



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 July 1, 2022 through the end of the third quarter on September 30, 2022.¹

CO Section	Title	Submitted Date
12 – COA 1b	2Q2022 Mass Load Assessment	09/30/2022
12 - COA2a	Interim Seep Remediation O&M Report #9	07/29/2022
12 - COA2a	Interim Seep Remediation O&M Report #10	09/30/2022
28	Quarterly Progress Report	07/28/2022

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 and April 1, 2022 through June 30, 2022 in the 2022 2nd quarter report.



2022 Third 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	384	240	2	6	20	332	984
Residences Exceeding GAC Criteria (GenX \geq 10 ng/L)	13	10	0	1	1	0	25
Residences Exceeding RO Criteria (Σ PFAS \geq 70 ng/L)	16	7	0	0	0	6	29
Residences Exceeding RO Criteria (PFAS \geq 10 ng/L)	165	58	0	1	8	96	329
Residences Drinking Water Well Detections (Results $<$ 10 ng/L)	111	92	0	1	6	108	319
Residences Drinking Water Well Non-Detections	79	72	2	3	5	123	284



Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018² - September 30, 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	2,604	132	110	3,710	147,528	44,691
Bottled Water	Residences Eligible for Bottled Water	Eligible Residences Receiving Bottled Water Services				
3Q 2022	396	376				
Total	3,232	2,604				
GAC	Residences Eligible for GAC	Residents Declined GAC	Residences with GAC Systems Online	Number of GAC Systems Decommissioned		
3Q 2022	1,592	0	0	0		
Total	1,999	7	110	8		
RO	Residences Eligible for RO (including shared well homes)	Residents Declined RO	Residences with RO Installed			
3Q 2022	501	2	200			
Total	5,265	132	3,710			

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 July 1, 2022 through the end of the third quarter of 2022 (September 30, 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 third quarter of 2022, two bimonthly sampling events were conducted. The first bimonthly sampling event was conducted on July 15 and 18, 2022 (the July 2022 event) and the second bimonthly sampling event was conducted on September 11 and 15, 2022 (the September 2022 event). Samples were collected from 27 locations during the July 2022 event and from 27 locations during the September 2022 event. In addition to the bimonthly events, two "mini" events were conducted to target locations that have less than 12 samples over the course of the Paragraph 11 sampling program. The first mini event was collected on August 12, 2022 (the August 2022 mini event) and five (5) locations were sampled. The second mini event was collected on September 30, 2022 (the September 2022 mini event) and six (6) locations were sampled.

Data collected from January – June 2022 will be reported by the end of October 2022. Data collected during the third quarter of 2022 will be reported by the end of the fourth quarter of 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's Addendum implementation activities during the third quarter of 2022 included:

Consent Order Addendum Paragraph 1

On September 30, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Second 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 second quarter of 2022. This submission was also pursuant to quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). In July 2022, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.

Consent Order Addendum Paragraph 2

During the third quarter of 2022, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On July 29 and September 30, 2022, Chemours submitted the Interim Seep Remediation Operation and Maintenance Reports #9 and #10, respectively. The Operation and Maintenance reports describe the operations and maintenance activities at the flow-through cells over the bimonthly reporting period of May/June and July/August 2022.

Consent Order Addendum Paragraph 3

The CO Addendum requires extraction of groundwater from seven existing Black Creek Aquifer monitoring wells (BCA-01, BCA-02, PW-11, PW-14, PW-15R, PIW-9D, and PIW-10DR) as an interim measure while the final remedy (barrier wall and groundwater extraction and treatment system) is being constructed. As part of the construction of the final remedy (outlined in more detail below), the abandonment of well PIW-9D was approved by NCDEQ on February 1, 2022; the pumping system in this well was subsequently taken off-line on May 13, 2022. The Black Creek Aquifer interim measure system continues to extract groundwater from the six remaining existing Black Creek Aquifer monitoring wells (BCA-01, BCA-02, PW-11, PW-14, PW-15R, and PIW-10DR). During the third quarter of 2022 through September 23, 2022 (the last reading taken during the reporting period), the system extracted 300,284 gallons of water for a total of 3,524,843 gallons since startup on November 30, 2020. Electrical and mechanical issues experienced during the second half of the quarter combined with delays in getting replacement parts resulted in downtimes during this period. Since resolving these issues, the wells have operated as designed with only minor, routine shutdowns for equipment issues, routine maintenance, or other issues.

With respect to the final remedy, on September 15, 2022, Chemours received the final NPDES permit from NCDEQ for the groundwater treatment system. After the third quarter, on October 14, 2022, Chemours appealed the permit by filing a petition for a contested case hearing before the NC Office of Administrative Hearings (OAH). As of the date of submission of this report, the appeal remains pending before OAH.

Also with respect to the final remedy, and as noted in prior quarterly reports, Chemours submitted the 90% Design Report for the barrier wall and groundwater extraction system to NCDEQ on March 25, 2022. On September 15, 2022, NCDEQ sent a letter and attachments "approving" the 90% Design Report "with specific conditions that shall be addressed by Chemours." After the third quarter, on October 25, 2022, Chemours sent NCDEQ a letter supplementing the 90% Design Report and

addressing NCDEQ's conditions for approval. On October 26, 2022, NCDEQ sent Chemours a letter approving the 90% Design Report as supplemented in Chemours's October 25th letter.

