Outfall 002).
- Transect 4 (34°48'19.32"N, 78°49'13.94"W): Stations 401, 402, and 403 (Outfall 003 downstream sampling point).



Exhibit 1A: Chemours Geographic Vicinity Maps

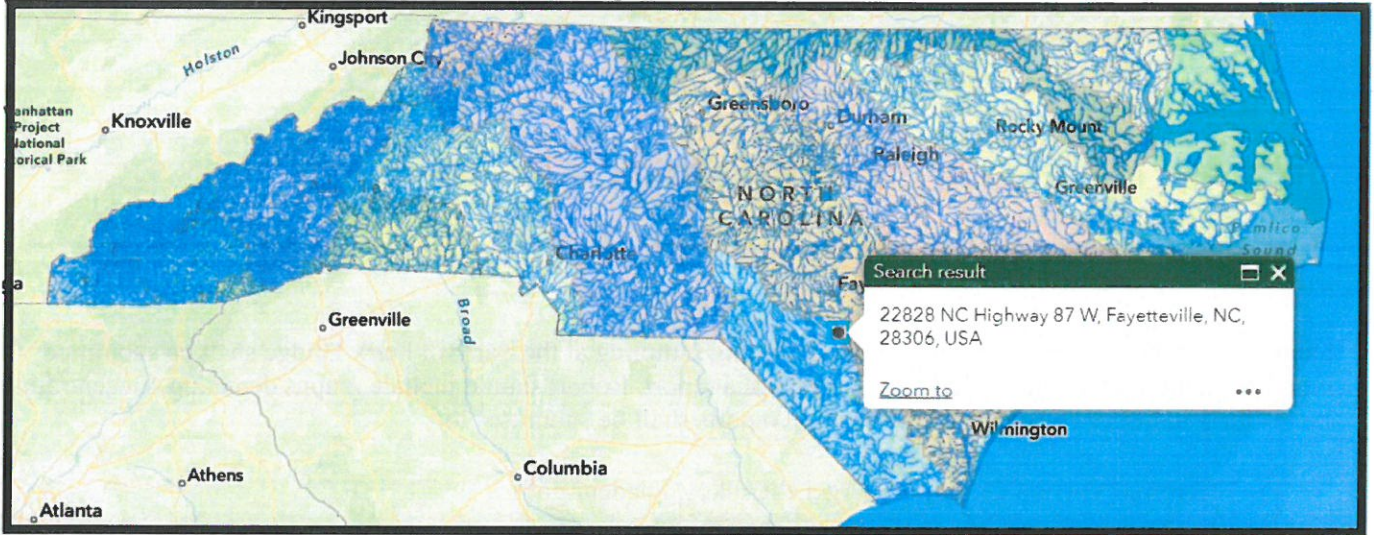
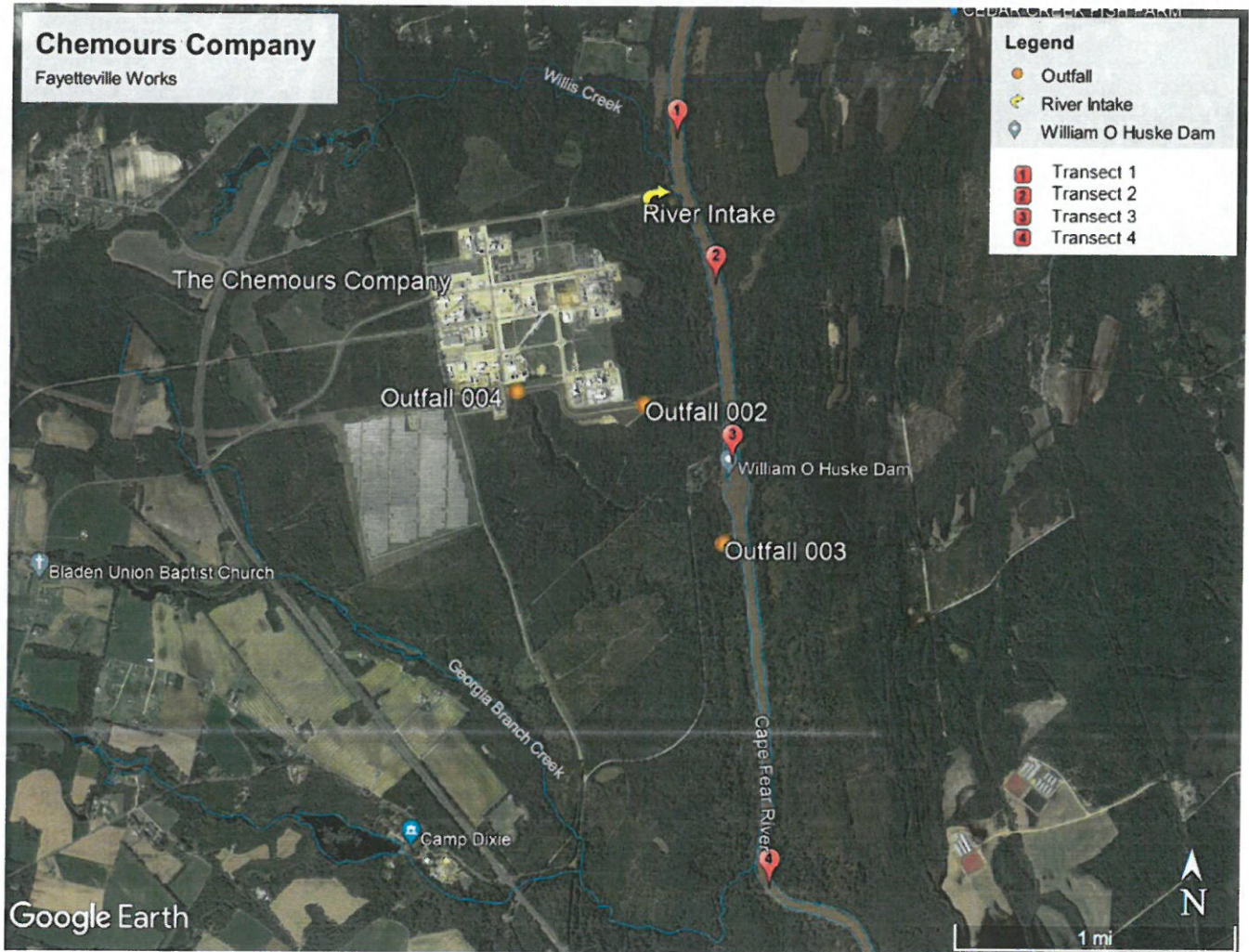




