



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 April 1, 2023 through the end of the second quarter on June 30, 2023.¹

Section	Title	Submitted Date
11	PFAS Process and Non-process Wastewater & Stormwater Analytical Results – Quarter 1 2023	06/29/2023
11a	Non-Targeted Analysis Report #7	6/30/2023
12 – COA 1(b)	First Quarter 2023 Mass Load Assessment	06/29/2023
12 – COA 2(a)	Interim Seep Remediation O&M Report #14	05/31/2023
12 – COA 2(a)	Seep Bimonthly Report	5/30/2023
12 – COA 3(b)	Groundwater and Seeps Remediation Report #1	06/29/2023
19	Permanent Water Supplies Extension	06/15/2023
21	Private Well Testing Extension	5/25/2023
23	Supplemental Water Program Termination Notice	06/02/2023
28	Quarterly Progress Report	04/26/2023

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, and January 1, 2023 through March 31, 2023 in the 2023 1st quarter report.



2023 Second Quarter and Cumulative 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	88	43	3	1	13	50	0	198
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	0	6	0	0	4	0	0	10
Residences Exceeding RO Criteria (Σ PFAS >= 70 ng/L)	7	2	1	0	1	1	0	12
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	23	11	0	0	2	6	0	42
Residences Drinking Water Well Detections (Results < 10 ng/L)	31	11	1	0	0	18	0	61
Residences Drinking Water Well Non-Detections	27	13	1	1	6	25	0	73



Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018² - June 30, 2023)

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	2,629	213	376	4,059	187,149	76,864
GAC	Residences Eligible for GAC	Residents Declined GAC	Residences with GAC Systems Online	Number of GAC Systems Decommissioned		
2Q 2023	45	0	140	1		
Total	2,038	3	376	10		
RO	Residences Eligible for RO (including shared well homes)	Residents Declined RO	Residences with RO Installed			
2Q 2023	83	2	71			
Total	5,565	139	4,059			

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 April 1, 2023 through the end of the second quarter of 2023 (June 30, 2023).

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 second quarter of 2023, two bi-monthly sampling events were conducted. The first bi-monthly sampling event was conducted on April 8, 10, and 11, 2023 (the April 2023 event). The second bi-monthly sampling event was conducted on May 27 and May 30 (the May 2023 event). Samples were collected from 27 locations and 28 locations during the April 2023 event and May 2023 event, respectively.

Data collected from January – March 2023 were submitted on June 29, 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' Addendum implementation activities during the second quarter of 2023 included:

Consent Order Addendum Paragraph 1

On June 29, 2023, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – First 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 first 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 May 2023, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.



Consent Order Addendum Paragraph 2

During the second quarter of 2023, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On May 31, 2023, Chemours submitted the Interim Seep Remediation Operation and Maintenance Report #14. The Operation and Maintenance report describes the operations and maintenance activities at the flow-through cells over the bi-monthly reporting period of March/April 2023.

Consent Order Addendum Paragraph 3

The CO Addendum required 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) was being constructed. During the second quarter of 2023, the interim program extracted 222,256 gallons of water for a total of 4,603,384 gallons since startup on November 30, 2020 (through July 6, 2023). On June 29, 2023, Chemours informed NCDEQ and CFRW that with the completion of the mechanical construction of the barrier wall and groundwater extraction system, the interim program would be shuttered as of July 6, 2023 with certain equipment being redeployed to support the completed system.

With respect to the final remedy, mechanical construction of the barrier wall was completed as of June 11, 2023. Four Ex-situ seep locations started pumping captured seep baseflow and the required rainfall runoff into the outfall 004 Water treatment plant on April 19, 2023. Further, the extraction wells installed under COA Paragraph 3.b have been pumping into the Outfall 004 water treatment plant for treatment prior to discharge since or prior to March 15, 2023. The performance of the remedy for the period of January – March 2023 is detailed in the first quarterly Groundwater and Seeps Remediation Report submitted on June 29, 2023. Performance details from the second quarter of 2023 will be reported in the second quarterly report to be submitted by September 30, 2023.

Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours conducted three sampling events in April 2023, two sampling events in May 2023, and five sampling events in June 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 second quarter of 2023. A quarterly bypass sample was collected on April 9, 2023, when rainfall exceeded 1 inch in 24 hours.

Section 14 Toxicity Studies

Range-finding work has been completed and approved by DEQ for the acute fish, algae, and ceriodaphnia acute studies. Two acute algae studies are currently underway and the remainder of the acute fish, algae and ceriodaphnia studies are scheduled. The algae and fish reference toxicant studies are also underway. The range-finding work for the chronic ceriodaphnia study is completed and awaiting approval from DEQ.

Chemours plans to submit the dose analysis method validation sets for DEQ review by the end of July 2023. Chemours will also plan a technical meeting among DEQ, Chemours, and Charles River Laboratories to set the dose levels for the 28-day rat and mouse studies. Initial recommendations for doses will be provided by the end of July 2023 with the technical meeting to be scheduled for mid-August 2023.

Section 16 Groundwater Remediation

On June 29, 2023, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – First 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 2,629 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 June 30, 2023, 21,406 residences have been identified within the current study area, of which 12,491 have been sampled and 2,551 additional residences have received at least one initial sample offer letter. Results of sampling that occurred throughout the second quarter of 2023 (198 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 June 30, 2023, there are 2,629 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 1st quarter 2023 progress report on April 26, 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, by pursuing property access agreements and permits with various entities, including private property owners, public water systems, NC Department of Transportation, and others. Chemours continued to conduct residential sampling during the second 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 second 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 third quarterly follow-up mailing via certified mail was sent to unresponsive owner/residents across the four counties in May 2023. Three monthly reports (March 2023, April 2023, and May 2023) were submitted to NCDEQ during the second quarter which documented the progress of this private well program.

As of June 30, 2023, 26,038 addresses have been screened for sampling eligibility, and 8,220 met the eligibility criteria. Of these 8,220 eligible locations, 6,274 have been scheduled for sampling and 5,501 have been sampled. Of the 5,309 samples with analytical results, 3,994 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 June 30, 2023, bottled water was being provided to 922 residents/owners that qualified, 556 RO systems had been installed, 60 GAC systems had been installed, and 24 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.



2023 Second Quarter and Cumulative Residential Sampling Summary

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	3,002	526	1,877	96	5,501
Total Number of Residences with Sample Results	2,936	488	1,793	92	5,309
Residences Exceeding GAC Criteria (GenX \geq 10 ng/L)	109	51	7	0	167
Residences Exceeding RO Criteria (Σ PFAS \geq 70 ng/L or PFAS \geq 10 ng/L)	628	104	412	4	1,148
Residences with Drinking Water Well Detections (Results $<$ 10 ng/L)	779	71	198	2	1,050
Residences with no Drinking Water Well Detections (All Attachment C PFAS Non-Detect)	1,420	262	1,176	86	2,944



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 June 30, 2023.

Four Counties Area Interim Replacement Drinking Water

Metric	Total	New Hanover	Brunswick	Pender	Columbus
Number of Private Wells Above the CO Criteria	1,315 (230)	737 (141)	155 (2)	419 (87)	4 (0)
Number of Locations Provided Interim Replacement Drinking Water ¹	922	483	109	327	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 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	1,264	728	105	427	4
Total Number of Properties who have Accepted Offer	688	437	59	191	1
Total Number of Properties with RO Systems Installed	556	348	47	160	1
Total Number of Properties that Selected Public Water Connection (if feasible and available)	170	29	20	121	0
Total Number of Properties Connected to Public Water	24	0	1	23	0
GAC					
Total Number of Properties Sent an Offer Letter	206	146	52	8	0
Total Number of Properties who have Accepted Offer	96	74	21	1	0
Total Number of Properties with GAC System Installed	60	49	10	1	0
Total Number of Properties that Selected Public Water Connection (if feasible and available)	31	19	8	4	0
Total Number of Properties Connected to Public Water	0	0	0	0	0