



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

The following table identifies submissions made by Chemours pursuant to the Consent Order and Addendum (COA) for the period of January 1, 2022 through the end of the first quarter on March 31, 2022.¹

CO Section	Title	Submitted Date
11	Characterization of PFAS In Process and Non-Process Wastewater and Storm Water Semi-Annual Report	03/31/2022
12 - COA 1b	Mass Loading Assessment – Fourth Quarter 2021	03/31/2022
12 - COA 2a	Interim Seep Remediation Operation & Maintenance Report #6	01/31/2022
12 - COA 2a	Interim Seep Remediation Operation & Maintenance Report #7	03/31/2022
12 - COA 3b	90 Percent Design Report	03/25/2022
28	Quarterly Progress Report	01/28/2022

¹ Consent Order submissions by Chemours from lodging of the Proposed Consent Order in November 2018 through March 31, 2019 were presented in the 2019 1st quarter report, April 1, 2019 through June 30, 2019 in the 2019 2nd quarter report, July 1, 2019 through September 30, 2019 in the 2019 3rd quarter report, October 1, 2019 through December 31, 2019 in the 2019 4th quarter report, January 1, 2020 through March 31, 2020 in the 2020 1st quarter report, April 1, 2020 through June 30, 2020 in the 2020 2nd quarter report, July 1, 2020 through September 30, 2020, in the 2020 3rd quarter report, October 1, 2020 through December 31, 2020 in the 2020 4th quarter report, January 1, 2021 through March 31, 2021 in the 2021 1st quarter report, April 1, 2021 through June 30, 2021 in the 2021 2nd quarter report, July 1, 2021 through September 30, 2021 in the 2021 3rd quarter report, and October 1, 2021 through December 31, 2021 in the 2021 4th quarter report.



2022 First Quarter Residential Summary

Item	Cumberland County (East of River)	Cumberland County (West of River)	Bladen County (East of River)	Bladen County (West of River)	Robeson County	Sampson County	Total
Total Number of Residences Sampled	328	376	18	49	27	35	833
Residences Exceeding GAC Criteria (GenX \geq 140 ng/L)	0	0	0	1	0	0	1
Residences Exceeding RO Criteria (Σ PFAS \geq 70 ng/L)	18	35	4	10	2	0	69
Residences Exceeding RO Criteria (PFAS \geq 10 ng/L)	94	70	8	15	8	10	205
Residences Drinking Water Well Detections (Results $<$ 10 ng/L)	56	117	1	6	9	8	197
Residences Drinking Water Well Non-Detections	41	50	3	16	7	7	124



Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018² - March 31, 2022)

Fayetteville Counties Area

Summary		Number of Residences on Bottled Water	GAC Systems Online & Confirmation Sample Complete	Number of Residences w/ RO Systems Installed	Homes Connected to Public Water by Chemours		
	Total		2797	111	3214	86	
Bottled Water		Residences Eligible for Bottled Water	Eligible Residences Receiving Bottled Water Services				
	1Q 2022	306	322				
	Total	2937	2797				
GAC		Residences Eligible for GAC	Residents Declined GAC	GAC to Install	Residences Responded to GAC Offer (Interview Conducted or Offer Declined)		
	1Q 2022	2	0	1	1		
	Total	271	7	125	123		
		GAC to Install but Resident has not Responded to Offer	Number of GAC Decommissioned	Confirmation Sampling Complete	GAC Offer Letters Sent to Residences	Call Team Interactions w/ GAC Residents	GAC Residence Response Rate
	1Q 2022	Not Applicable	1	0	2	143	Not Applicable
Total	104	8	108	271	4032	45%	
RO		Residences Eligible for RO (including shared well homes)	Residences Responded to RO Offer	Residents Declined RO	RO to Install but Resident has not Responded to Offer	RO Residence Response Rate	
	1Q 2022	419	565	10	166	Not Applicable	
	Total	6135	4315	128	1645	70%	
		Residences with RO Installed	Residences where RO Systems to be Installed	RO Offer Letters Sent to Residences	Call Team Interactions w/ RO Residents		
	1Q 2022	342	419	419	3095		
Total	3214	2547	6135	32663			

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 and Addendum for the period from January 1, 2022 through the end of the first quarter of 2022 (March 31, 2022). On August 13, 2020, Chemours signed the Addendum to Consent Order Paragraph 12, and the Addendum was entered by the Bladen County Superior Court on October 12, 2020.