Exhibit 1B: Overview Chemours Intake and Outfall Map



Exhibit 1C Chemours Cape Fear River Water Quality Monitoring Sampling Points





**PART II**  
**STANDARD CONDITIONS FOR NPDES PERMITS**

**Section A. Definitions****2/Month**

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

**3/Week**

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

**Act or "the Act"**

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

**Annual Average**

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

**Arithmetic Mean**

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

**Bypass**

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

**Calendar Day**

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

**Calendar Week**

The period from Sunday through the following Saturday.

**Calendar Quarter**

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

**Composite Sample**

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

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

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

#### Continuous flow measurement

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

#### Daily Discharge

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

#### Daily Maximum

The highest "daily discharge" during the calendar month.

#### Daily Sampling

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

#### DWQ or "the Division"

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

#### Effluent

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

#### EMC

The North Carolina Environmental Management Commission

#### EPA

The United States Environmental Protection Agency

#### Facility Closure

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

#### Geometric Mean

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



Grab Sample

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

Hazardous Substance

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

Instantaneous flow measurement

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

Monthly Average (concentration limit)

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

Permit Issuing Authority

The Director of the Division of Water Quality.

Quarterly Average (concentration limit)

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

Severe property damage

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

Toxic Pollutant:

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

Upset

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

Weekly Average (concentration limit)

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

**Section B. General Conditions****I. Duty to Comply**

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

- a. The Permittee shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

- b. The CWA provides that any person who violates section[s] 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$37,500 per day for each violation. [33 USC 1319(d) and 40 CFR 122.41(a)(2)]
- c. The CWA provides that any person who negligently violates sections 301, 302, 306, 307, 308, 318, or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. [33 USC 1319(c)(1) and 40 CFR 122.41(a)(2)]
- d. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. [33 USC 1319(c)(2) and 40 CFR 122.41(a)(2)]
- e. Any person who *knowingly* violates section 301, 302, 303, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions. [40 CFR 122.41(a)(2)]
- f. Under state law, a civil penalty of not more than \$25,000 per violation may be assessed against any person who violates or fails to act in accordance with the terms, conditions, or requirements of a permit. [North Carolina General Statutes § 143-215.6A]
- g. Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$16,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$37,500. Penalties for Class II violations are not to exceed \$16,000 per day for each day during which the violation continues, with the maximum amount of any Class II penalty not to exceed \$177,500. [33 USC 1319(g)(2) and 40 CFR 122.41(a)(3)]

## 2. Duty to Mitigate

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

## 3. Civil and Criminal Liability

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

#### 4. Oil and Hazardous Substance Liability

Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties to which the Permittee is or may be subject to under NCGS 143215.75 et seq. or Section 311 of the Federal Act, 33 USG 1321. Furthermore, the Permittee is responsible for consequential damages, such as fish kills, even though the responsibility for effective compliance may be temporarily suspended.

#### 5. Property Rights

The issuance of this permit does not convey any property rights in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of Federal, State or local laws or regulations [40 CFR 122.41(g)].