Construction activity on the final remedy continues to proceed. Construction of the groundwater extraction conveyance system, the ex-situ conveyance system, and the groundwater treatment plant continue to progress.

Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours conducted three sampling events in July 2022, four sampling events in August 2022, and two sampling events in September 2022 during the stormwater treatment system operation for removal of PFAS compounds. The monthly monitoring reports for July 2022 – September 2022 will be submitted in the fourth quarter of 2022. The treatment system also consistently captured stormwater runoff from precipitation events of up to the 1-inch, 24-hour design during the third quarter of 2022.

Chemours has prepared Stormwater Treatment System Monthly Monitoring Reports for the months of April 2022 through June 2022 and will be submitting these reports by the end of October 2022.

Section 14 Toxicity Studies

The acute and chronic daphnia study master protocols and the sediment study master protocol have been updated to address comments by NCDEQ and were resubmitted on July 13, 2022. NCDEQ provided additional comments on September 12, 2022. These comments are being addressed by the Eurofins laboratory. Initial method development supporting the aquatic toxicity studies has begun. The compound-specific protocols will be issued after the method development is completed, and these protocols will be submitted to NCDEQ.

NCDEQ provided comments on the mammalian protocols on May 20, 2022. These comments were submitted to Charles River Laboratories for consideration. The response from Charles River Laboratories is expected in the fourth quarter.

Section 16 Groundwater Remediation

On September 30, 2022, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – Second 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 2,604 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 third quarter of 2022.

On July 13, 2022, Chemours sent NCDEQ a letter responding to NCDEQ's June 15, 2022 letter concerning the issuance by EPA of a Final Health Advisory for GenX Chemicals, including HFPO-Dimer Acid. In the response letter, Chemours provided details of its plans to implement actions based on the Health Advisory level pursuant to Paragraph 19 of the Consent Order. Chemours also submitted to NCDEQ on August 23, 2022 a Carbon Transition Plan that provided changes to GAC installation procedures.

On September 12, 2022, Chemours started sending property owners a letter indicating their eligibility for permanent replacement drinking water pursuant to Paragraph 19 and asking for their preference among the permanent replacement drinking water options.

Section 21 Private Well Testing

As of September 30, 2022, 15,010 residences have been identified within the current study area, of which 11,429 have been sampled and 2,495 additional residences have received at least one initial sample offer letter. Results of sampling that occurred throughout the third quarter of 2022 (984 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 September 30, 2022, there are 2,604 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. As of the end of the third quarter of 2022, Chemours is working with public water providers to verify 525 properties that may be connected to public water.
- Since 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.

Additionally, as noted above, Chemours submitted a Carbon Transition Plan on August 23, 2022 to NCDEQ outlining changes to GAC Point of Entry Treatment (POET) installation and maintenance procedures based on GAC system experiences to date.

Section 28 Reporting

Chemours submitted the Consent Order 2nd quarter 2022 progress report on July 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>.

During the third quarter of 2022, Chemours held two public information sessions on plans to expand its manufacturing capabilities at Fayetteville Works - on September 20 at the Bladen Community College Auditorium and on September 21 at the Leland Cultural Arts Center.



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. The design of the sampling program is guided by four hypotheses for the source(s) and cause(s) of Table 3+ PFAS detected in some groundwater samples in the four counties and sampling of background areas (expected not to have detectable concentrations of Table 3+ PFAS).

Chemours maintained communication between representatives from Brunswick County, Pender County, and New Hanover County health departments to request private well construction records. Chemours is in the process of reviewing well construction records received from the county health departments.

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 third 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 June, July, and August 2022) were submitted to NCDEQ during the third quarter which documented the progress of this private well program.

As of September 30, 2022, 12,381 addresses have been screened for sampling eligibility, and 3,543 met the eligibility criteria. Of these 3,543 eligible locations, 2,737 have been scheduled for sampling and 1,985 have been sampled. Of the 1,382 samples with analytical results, 1,073 showed no exceedances of Consent Order Attachment C criteria. Bottled water has been provided to the 305 residents/owners that qualified. The four 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 Third Quarter Residential Summary

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	1,308	154	480	43	1,985
Total Number of Residences with Sample Results	996	119	231	36	1,382
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	29	8	1	0	38
Residences Exceeding RO Criteria (Σ PFAS >= 70 ng/L)	93	9	20	0	122
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	119	6	23	1	149
Residences Drinking Water Well Detections (Results <10 ng/L)	262	13	22	1	298
Residences Drinking Water Well Non-Detections	493	83	165	34	775

Replacement Drinking Water Actions

(Replacement drinking water actions from February 15, 2022³ - September 30, 2022)

Four Counties Area

Summary		Total Number of Residences with Sample Results ⁴	Residences with Results Above Consent Order Criteria	Residences Provided Interim Replacement Drinking Water
	Total		1,382	309

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

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