



Submissions to the State of North Carolina and Cape Fear River Watch

The following table identifies submissions made by Chemours pursuant to the requirements of the Consent Order for the period of July 1, 2019 through the end of the third quarter on September 30, 2019.¹

CO Section	Submitted To	Title	Submitted Date
8	NCDAQ	Monthly Emissions Report	7/22/2019
8	NCDAQ	Monthly Emissions Report and VES Carbon Bed and Stack Test Report	8/21/2019
8	NCDAQ	Monthly Emissions Report	9/24/2019
11	NCDEQ	Quarterly Report for Characterization of PFAS in Process and Non-Process Wastewater and Stormwater	7/31/2019
11.1 and 12	NCDEQ	Cape Fear River PFAS Loading Reduction Plan and Attachments	8/26/2019
11.2	NCDWR	Sediment Characterization Plan	8/21/2019
12	NCDEQ	Old Outfall 002 GAC Pilot Report, Surface Water Sampling Report, and PlumeStop Phase 1 Pilot Report	9/30/2019
18	NCDEQ	On and Offsite Assessment	9/30/2019
28	NCDEQ	Quarterly Progress Report	7/15/2019
Other	NCDEQ	Chemours Fayetteville Works NPDES Permit Application Update	7/09/2019
Other	NCDWR	PFAS Observations at Intake and Outfall 002	8/08/2019
Other	NCDEQ	Offsite Screening Level Exposure Assessment (SLEA) Workplan	7/19/2019

¹ Consent Order submissions by Chemours from lodging of the Proposed Consent Order in November 2018 through March 31, 2019 were presented in the 1st quarter report and from April 1, 2019 through June 30, 2019 in the 2nd quarter report.

Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018² - September 30, 2019)

Summary		Number of Residents on Bottled Water	GAC Systems On-line & Confirmation Sampling Complete	Number of Homes Where RO Systems Installed					
		Total	1,043	63	284				
Bottled Water		Residences Eligible for Bottled Water	Already Connected to Public Water	Eligible Residences Received Bottled Water	Residents Declined Bottled Water				
		3Q2019 Only	269	Not Applicable	266	3			
		Total	1,046	3	1,043	18			
GAC		Residences Eligible for GAC	Already Connected to Public Water	Public Water Readily Available	Public Water Feasible	Residents Declined GAC System	GAC Systems to Install	Number of Residences Responded to GAC Offer (Interview Conducted or Declined Offer)	
		3Q2019 Only	13	0	0	0	1	12	
		Total	206	3	13	36	2	154	
		Number of GAC Systems to Install but Resident has Not Responded to Offer	Total Sheds Dropped	System On-line & Confirmation Sampling Complete	GAC Offer Letters Sent to Residents	Call Log Interactions with GAC Residents	GAC Residence Response Rate		
		3Q2019 Only	Not Applicable	16	Not Applicable	94	159	Not Applicable	
		Total	69	68	63	471	471	54%	
RO		Residences Eligible for RO (includes homes with shared wells)	Number of Residences Responded to RO Offer	Residents Declined RO	Homes/Buildings where RO Systems to be Installed but Resident has Not Responded	RO Residence Response Rate			
		3Q2019 Only	256	175	6	Not Applicable	Not Applicable		
		Total	829	345	17	467	44%		
		Number of Homes where RO Systems Installed	Homes/Buildings where RO Systems are to be Installed	Number of RO Offer Letters Sent to Residences	Call Log Interactions with RO Residents				
		3Q2019 Only	151	Not Applicable	385	558			
		Total	284	528	1,440	1,187			

² The date the proposed Consent Order was lodged.

Consent Order Progress Details

This section summarizes the activities that have been undertaken by Chemours pursuant to the Consent Order Compliance Measures for the period from July 1, 2019 through the end of the third quarter of 2019 (September 30, 2019).

Section 7 Control Technology Improvements

Construction of the thermal oxidizer, which will capture and destroy over 99.99% of PFAS air emissions, continues, with scheduled completion and operation by the end of this year. The thermal oxidizer and scrubber apparatus have been delivered and installed (see photo at right), and the construction team is now working on mechanical completion and electrical checkout.



Section 8 GenX Emissions Reduction Milestones

During the third quarter, Chemours submitted monthly emissions reports in July, August, and September, which provided the details of emissions to date to meet the Consent Order requirements of 82% and 92% for plant-wide interim reductions of air emissions of GenX Compounds. In September, Chemours conducted emissions testing during the first product campaigns in 2019 for EVE and IXM CR.

Section 10 No Discharge of Process Wastewater from Chemours' Manufacturing Areas

Chemours continues to not discharge its process wastewater and to ship all of its process wastewater offsite for disposal.

Section 11 Characterization of PFAS in Process and Non-Process Wastewater and Stormwater at the Facility

Chemours' consultant Geosyntec prepared the first quarterly report describing and analyzing characterization sampling of process water, non-process wastewater and stormwater. Chemours submitted the report on July 31, 2019. Additional sampling

under Paragraph 11 was conducted in August 2019 and the results will be reported by the end of October. Chemours has also commenced non-targeted analysis on six samples that had been collected over the past two months and will report the findings from this analysis when they become available.

Section 11.1 Characterization of PFAS Contamination in Downstream Raw Water Intakes

Chemours' consultant Geosyntec prepared the characterization of PFAS in downstream raw water intakes as part of the Mass Loading Model assessment in the Paragraph 12 PFAS Loading Reduction Plan submittal made on August 26, 2019.

