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 wastewater and stormwater 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, II, III, and IV hereof.

The permit modification shall become effective July 1, 2015.

This permit and the authorization to discharge shall expire at midnight on October 31, 2016.

Signed this day October 28, 2015.

Signed by Tom Belnick for

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

SUPPLEMENT TO PERMIT COVER SHEET

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

The Chemours Company FC, LLC

is hereby authorized to:

1. Continue to operate existing wastewater treatment facilities consisting of:
   - equalization;
   - neutralization;
   - aerated pre-digester tank;
   - nutrient feed system;
   - aeration tank;
   - three clarifiers;
   - effluent flow measurement;
   - DAF unit;
   - rotary filter for sludge thickening;
   - sludge pump;
   - sludge filter press; and
   - steam heated sludge dryers.

2. Discharge treated process wastewater from Butacite®, Nafion®, SentryGlas®, and PVF (polyvinyl fluoride resin), process stormwater, sanitary wastewater, and co-neutralized regenerate from said treated facilities through internal outfall 001;

3. Discharge stormwater, non-contact cooling water, boiler blowdown and condensate, cooling tower blowdown, and treated wastewater effluent from 001, through 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.

A. (1) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge from **Outfall 001**. Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location
Flow (MGD)	2.0		Continuous	Recording	Effluent
BOD_5, 20^0 C	182.6 lbs/day	484.7 lbs/day	3/Week	Composite	Effluent
Total Suspended Solids	303.1 lbs/day	981.5 lbs/day	3/Week	Composite	Effluent
Temperature			Weekly	Grab	Effluent
Oil & Grease			Monthly	Grab	Effluent
pH	Between 6.0 and 9.0 Standard Units		3/Week	Grab	Effluent
40 CFR 414 Subpart I	See Condition A. (2)				

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

A. (2) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - SUBPART I

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee shall comply with the limitations and monitoring frequencies established below at outfall 001:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average[1]	Daily Maximum[1]	Measurement Frequency	Sample Type	Sample Location
Acenaphthene	0.166	0.444	See Note 2	Grab	Effluent
Acenaphthylene	0.166	0.444	See Note 2	Grab	Effluent
Acrylonitrile	0.723	1.821	See Note 2	Grab	Effluent
Anthracene	0.166	12.8 ug/L	See Note 2	Grab	Effluent
Benzene	0.278	1.024	See Note 2	Grab	Effluent
Benzo(a)anthracene	0.166	0.444	See Note 2	Grab	Effluent
3,4-Benzofluoranthene	0.173	0.459	See Note 2	Grab	Effluent
Benzo(k)fluoranthene	0.166	0.444	See Note 2	Grab	Effluent
Benzo(a)pyrene	0.173	0.459	See Note 2	Grab	Effluent
Bis(2-ethylhexyl) phthalate	0.775	2.100	See Note 2	Grab	Effluent
Carbon Tetrachloride	0.135	0.286	See Note 2	Grab	Effluent
Chlorobenzene	0.113	0.211	See Note 2	Grab	Effluent
Chloroethane	0.783	2.017	See Note 2	Grab	Effluent
Chloroform	0.158	0.346	See Note 2	Grab	Effluent
2-Chlorophenol	0.233	0.738	See Note 2	Grab	Effluent
Chrysene	0.166	0.444	See Note 2	Grab	Effluent
Di-n-butyl phthalate	0.203	0.429	See Note 2	Grab	Effluent
1,2-Dichlorobenzene	0.580	1.227	See Note 2	Grab	Effluent
1,3-Dichlorobenzene	0.233	0.331	See Note 2	Grab	Effluent
1,4-Dichlorobenzene	0.113	0.211	See Note 2	Grab	Effluent
1,1-Dichloroethane	0.166	0.444	See Note 2	Grab	Effluent
1,2-Dichloroethane	0.512	1.588	See Note 2	Grab	Effluent
1,1-Dichloroethylene	0.120	0.188	See Note 2	Grab	Effluent
1,2-trans-Dichloroethylene	0.158	0.406	See Note 2	Grab	Effluent
2,4-Dichlorophenol	0.294	0.843	See Note 2	Grab	Effluent
1,2-Dichloropropane	1.152	1.731	See Note 2	Grab	Effluent
1,3-Dichloropropylene	0.218	0.331	See Note 2	Grab	Effluent
Diethyl phthalate	0.610	1.528	See Note 2	Grab	Effluent
2,4-Dimethylphenol	0.135	0.271	See Note 2	Grab	Effluent
Dimethyl phthalate	0.143	0.354	See Note 2	Grab	Effluent
4,6-Dinitro-o-cresol	0.587	2.085	See Note 2	Grab	Effluent
2,4-Dinitrophenol	0.534	0.926	See Note 2	Grab	Effluent
2,4-Dinitrotoluene	0.851	2.145	See Note 2	Grab	Effluent
2,6-Dinitrotoluene	1.919	12.3 ug/L	See Note 2	Grab	Effluent
Ethylbenzene	0.241	0.813	See Note 2	Grab	Effluent

