



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, 2023 through the end of the fourth quarter on December 31, 2023.¹

Section	Title	Submitted Date
11a	PFAS Non-Targeted Analysis and Methods Interim Report 8	12/22/2023
11d	PFAS Process and Non-process Wastewater & Stormwater Analytical Results – Quarter 3 2023	12/28/2023
11d	Paragraph 11d Table A1 Jul thru Sept 2023	12/28/2023
12 - COA 3	CFR Long-term Remedy Performance Monitoring Report 3	12/22/2023
12 - COA 1b	3Q2023 Mass Load Assessment	12/22/2023
28	Quarterly Progress Report	10/23/2023

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, July 1, 2022 through September 30, 2022 in the 2022 3rd quarter report, October 1, 2022 through December 31, 2022 in the 2022 4th quarter report, January 1, 2023 through March 31, 2023 in the 2023 1st quarter report, April 1, 2023 through June 30, 2023 in the 2023 2nd quarter report, and July 1, 2023 through September 30, 2023 in the 2023 3rd quarter report.



2023 Fourth Quarter Residential Sampling 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	58	70	3	12	6	30	0	179
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	2	6	0	1	0	0	0	9
Residences Exceeding RO Criteria (Σ PFAS >= 70 ng/L)	2	3	0	0	0	0	0	5
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	17	10	0	0	2	10	0	39
Residences Drinking Water Well Detections (Results < 10 ng/L)	18	26	0	4	1	5	0	54
Residences Drinking Water Well Non-Detections	19	25	3	7	3	15	0	72



Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018² - December 31, 2023)

Fayetteville Counties Area

Summary	Number of Residences on Bottled Water	Residences Connected to Public Water by Chemours	Residences with GAC Systems Online	Residences with RO Installed	Outreach Letters Interactions	Outreach Call Team Interactions
Total	2,569	251	676	3,202	199,773	85,697
GAC	Residences Eligible for GAC	Residences Declined GAC	Residences with GAC Systems Online	Number of GAC Systems Decommissioned		
4Q 2023	10	2	94	0		
Total	2,063	4	676	10		
RO	Residences Eligible for RO (including shared well residences)	Residences Declined RO	Residences with RO Installed			
4Q 2023	52	4	44			
Total	5,670	135	3,202			

Note: Number of residences on bottled water is all residences currently on bottled water services; eligible residences for GAC and RO includes any location eligible and installed.

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, 2023 through the end of the fourth quarter of 2023 (December 31, 2023).

Section 7 Control Technology Improvements

The thermal oxidizer (see photo) 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 2023, one bi-monthly sampling event was conducted. The bi-monthly sampling event was conducted on November 21, 22, and 28 (November 2023 event). Samples were collected from 28 locations during the November 2023 event. Data collected from July–September 2023 were submitted on December 26, 2023.

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 2023 included:

Consent Order Addendum Paragraph 1

On December 22, 2023, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2023 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 2023. This submission was also made as part of the quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). In November 2023, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.

Consent Order Addendum Paragraph 2

During the fourth quarter of 2023, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On December 22, 2023, Chemours submitted the CFR Long-Term Remedy Performance Monitoring Report #3, which includes, in addition to the long-term remedy components, description of the operations and maintenance activities at the flow-through cells over the quarterly reporting period of July- September 2023.



Consent Order Addendum Paragraph 3

Performance details for the COA systems from the third quarter of 2023 were reported on December 22, 2023, and the fourth quarterly report will be submitted by March 31, 2024.

Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours conducted two sampling events in October 2023, three sampling events in November 2023, and three sampling events in December 2023. The stormwater treatment system removed greater than 99.9% of PFAS and consistently captured stormwater runoff from precipitation events up to the 1-inch, 24-hour design during the third quarter of 2023. A quarterly bypass sample was collected on December 17, 2023 when rainfall exceeded 3" in 24 hours.

Section 14 Toxicity Studies

The algae, ceriodaphnia, and fish acute studies are all in progress or scheduled with final reports expected in the 1st Quarter 2024. The chronic ceriodaphnia studies are also scheduled or in progress with final reports expected in the 1st Quarter 2024. The range finder work for the sediment studies is scheduled for the 1st Quarter 2024.

The 28-day rodent study protocols have been approved. The rodent Dose Analysis Method for all studies was also approved by DEQ in the fourth Quarter 2023. Dose level selection for the remaining substances will occur in the 1st Quarter 2024. After the 28-day protocols are finalized, the protocols for the 90-day studies will be reviewed.

Section 16 Groundwater Remediation

On December 22, 2023, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Third Quarter 2023 Report pursuant to Consent Order Addendum Paragraph 1(b). This submission was also made as part of 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 2,569 homes. Chemours is working on installation of water meters, where available, so that eligible residences can be connected to a public water system.

Based on property owners' preferences for permanent replacement drinking water, Chemours continues the installation of mitigation systems or connections to public water systems to those eligible residences and properties.