Section 11.2 Characterization of PFAS Contamination in River Sediment

Chemours' consultant Geosyntec prepared a Sediment Characterization Plan, which Chemours submitted on August 21, 2019.

Section 12 Accelerated Reduction of PFAS Contamination in the Cape Fear River and Downstream Water Intakes

Chemours' consultant Geosyntec prepared the following reports, which Chemours submitted on August 26, 2019:

- Cape Fear River PFAS Loading Reduction Plan (The Reduction Plan)
- Attachment 1: Cape Rear River PFAS Mass Loading Model Assessment and Paragraph 11.1 Characterization of PFAS at Intakes
- Attachment 2: Seeps and Creeks Investigation Report
- Attachment 3: Assessment of HFPO-DA and PFMOAA in Outfall 002 Discharge and Evaluation of Potential Control Options
- Attachment 4: Decommissioning Summary of Grouting of East-West Section of Terracotta Pipe from Chemours Monomers IXM Area
- Attachment 5: HFPO-DA Loading Reductions Estimate

The Reduction Plan and attachments described the mass loading of PFAS originating from the Site to the Cape Fear River and outlined seven actions Chemours has proposed to implement to further reduce PFAS loadings originating from the facility to the Cape Fear River.

As required by paragraph 12.e of the Consent Order, samples were collected once per month beginning in March 2019 at several locations in Old Outfall 002. During the third quarter, Chemours' consultant Parsons completed the July and August sampling and the results of all six monthly sampling events were reported to NCDEQ and Cape Fear River Watch in September 2019.

As required by paragraph 12.e of the Consent Order, Chemours' consultant Parsons also performed a pilot study for GAC treatment for PFAS compounds in Old Outfall 002. The pilot study was conducted from June through September 2019, and the results of the

pilot study and associated bench testing were reported to NCDEQ and Cape Fear River Watch in September 2019.

Additionally, Chemours' consultant Parsons conducted a pilot study to evaluate the use of Regenes Plumestop® to remediate PFAS constituents at Old Outfall 002. Plumestop® was injected in May followed by monthly sampling. During the third quarter, the monthly sampling for July and August was completed and a report summarizing the results of the pilot study was submitted to NCDEQ and Cape Fear River Watch in September 2019.

Section 14 Toxicity Studies

Chemours received approval from NCDEQ for the Charles River Laboratories and EAG Laboratories for toxicology testing. Toxicology studies will start after the in-process test substance synthesis is completed.

Section 16 Groundwater Remediation

Chemours' consultant Geosyntec began developing a numerical groundwater model to quantitatively assess groundwater flow at the Site to support groundwater remedy selection in the Corrective Action Plan required by Paragraph 16. Additionally, multiple monitoring wells were installed adjacent to Willis Creek, Old Outfall 002, and Georgia Branch Creek.

Section 18 On and Off-site Assessment

Chemours' subcontractors installed 42 additional wells onsite and 20 wells offsite in 2019. The onsite wells were installed to support development of the geological model and provide additional PFAS delineation. Offsite wells were installed under North Carolina Department of Transportation agreements to support assessment of the distribution of PFAS originating from the facility in offsite areas. All newly installed wells have been sampled, and an additional round of sampling will be completed.

Chemours' contractor Geosyntec prepared the Onsite and Offsite Assessment for the Chemours Fayetteville Works and Chemours submitted the report on September 30, 2019. Chemours intends to submit an update to the report by October 31, 2019 because not all analytical data had been received from the laboratories by September 30, 2019.

Sections 19 and 20 Provision of Public Water Supplies, Whole Building Filtration Systems, and Reverse Osmosis Drinking Water Systems

Chemours' contractors continued to install GAC whole building filtration systems and RO drinking water systems at residences. Statistics are provided in the "Replacement Drinking Water Actions" section above.

Section 21 Private Well Testing

For the five sectors in the north-northwest (west of the Cape Fear River), the initial stage of step-out sampling was completed, and these results (along with additional step-out sampling results) indicated that the sampling area needed to move out to the next one-mile interval. (This next interval of sampling was completed in early October, and the results are pending.) Infill sampling is still ongoing in these areas. For the remaining 11 sectors (to the east and south), the initial stage of step-out sampling was completed, and the results are pending. Infill sampling of these areas will begin later in the fourth quarter of 2019.

Since the Consent Order was signed, the project team has made a total of 2,675 visits to 1,620 residences and collected 449 samples. During the third quarter, there were 1,738 visits made to 1,020 residences and 379 samples were collected.

Section 22 Provision of Sampling Results

Chemours provided (and continues to provide) sampling results to NCDEQ and residences as required under the Consent Order.

Section 23 Interim Replacement of Private Drinking Water Supplies

All residences eligible to receive the interim replacement drinking water supplies have received the supplies (i.e., bottled water). As of September 30, 2019, there are 1,043 residences receiving bottled water.

Section 24 Drinking Water Compliance Plan

Chemours responded to comments from NCDEQ on the Drinking Water Compliance Plan on August 22, 2019.

Section 28 Reporting

Chemours submitted the Consent Order 2nd quarter progress report on July 15, 2019.

Sections 29 and 30 Public Information

Chemours has continued to post its Consent Order submissions at <https://www.chemours.com/Fayetteville-Works/en-us/c3-dimer-acid/compliance-testing/>.