Section 7 Control Technology Improvements

The thermal oxidizer (see photo at right) continues to control process emissions at an average PFAS destruction efficiency exceeding 99.99%.



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

Chemours does not discharge its process wastewater and instead collects and ships its process wastewater offsite for disposal or recycles treated water internally within several manufacturing processes.

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

During the first quarter of 2022, one sampling event was conducted during January 16-19, 2022 (the January 2022 event). Samples were collected from 23 locations during the January 2022 event. Data from the August 2021, September 2021, and December 2021 events were evaluated and compiled in the semi-annual report, submitted on March 31, 2022.

Section 12 Accelerated Reduction of PFAS Contamination in the Cape Fear River and Downstream Water Intakes, and Addendum to Consent Order Paragraph 12

Chemours continued operation of the treatment system for the Old Outfall (Outfall 003) pursuant to Consent Order Paragraph 12(e) and a NPDES permit issued by NCDEQ.

As noted above, the Addendum to Consent Order Paragraph 12 was signed in the third quarter of 2020 and entered by the Court during the fourth quarter of 2020. Chemours' Addendum implementation activities during the first quarter of 2022 included:

Consent Order Addendum Paragraph 1

On March 31, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2021 Report pursuant to Consent Order Addendum Paragraph 1(b). The report describes sampling activities and mass loading results for the Cape Fear River and PFAS loading pathways from the fourth quarter of 2021. This submission was also pursuant to quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). In

January 2022, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.

Consent Order Addendum Paragraph 2

During the first quarter of 2022, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On January 31, 2022, Chemours submitted the Interim Seep Remediation Operation and Maintenance Report #6; and on March 31, 2022, Chemours submitted the Interim Seep Remediation Operation and Maintenance Report #7. The two Operation and Maintenance reports describe the operations and maintenance activities at the flow-through cells over the bimonthly reporting periods of November/December 2021 and January/February 2022, respectively.

Consent Order Addendum Paragraph 3

As required by the Addendum, the Black Creek Aquifer interim measure system to extract groundwater from the seven existing Black Creek Aquifer monitoring wells (BCA-01, BCA-02, PW-11, PW-14, PW-15R, PIW-9D, and PIW-10DR) continued to operate in the first quarter as designed. During the first quarter of 2022 through March 28, 2022 (the last reading taken during the reporting period), the system extracted 619,959 gallons of water for a total of 2,571,591 gallons since startup on November 30, 2020. The wells have continued to operate as designed with only minor, routine shutdowns for freezing weather, maintenance, or equipment issues.

On January 13, 2022, Chemours submitted a Groundwater Remedy and Treatment System Net Benefit Assessment Memorandum. The memorandum described how the groundwater remedy will provide long-lasting benefits by reducing the Table 3+ PFAS mass loading to the Cape Fear River and also provide mass loading reduction benefits during remedy initiation and after commissions.

On January 13, 2022, Chemours submitted a request to NCDEQ to abandon wells PIW-9S, PIW-9D, EW-2, OW-6 which pose conflicts with the remedy construction. On February 1, 2022, NCDEQ approved the request to abandon these wells. On March 8, 2022, Chemours submitted an additional request to abandon wells P-7, P-8, MW-31, MW-32, and MW-33. On March 17, 2022, NCDEQ approved the request to abandon these additional five wells with requirements regarding sampling and abandonment records.

On February 18, 2022, Chemours submitted to NCDEQ a Response to DEQ Draft NPDES Permit for Chemours Company Fayetteville Works – Outfall 004.

On March 17, 2022, Chemours submitted responses to NCDEQ comments on the Quality Assurance Plan for the barrier wall installation and the Performance Monitoring Plan (PMP) received on February 15, 2022 from NCDEQ. In addition, on March 25, 2022, Chemours submitted responses to NCDEQ comments on the groundwater model received on February 15 and additional comments received March 14, 2022. A teleconference was held with NCDEQ on March 14, 2022 to discuss the groundwater model. The submitted responses on March 17 and 25, 2022 provided additional clarification on details of the Quality Assurance Plan, PMP, and groundwater model.