A. (2) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS - SUBPART I (CONTUNUED)

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee shall comply with the limitations and monitoring frequencies established below at outfall 001:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average[1]	Daily Maximum[1]	Measurement Frequency	Sample Type	Sample Location
Fluoranthene	0.188	28.2 ug/L	See Note 2	Grab	Effluent
Fluorene	0.166	0.444	See Note 2	Grab	Effluent
Hexachlorobenzene	0.113	0.5 µg/L	Annually[3]	Grab	Effluent
Hexachlorobutadiene	0.151	0.369	See Note 2	Grab	Effluent
Hexachloroethane	0.158	0.406	See Note 2	Grab	Effluent
Methyl Chloride	0.647	1.430	See Note 2	Grab	Effluent
Methylene Chloride	0.301	0.670	See Note 2	Grab	Effluent
Naphthalene	0.166	0.444	See Note 2	Grab	Effluent
Nitrobenzene	0.203	0.512	See Note 2	Grab	Effluent
2-Nitrophenol	0.309	0.519	See Note 2	Grab	Effluent
4-Nitrophenol	0.542	0.933	See Note 2	Grab	Effluent
Phenanthrene	0.166	0.444	See Note 2	Grab	Effluent
Phenol	0.113	0.196	See Note 2	Grab	Effluent
Pyrene	0.188	0.504	See Note 2	Grab	Effluent
Tetrachloroethylene	0.166	0.422	See Note 2	Grab	Effluent
Toluene	0.196	0.602	See Note 2	Grab	Effluent
1,2,4-Trichlorobenzene	0.512	1.054	See Note 2	Grab	Effluent
1,1,1-Trichloroethane	0.158	0.406	See Note 2	Grab	Effluent
1,1,2-Trichloroethane	0.158	0.406	See Note 2	Grab	Effluent
Trichloroethylene	0.158	0.406	See Note 2	Grab	Effluent
Vinyl Chloride	0.783	2.017	See Note 2	Grab	Effluent
Total Chromium	8.355	20.849	Annually	Grab	Effluent
Total Copper	10.914	25.441	Annually	Grab	Effluent
Total Cyanide	3.161	9.032	See Note 2	Grab	Effluent
Total Lead	2.409	5.194	See Note 2	Grab	Effluent
Total Nickel	12.720	29.957	Annually	Grab	Effluent
Total Zinc	7.903	19.645	Annually	Grab	Effluent

Notes:

1. All units are lbs/day unless otherwise noted.
2. Monitoring for the specified parameters has been waived based on a demonstration made by the Permittee in accordance with 40 CFR 122.44(a)(2)(i). This waiver is good only for the term of the permit. Please note that any exceedence of the effluent limitations found herein shall be considered a permit violation subject to appropriate enforcement action.
3. The most sensitive analytical method available shall be employed for determining the presence of hexachlorobenzene in the effluent.