Section 21 Private Well Testing

As of December 31, 2023, approximately 19,907 residences have been identified within the current study area, of which 12,930 have been sampled and 3,026 additional residences have received at least one initial sample offer letter. Results of sampling that occurred throughout the fourth quarter of 2023 (179 residences) are presented at the beginning of this progress report. Current Step-out and Infill distance intervals range from 2.5 miles to 26.75 miles from the Site. Chemours continues to collect samples from private drinking water wells, confirm residences/tenants/owners' names, phone numbers, and addresses, and determine public water connections.

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, 2023, there are 2,569 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 (DWCP) is currently under review and some of the protocols are being revised based on discussions with NCDEQ.

Chemours has identified potential additional residences for public water connections. Chemours is working with counties and water providers to facilitate and make public water connections where feasibility has been determined.

Section 28 Reporting

Chemours submitted the Consent Order 3rd quarter 2023 progress report on October 23, 2023.

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” (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. On March 16, 2023, Chemours submitted responses to NCDEQ’s January 30, 2023 comments on the Assessment Work Plan. On May 9, 2023, NCDEQ provided additional comments on the Work Plan, which Chemours responded to on June 9, 2023. Chemours is implementing the Work Plan, as submitted to NCDEQ and in accordance with NCDEQ comments. Access/encroachment agreements with private property owners and the NC Department of Transportation and NCDEQ well permits have been obtained. Installation of six temporary monitoring wells and collection of associated soil samples, was conducted between December 18 and 21, 2023. Installation of additional wells and development and groundwater sampling at already-installed wells is planned to continue in first quarter 2024. Chemours continued to conduct residential sampling during the fourth quarter.

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. A fifth quarterly follow-up mailing via certified mail was sent to unresponsive owners/residents across the four counties in November 2023. Three monthly reports (for September 2023, October 2023, and November 2023) were submitted to NCDEQ during the fourth quarter which documented the progress of this private well program. Expanded sampling eligibility criteria were established in a meeting between Chemours and NCDEQ on November 15, 2023. In December 2023, the expanded sampling eligibility criteria were applied to re-screen previously ineligible properties for eligibility and to identify additional properties across the four counties to contact via community outreach. As of December 31, 2023, the process of mailing well information and sampling offer letters had begun for approximately 14,100 residences identified in the expanded sampling eligibility criteria.

As of December 31, 2023, there are 29,796 addresses that have been screened for sampling eligibility, and 9,506 met the eligibility criteria. Of these 9,506 eligible locations, 7,410 have been scheduled for sampling and 6,500 have been sampled. Of the 6,370 samples with analytical results, 4,853 showed no exceedances of Consent Order Attachment C criteria. 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. As of December 31, 2023, bottled water was being provided to 869 residents/owners that qualified, 730 RO systems had been installed, 106 GAC systems had been installed, 3 combinations of both RO and GAC systems had been installed, and 45 public water connections had been completed. These counts of bottled water recipients, system installations, and public water connections include qualifying shared well users. 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.



Cumulative Residential Sampling Summary as of Fourth Quarter 2023

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	3,348	695	2,329	128	6,500
Total Number of Residences with Sample Results	3,312	677	2,267	114	6,370
Residences Exceeding GAC Criteria (GenX \geq 10 ng/L)	127	64	8	0	199
Residences Exceeding RO Criteria (Σ PFAS \geq 70 ng/L or PFAS \geq 10 ng/L)	688	148	476	6	1,318
Residences with Drinking Water Well Detections (Results $<$ 10 ng/L)	872	102	238	3	1,215
Residences with no Drinking Water Well Detections (All Attachment C PFAS Non-Detect)	1,625	363	1,545	105	3,638



Replacement Drinking Water Actions

Replacement drinking water actions from February 15, 2022, the start date of the Chemours Call Line in the Four Counties Area, through December 31, 2023.

Four Counties Area Interim Replacement Drinking Water

Metric	Total	New Hanover	Brunswick	Pender	Columbus
Number of Private Wells Above the CO Criteria	1,517 (242)	815 (149)	212 (4)	484 (89)	6 (0)
Number of Locations Currently Being Provided Interim Replacement Drinking Water ¹	869	434	118	314	3

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 currently being 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	1,444	794	150	494	6
Total Number of Responses to RO Offers	1,078	575	111	390	2
Total Number of Properties with RO Systems Installed	730	440	74	214	2
Total Number of Properties Connected to Public Water	43	3	2	38	0
GAC					
Total Number of Properties Sent an Offer Letter	238	165	64	9	0
Total Number of Responses to GAC Offers	205	142	55	8	0
Total Number of Properties with GAC System Installed	106	74	30	2	0
Total Number of Properties with RO and GAC Systems Installed	3	2	0	1	0
Total Number of Properties Connected to Public Water	2	0	2	0	0