On March 25, 2022, Chemours submitted the 90% Design report to NCDEQ in advance of the Consent Order Addendum required date of March 31, 2022. This submission included a revised PMP and an updated groundwater model report.

Construction activity on the remedy continues to proceed. NCDEQ and Chemours conducted a Site visit on February 11, 2022 to observe extraction well installation for the remedy. In the first quarter of 2022 Chemours installed 52 extraction wells. In addition, two retaining walls along the remedy have been completed and barrier wall roadway grading continues.

Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours conducted five sampling events in January 2022, three sampling events in February 2022, and two sampling events in March 2022 during the stormwater treatment system operation for removal of PFAS compounds. The monthly monitoring reports for January 2022 – March 2022 will be submitted in the second quarter of 2022. The treatment system also consistently captured stormwater runoff from precipitation events of up to the 1-inch, 24-hour design storm during the first quarter of 2022.

On March 25, 2022, Chemours submitted Stormwater Treatment System Monthly Monitoring Reports for the months of September 2021 through December 2021, as well as a Stormwater Capture and Removal Efficiency Report for September 2021 (October through December did not have bypass flows). Chemours also submitted to NCDEQ the Updated Stormwater Collection and Treatment System O&M Plan and the Updated Stormwater Treatment System Sampling Plan.

Section 14 Toxicity Studies

Following a technical meeting between NCDEQ, Chemours, and Eurofins (the aquatic toxicity contract laboratory), NCDEQ provided final comments on the aquatic protocols. Eurofins has addressed the comments and Chemours submitted the protocols to NCDEQ for final approval.

The 28-day immunotoxicity study draft protocols were submitted to NCDEQ during the fourth quarter of 2021 and are awaiting comments from NCDEQ. Chemours requested confirmation of the intended guideline for the 90-day study and received comments from NCDEQ in late December 2021. The comments were reviewed and a response was sent by Chemours to NCDEQ in March 2022.

Section 16 Groundwater Remediation

On March 31, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Fourth Quarter 2021 Report pursuant to Consent Order Addendum Paragraph 1(b). This submission was also pursuant to quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). On-going groundwater remediation activities are being conducted pursuant to Consent Order Addendum Paragraph 3 and are described earlier in this document under that paragraph.

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

As shown in the summary tables above, Chemours continues to make significant progress in implementing the Consent Order requirements of Paragraphs 19 and 20. Since resuming RO installations in June 2020, following the COVID-19 postponement period, RO acceptance rates and installations have maintained a steady pace. O&M activities for installed GAC systems continue uninterrupted. Bottled water services continue uninterrupted for 2,797 homes. In September 2021, Chemours entered into an agreement with Bladen County to fund public water system upgrades and

connections associated with providing permanent replacement drinking water supplies under the Consent Order, and Chemours proceeded with implementation of the agreement during the first quarter of 2022.

Section 21 Private Well Testing

As of March 31, 2022, 13,833 residences have been identified within the current study area, of which 9,313 have been sampled and 3,329 additional residences have received at least one initial sample offer letter. Results of sampling that occurred throughout the first quarter of 2022 (833 residences) are presented at the beginning of this progress report. Current Step-out and Infill distance intervals range from 2.5 miles to 25.5 miles from the Site.

Chemours continues to follow the private well cold calling protocol (i.e., to confirm residences, tenant/owner name and phone number, addresses, not connected to public water, and residents' willingness to have a sample collected from their drinking water well).

Section 22 Provision of Sampling Results

Chemours provided (and continues to provide) sampling results to NCDEQ and residents as required under the Consent Order. Chemours has provided sampling results to NCDEQ by sending a courtesy email notification and by uploading sampling results to the state Equis database. Chemours has also provided final lab reports to NCDEQ. Chemours has provided sampling results to residents by including preliminary results with water filtration system initial offer letters and sending the final lab reports to residents within the following 30 days. Chemours has also provided non-detect sampling results to residents.