A. (3) EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS

Beginning on the effective date of this permit and lasting through the expiration date, the Permittee is authorized to discharge from **Outfall 002 (boiler blowdown, once-through cooling water, and treated wastewater from outfall 001)** Such discharges shall be limited and monitored by the Permittee as specified below:

PARAMETER	EFFLUENT LIMITATIONS		MONITORING REQUIREMENTS		
	Monthly Average	Daily Maximum	Measurement Frequency	Sample Type	Sample Location[1]
Flow (MGD)			Continuous	Recording	Effluent or Influent
Temperature, °C	See Note 2		Daily[3]	Grab	Effluent, Upstream, Downstream
BOD_5, 20°C			Quarterly	Composite	Effluent
COD			Quarterly	Composite	Effluent
Fluoride (ug/L)			Quarterly	Grab	Effluent
Dissolved Oxygen			Weekly	Grab	Upstream, Downstream
PFOA[4]			Monthly	Grab	Effluent
Total Phosphorus			Monthly	Composite	Effluent
Total Nitrogen (NO_2+NO_3+TKN)			Monthly	Composite	Effluent
Conductivity			Weekly	Grab	Upstream, Downstream
Chronic Toxicity	See Note 5		Quarterly	Composite	Effluent
pH	Between 6.0 and 9.0 Standard Units		3/Week	Grab	Effluent

Notes:

1. Upstream shall be at the Permittee's river pump station; downstream shall be at the boat ramp approximately 4500 feet downstream at Prospect Hall Landing.
   As a participant in the Middle Cape Fear River Basin Association, the instream monitoring requirements as stated above are waived. 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.
2. 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.
3. Daily shall be defined as every day except Saturdays, Sundays, and legal holidays. Instream temperature sampling shall be conducted weekly.
4. PFOA (Perfluorooctanoic acid) - The Cape Fear River water intake may be sampled for PFOA on a monthly basis and reported as an upstream parameter in DWQ Form – MR-3.
5. Chronic Toxicity (Ceriodaphnia) P/F @ 3.3% February, May, August, November; see condition A. (4) of this permit. The compliance monitoring point for chronic toxicity shall be downstream of the confluence of outfall 001 and 002.

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

A. (4) CHRONIC TOXICITY PERMIT LIMIT (QUARTERLY) – OUTFALL 002

The effluent discharge shall at no time exhibit observable inhibition of reproduction or significant mortality to *Ceriodaphnia dubia* at an effluent concentration of 3.3%.

The permit holder shall perform at a minimum, quarterly monitoring using test procedures outlined in the "North Carolina *Ceriodaphnia* Chronic Effluent Bioassay Procedure," Revised February 1998, or subsequent versions or "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions. The tests will be performed during the months of February, May, August, and November. Effluent sampling for this testing 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-February 1998) or subsequent versions.

The chronic value for multiple concentration tests will be determined using the geometric mean of the highest concentration having no detectable impairment of reproduction or survival and the lowest concentration that does have a detectable impairment of reproduction or survival. The definition of "detectable impairment," collection methods, exposure regimes, and further statistical methods are specified in the "North Carolina Phase II Chronic Whole Effluent Toxicity Test Procedure" (Revised-February 1998) or subsequent versions.

All toxicity testing results required as part of this permit condition will be entered on the Effluent Discharge Monitoring Form (MR-1) 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, DWQ Form AT-3 (original) is to be sent to the following address:

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

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

Test data shall be complete, 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 Environmental 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.

Should any test data from this monitoring requirement 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, 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.

A. (5) RE-OPENER CONDITION

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

A. (6) BIOCIDE CONDITION

The permittee shall not use any biocide except those approved in conjunction with the permit application. The permittee shall notify the Director in writing not later than ninety (90) days prior to instituting use of any additional biocide used in cooling systems which may be toxic to aquatic life other than those previously reported to the Division of Water Quality. Such notification shall include completion of Biocide Worksheet Form 101 and a map locating the discharge point and receiving stream.