



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 October 1, 2022 through the end of the fourth quarter on December 31, 2022.¹

CO Section	Title	Submitted Date
11(a)	PFAS Non-Targeted Analysis and Methods Interim Report #6	12/28/2022
11(d)	January – June 2022 Data Submittal	12/9/2022
12 – COA 1(b)	3Q2022 Mass Load Assessment	12/28/2022
12 – COA 2(a)	Interim Seep Remediation O&M Report #11	11/30/2022
12 – COA 3(b)	Barrier Wall and Groundwater Extraction System 90 Percent Design Response Letter	10/25/2022
28	Quarterly Progress Report	10/28/2022

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, October 1, 2021 through December 31, 2021 in the 2021 4th quarter report, January 1, 2022 through March 31, 2022 in the 2022 1st quarter report, April 1, 2022 through June 30, 2022 in the 2022 2nd quarter report, and July 1, 2022 through September 30, 2022 in the 2022 3rd quarter report.



2022 Fourth 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	Hoke County	Total
Total Number of Residences Sampled	133	121	30	7	12	62	1	366
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	7	5	0	0	0	1	0	13
Residences Exceeding RO Criteria (Σ PFAS >= 70 ng/L)	6	6	0	0	1	0	0	13
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	54	20	7	0	3	15	0	99
Residences Drinking Water Well Detections (Results < 10 ng/L)	35	44	7	5	2	19	0	112
Residences Drinking Water Well Non-Detections	31	46	16	2	6	27	1	129



Replacement Drinking Water Actions

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

Fayetteville Counties Area

Summary	Number of Residences on Bottled Water	Homes Connected to Public Water by Chemours	Residences with GAC Systems Online	Residences with RO Installed	Outreach Letters Interactions	Outreach Call Team Interactions
Total	2,523	137	120	3,868	162,043	67,191
Bottled Water	Residences Eligible for Bottled Water	Eligible Residences Receiving Bottled Water Services				
4Q 2022	197	145				
Total	3,144	2,523				
GAC	Residences Eligible for GAC	Residents Declined GAC	Residences with GAC Systems Online	Number of GAC Systems Decommissioned		
4Q 2022	18	0	14	0		
Total	2,018	4	120	9		
RO	Residences Eligible for RO (including shared well homes)	Residents Declined RO	Residences with RO Installed			
4Q 2022	179	11	145			
Total	5,400	147	3,868			

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 October 1, 2022 through the end of the fourth quarter of 2022 (December 31, 2022).

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 fourth quarter of 2022, one bi-monthly sampling event was conducted. The bi-monthly sampling event was conducted on November 30, 2022 and December 1, 2022 (the November/December 2022 event). Samples were collected from 27 locations during this event. In addition to the bi-monthly event, one "mini" event was conducted to target locations that have less than 12 samples over the course of the paragraph 11 sampling program. The mini event was conducted on December 15, 2022 (the December 2022 mini event) and three locations were sampled. Additionally, process wastewater samples were collected on October 4 and 11, 2022, November 29, 2022, and December 2, 6, 13, 16, and 20, 2022.

Data collected from January – June 2022 were submitted on December 9, 2022. Additionally, a response to the NCDEQ comment letter was submitted on November 30, 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.

Chemours's Addendum implementation activities during the fourth quarter of 2022 included:

Consent Order Addendum Paragraph 1

On December 28, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2022 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 third quarter of 2022. This submission was also pursuant to quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). In November 2022, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.

Consent Order Addendum Paragraph 2

During the fourth quarter of 2022, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On November 30, 2022, Chemours submitted the Interim Seep Remediation Operation and Maintenance Report #11. The Operation and Maintenance report describes the operations and maintenance activities at the flow-through cells over the bi-monthly reporting period of September/October 2022.

Consent Order Addendum Paragraph 3

The CO Addendum requires extraction of groundwater from existing Black Creek Aquifer monitoring wells as an interim measure while the final remedy (barrier wall and groundwater extraction and treatment system) is being constructed. During the fourth quarter of 2022, the interim system extracted 363,303 gallons of water for a total of 3,888,146 gallons since startup on November 30, 2020. The interim extraction system continues to operate as designed with only minor, routine shutdowns for equipment issues, routine maintenance, weather, or other issues.

With respect to the final remedy, on October 14, 2022, Chemours received the final CWA 401 Water Quality Certification followed by the final 404 permit from the USACE. Chemours received NCDEQ's approval of the 90% design for the barrier wall and groundwater extraction system on October 26, 2022. On November 14, 2022, Chemours, NCDEQ, and CFPWA entered into a Settlement Agreement with respect to the NPDES permit from NCDEQ for the groundwater treatment system.

Construction of the groundwater extraction conveyance system, the ex-situ conveyance system, and the groundwater treatment plant continue to progress. Construction on the ex-situ capture locations began after the receipt of the 404/401 permit. The test panel section of the barrier wall was installed during the week of December 12, 2022.

Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours conducted three sampling events in November 2022 and four sampling events in December 2022. The stormwater treatment system removed greater than 99.9% of PFAS and also consistently captured stormwater runoff from precipitation events of up to the 1-inch, 24-hour design during the fourth quarter of 2022. A quarterly bypass sample was collected on November 11, 2022, when rainfall exceeded 1 inch in 24 hours.

Chemours submitted Stormwater Treatment System Monthly Monitoring Reports for the months of April 2022 through June 2022 on November 2, 2022.