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 or voucher card for bottled water). As of March 31, 2022, there are 2,797 residences receiving bottled water services.

Section 24 Drinking Water Compliance Plan

As discussed above, the off-site replacement drinking water program continues. The Drinking Water Compliance Plan is currently under review and some of the protocols are being revised based on discussions with NCDEQ. The following revised procedures are currently implemented based on approval by NCDEQ:

- Point-of-Use (POU) Granular Activated Carbon (GAC) filtration systems for commercial establishments that were eligible for RO systems, pursuant to NCDEQ's approval letter dated January 5, 2021.
- Chemours connected six homes in Cumberland County to public water as part of a pilot program and a report was submitted to NCDEQ on June 25, 2021 and approved by NCDEQ on September 22, 2021.
- The pilot program is now expanding to include additional residences for public water connections in the study area. Chemours has identified potential additional residences for public water connections. Chemours is working with counties and water providers to facilitate the public water connections where feasibility has been determined. One residence was connected to public water in February 2022. Seventeen additional homes are slated for public water connections in April/May 2022.



Consent Order Progress Report For First Quarter 2022

- Starting in the second quarter of 2020, the GAC OM&M sampling has been revised to include quarterly sampling in between the lead and lag carbon vessel and one annual raw water sample.

Section 28 Reporting

Chemours submitted the Consent Order 4th quarter 2021 progress report on January 28, 2022.

Sections 29 and 30 Public Information

Chemours has continued to post its Consent Order submissions at

<https://www.chemours.com/en/about-chemours/global-reach/fayetteville-works/compliance-testing>.



Four Counties Sampling Program

On February 1, 2022, Chemours submitted a “Framework to Assess Table 3+ PFAS in New Hanover, Brunswick, Columbus, and Pender Counties” (the “Assessment Framework”) and an “Interim Four Counties Sampling and Drinking Water Plan (New Hanover, Brunswick, Columbus, and Pender Counties)” (the “Interim Plan”) for the sampling of groundwater from private wells in the four counties as requested by the well owners. Both documents were prepared by Chemours’s Consultant Geosyntec Consultants of NC, PC.

Interim Sampling and Drinking Water Plan for Four Counties

On March 2 and March 28, 2022, Chemours received letters containing comments from NCDEQ on the Interim Plan. Chemours prepared a response to NCDEQ comments and a revised Interim Plan, which were transmitted to NCDEQ on April 1, 2022.

An information call line was activated by Chemours on February 15, 2022. This call line has been used to answer questions about the activities covered in the Interim Plan and for residents to request sampling of their private wells. Well owners/residents that request sampling via the call center are screened against the eligibility criteria described in the Interim Plan. As of March 31, 2022, of the 77 requests received for sampling, 61 met the eligibility criteria and were sampled. Chemours is also resampling certain locations previously sampled by NCDEQ. Of the 58 samples for which analytical results were received, 54 showed no exceedances of Consent Order Attachment C criteria. Bottled water has been provided to the two residents/owners that qualified. The two other results that showed exceedances were resamples of wells that were sampled by NCDEQ and these locations are already connected to a public water source.



2022 First Quarter Residential Summary

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	55	0	2	1	58
Residences Exceeding GAC Criteria (GenX >= 140 ng/L)	0	0	0	0	0
Residences Exceeding RO Criteria (Σ PFAS >= 70 ng/L)	2	0	0	0	2
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	2	0	0	0	2
Residences Drinking Water Well Detections (Results < 10 ng/L)	8	0	0	0	8
Residences Drinking Water Well Non-Detections	43	0	2	1	46

Replacement Drinking Water Actions

(Replacement drinking water actions from February 15, 2022³ - March 31, 2022)

Four Counties Area

Summary	Residences Requested Sampling ⁴	Residences Sampled	Residences Eligible for Bottled Water	Residences Receiving Bottled Water Voucher Card
	Total	66	58	2

³ The start date of the Chemours Call Line in the Four Counties Area.

⁴ Includes five NCDEQ resampled locations which are not all residences (i.e., country clubs, parks).