#### 6. Onshore or Offshore Construction

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

#### 7. Severability

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

#### 8. Duty to Provide Information

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

#### 9. Duty to Reapply

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

#### 10. Expiration of Permit

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

#### 11. Signatory Requirements

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

a. All permit applications shall be signed as follows:

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

- (2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or
  - (3) For a municipality, State, Federal, or other public agency: by either a principal executive officer or ranking elected official [40 CFR 122.22].
- b. All reports required by the permit and other information requested by the Permit Issuing Authority shall be signed by a person described in paragraph a. above or by a duly authorized representative of that person. A person is a duly authorized representative only if:
- (1) The authorization is made in writing by a person described above;
  - (2) The authorization specified either an individual or a position having responsibility for the overall operation of the regulated facility or activity, such as the position of plant manager, operator of a well or well field, superintendent, a position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.); and
  - (3) The written authorization is submitted to the Permit Issuing Authority [40 CFR 122.22]
- c. Changes to authorization: If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative [40 CFR 122.22]
- d. Certification. Any person signing a document under paragraphs a. or b. of this section shall make the following certification [40 CFR 122.22]. NO OTHER STATEMENTS OF CERTIFICATION WILL BE ACCEPTED:
- "I certify, under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations."*

## 12. Permit Actions

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

## 13. Permit Modification, Revocation and Reissuance, or Termination

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

## 14. Annual Administering and Compliance Monitoring Fee Requirements

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

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

### 1. Certified Operator

Owners of classified water pollution control systems must designate operators, certified by the Water Pollution Control System Operators Certification Commission (WPCSOCC), of the appropriate type and grade for the system, and, for each classification must [T15A NCAC 08G .0201]:



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

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

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

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

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

## 2. Proper Operation and Maintenance

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

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

## 3. Need to Halt or Reduce not a Defense

It shall not be a defense for a Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the condition of this permit [40 CFR 122.41(c)].

## 4. Bypassing of Treatment Facilities

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

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

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

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

## c. Prohibition of Bypass

- (1) Bypass from the treatment facility is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for bypass, unless:
  - (A) Bypass was unavoidable to prevent loss of life, personal injury or severe property damage;
  - (B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate backup equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and
  - (C) The Permittee submitted notices as required under Paragraph b. of this section.
- (2) Bypass from the collection system is prohibited and the Permit Issuing Authority may take enforcement action against a Permittee for a bypass as provided in any current or future system-wide collection system permit associated with the treatment facility.
- (3) The Permit Issuing Authority may approve an anticipated bypass, after considering its adverse effects, if the Permit Issuing Authority determines that it will meet the three conditions listed above in Paragraph c.
  - (1) of this section.

5. Upsets

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

6. Removed Substances

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

### 7. Power Failures

Refer to footnote number 12 within section A. (1.) Effluent Limitations and Monitoring Requirements – Outfall 004 for specific requirements.

## **Section D. Monitoring and Records I.**

### 1. Representative Sampling

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

### 2. Reporting

Monitoring results obtained during the previous month(s) shall be summarized for each month and reported on a monthly Discharge Monitoring Report (DMR) Form (MR 1, 1.1, 2, 3) or alternative forms approved by the Director, postmarked no later than the last calendar day of the month following the completed reporting period. The first DMR is due on the last day of the month following the issuance of the permit or in the case of a new facility, on the last day of the month following the commencement of discharge. Duplicate signed copies of these, and all other reports required herein, shall be submitted to the following address:

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

### 3. Flow Measurements

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

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

### 4. Test Procedures

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

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

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

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

#### 5. Penalties for Tampering

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

#### 6. Records Retention

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

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

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

#### 7. Recording Results

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

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

#### 8. Inspection and Entry

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

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



**Section E. Reporting Requirements****1. Change in Discharge**

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

**2. Planned Changes**

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

- a. The alteration or addition to a permitted facility may meet one of the criteria for new sources at 40 CFR 122.29(b); or
- b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants subject neither to effluent limitations in the permit, nor to notification requirements under 40 CFR 122.42(a)(1); or
- c. The alteration or addition results in a significant change in the Permittee's sludge use or disposal practices, and such alteration, addition or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

**3. Anticipated Noncompliance**

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

**4. Transfers**

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

**5. Monitoring Reports**

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

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

**6. Twenty-four Hour Reporting**

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

### 7. Other Noncompliance

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

### 8. Other Information

Where the Permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information [40 CFR 122.41(l)(8)].

### 9. Noncompliance Notification

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

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

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

### 10. Availability of Reports

Except for data determined to be confidential under NCGS 143-215.3 (a)(2) or Section 308 of the Federal Act, 33 USC 1318, all reports prepared in accordance with the terms shall be available for public inspection at the offices of the Division. As required by the Act, effluent data shall not be considered confidential. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NCGS 143215.1(b)(2) or in Section 309 of the Federal Act.

### 11. Penalties for Falsification of Reports

The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or noncompliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than two years per violation, or by both [40 CFR 122.41].

### 12. Annual Performance Reports

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

The report shall be sent to:

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

## PART III OTHER REQUIREMENTS

### **Section A. Construction**

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

### **Section B. Groundwater Monitoring**

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

### **Section C. Changes in Discharges of Toxic Substances**

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

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

### **Section D. Facility Closure Requirements**

The Permittee must notify the Division at least 90 days prior to the closure of any wastewater treatment system covered by this permit. The Division may require specific measures during deactivation of the system to prevent



adverse impacts to waters of the State. This permit cannot be rescinded while any activities requiring this permit continue at the permitted facility.