Section 14 Toxicity Studies

NCDEQ has approved all of the protocols for the aquatic toxicology studies. Range-finding and method development have begun for the algae studies. Range-finding results for two of the algae studies were submitted for NCDEQ review in January 2023. NCDEQ requested some additional information and that is being

gathered by the Eurofins laboratory for submittal in February 2023. Signed protocols will be shared with NCDEQ as they become available.

Chemours submitted the revised mammalian toxicology study protocols to NCDEQ in November 2022 and requested a technical meeting between Chemours, Charles River Laboratories, and NCDEQ in order to finalize the study endpoints.

Section 16 Groundwater Remediation

On December 28, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2022 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. 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 2,523 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. Pursuant to that agreement, Chemours and its contractors are completing the installation of treatment system enhancements to the Tobermory and Live Oak public water supply systems. In addition, Chemours is also working with the county on installation of water meters so that eligible residences can be connected to a public water system.

Based on property owners' preferences for permanent replacement drinking water as a result of the EPA Health Advisory, Chemours has started the installation of mitigation systems or connection to public water systems to those eligible residences and properties.

Section 21 Private Well Testing

As of December 31, 2022, 15,585 residences have been identified within the current study area, of which 11,952 have been sampled and 2,310 additional residences have received at least one initial sample offer letter. Results of sampling that occurred throughout the fourth quarter of 2022 (366 residences) are presented at the beginning of this progress report. Current Step-out and Infill distance intervals range from 2.5 miles to 26.5 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 December 31, 2022, there are 2,523 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 public water pilot program is 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 and make the public water connections where feasibility has been determined. Chemours received NCDEQ's comments on the Carbon Transition Plan on October 27, 2022 and is preparing a response.

Section 28 Reporting

Chemours submitted the Consent Order 3rd quarter 2022 progress report on October 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

In accordance with the “Framework to Assess Table 3+ PFAS in New Hanover, Brunswick, Columbus, and Pender Counties” (the “Assessment Framework”), Chemours submitted to NCDEQ a work plan to conduct groundwater and soil sampling in the four counties (New Hanover, Brunswick, Columbus, and Pender counties) on August 29, 2022. Chemours continued to conduct residential sampling during the fourth quarter.

Chemours previously maintained communication between representatives from Brunswick County, Pender County, Columbus County, and New Hanover County health departments to obtain private well construction records. Chemours has reviewed the well construction records received from county health departments. A summary of communications and data received from county representatives is provided as an attachment to the “Four Counties Private Well Sampling Monthly Report” submitted to NCDEQ each month.

Interim Sampling and Drinking Water Plan for Four Counties

Based on the revised Interim Plan dated June 1, 2022, Representative Sampling activities continued in the fourth quarter which included eligible private wells identified through community outreach via letters across the four counties, proximity to Consent Order exceedances, and requests received via the call line or web form. Three monthly reports (for September, October, and November 2022) were submitted to NCDEQ during the fourth quarter which documented the progress of this private well program.

As of December 31, 2022, 17,281 addresses have been screened for sampling eligibility, and 5,702 met the eligibility criteria. Of these 5,702 eligible locations, 4,374 have been scheduled for sampling and 3,722 have been sampled. Of the 3,506 samples with analytical results, 2,614 showed no exceedances of Consent Order Attachment C criteria. Bottled water has been provided to the 884 residents/owners that qualified. No further action was required for properties that were vacant, empty lots, connected to public water, or declined bottled water, including four of the NCDEQ resampling locations.

Chemours and its contractors have started the installation of mitigation systems or connection to public water systems to those properties that are eligible based on the sampling results.



2022 Fourth Quarter Residential Summary

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	2,237	284	1,142	59	3,722
Total Number of Residences with Sample Results	2,144	261	1,045	56	3,506
Residences Exceeding GAC Criteria (GenX \geq 10 ng/L)	73	19	3	0	95
Residences Exceeding RO Criteria (Σ PFAS \geq 70 ng/L or PFAS \geq 10 ng/L)	483	55	258	1	797
Residences Drinking Water Well Detections (Results $<$ 10 ng/L)	595	34	106	2	737
Residences Drinking Water Well Non-Detections	993	153	678	53	1,877



Replacement Drinking Water Actions

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

Four Counties Area Interim Replacement Drinking Water

Metric	Total	New Hanover	Brunswick	Pender	Columbus
Number of Private Wells Above the CO Criteria	892 (158)	556 (77)	74 (2)	261 (79)	1 (0)
Number of Locations Provided Interim Replacement Drinking Water ¹	884	507	67	309	1

Notes:

Values in parentheses indicate additional number of properties connected to shared wells or community wells that have a CO exceedance.

1 – Number of Locations Provided Interim Replacement Drinking Water includes shared wells

Four Counties Area Permanent Replacement Drinking Water

Metric	Total	Totals By County			
		New Hanover	Brunswick	Pender	Columbus
RO					
Total Number of Properties Sent an Offer Letter	949	555	57	336	1
Total Number of Properties who have Accepted Offer	279	196	17	66	0
Total Number of Properties with RO Systems Installed	118	95	5	18	0
Total Number of Properties that Selected Public Water Connection (if feasible and available)	82	24	4	54	0
GAC					
Total Number of Properties Sent an Offer Letter	101	78	19	4	0
Total Number of Properties who have Accepted Offer	32	27	3	2	0
Total Number of Properties with GAC System Installed	6	6	0	0	0
Total Number of Properties that Selected Public Water Connection (if feasible and available)	11	5	5	1	0

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