



The Chemours Company  
Fayetteville Works  
22828 NC Highway 87 W  
Fayetteville, NC 28306

July 31, 2024

Sushma Masemore  
Assistant Secretary  
N.C. Department of Environmental Quality  
1601 Mail Service Center  
Raleigh, NC 27699-1601  
sushma.masemore@ncdenr.gov

Re: Submission of Quarterly Progress Report Pursuant to Consent Order Paragraph 28

Dear Ms. Masemore,

Chemours is pleased to submit the enclosed quarterly progress report, as required under paragraph 28 of the Consent Order entered by the Superior Court for Bladen County on February 25, 2019. This quarterly progress report details the work and activities undertaken and completed pursuant to the Consent Order and Addendum for the period from April 1, 2024 through June 30, 2024.

If you have any questions or need any additional information concerning this report, or the Consent Order implementation generally, please contact me at [seth.t.bailey@chemours.com](mailto:seth.t.bailey@chemours.com).

Sincerely,

A handwritten signature in black ink that reads 'Seth T. Bailey'.

Seth T. Bailey  
Plant Manager  
Chemours – Fayetteville Works

Enclosure

Quarterly Progress Report

Cc:

William F. Lane, DEQ

Francisco Benzoni, NC DOJ

Michael Abraczinskas, DAQ

Michael Scott, DWM

Richard Rogers, DWR

David C. Shelton, Chemours

John F. Savarese, WLRK

Kemp Burdette, CFRW

Geoff Gisler, SELC



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, 2024 through the end of the second quarter on June 30, 2024.<sup>1</sup>

Section	Title	Submitted Date
<b>11</b>	January – March 2024 P11 Data Submittal	06/21/2024
<b>11a</b>	PFAS Non-Targeted Analysis and Methods Interim Report #9	06/26/2024
<b>12 – COA 1b</b>	PFAS Mass Loading Assessment Report Q1 2024	06/27/2024
<b>12 – COA 2c</b>	CFR Long-Term Remedy Performance Monitoring Report 5 Jan-Mar 2024	06/27/2024
<b>16</b>	Re-Submittal of Annual Onsite and Offsite Groundwater Monitoring Report Q4 2023	06/27/2024
<b>28</b>	1Q2024 Quarterly Progress Report	04/30/2024

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<sup>1</sup> Consent Order submissions by Chemours from lodging of the Proposed Consent Order in November 2018 through March 31, 2019 were presented in the 2019 1<sup>st</sup> quarter report, April 1, 2019 through June 30, 2019 in the 2019 2<sup>nd</sup> quarter report, July 1, 2019 through September 30, 2019 in the 2019 3<sup>rd</sup> quarter report, October 1, 2019 through December 31, 2019 in the 2019 4<sup>th</sup> quarter report, January 1, 2020 through March 31, 2020 in the 2020 1<sup>st</sup> quarter report, April 1, 2020 through June 30, 2020 in the 2020 2<sup>nd</sup> quarter report, July 1, 2020 through September 30, 2020, in the 2020 3<sup>rd</sup> quarter report, October 1, 2020 through December 31, 2020 in the 2020 4<sup>th</sup> quarter report, January 1, 2021 through March 31, 2021 in the 2021 1<sup>st</sup> quarter report, April 1, 2021 through June 30, 2021 in the 2021 2<sup>nd</sup> quarter report, July 1, 2021 through September 30, 2021 in the 2021 3<sup>rd</sup> quarter report, October 1, 2021 through December 31, 2021 in the 2021 4<sup>th</sup> quarter report, January 1, 2022 through March 31, 2022 in the 2022 1<sup>st</sup> quarter report, April 1, 2022 through June 30, 2022 in the 2022 2<sup>nd</sup> quarter report, July 1, 2022 through September 30, 2022 in the 2022 3<sup>rd</sup> quarter report, October 1, 2022 through December 31, 2022 in the 2022 4<sup>th</sup> quarter report, January 1, 2023 through March 31, 2023 in the 2023 1<sup>st</sup> quarter report, April 1, 2023 through June 30, 2023 in the 2023 2<sup>nd</sup> quarter report, July 1, 2023 through September 30, 2023 in the 2023 3<sup>rd</sup> quarter report, October 1, 2023 through December 31 in the 2023 4<sup>th</sup> quarter report, and January 1, 2024 through March 31, 2024 in the 2024 1<sup>st</sup> quarter report.



2024 Second 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	37	57	9	4	1	44	0	152
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	2	4	1	1	0	0	0	8
Residences Exceeding RO Criteria ( $\Sigma$ PFAS >= 70 ng/L)	2	1	0	2	0	1	0	6
Residences Exceeding RO Criteria (PFAS >= 10 ng/L)	11	8	1	0	0	9	0	29
Residences Drinking Water Well Detections (Results < 10 ng/L)	7	14	3	0	1	19	0	44
Residences Drinking Water Well Non-Detections	15	30	4	1	0	15	0	66



Replacement Drinking Water Actions

(Replacement drinking water actions from November 2018<sup>2</sup> - June 30, 2024)

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
<b>Total</b>	2,286	312	852	3,285	219,636	93,624
GAC	Residences Eligible for GAC	Residences Declined GAC	Residences with GAC Systems Online	Number of GAC Systems Decommissioned		
<b>2Q 2024</b>	10	0	81	0		
<b>Total</b>	2,086	1	852	10		
RO	Residences Eligible for RO (including shared well residences)	Residences Declined RO	Residences with RO Installed			
<b>2Q 2024</b>	46	1	48			
<b>Total</b>	5,760	104	3,285			

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.

<sup>2</sup> 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, 2024 through the end of the second quarter on June 30, 2024.

### 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 second quarter of 2024, one bi-monthly sampling event was conducted. The bi-monthly sampling event was conducted on June 26, 27, and 28 (June 2024 event). Samples were collected from 23 locations during the June 2024 event. Data collected from January – March 2024 were submitted on June 21, 2024.

On June 26, 2024, Chemours submitted the PFAS Non-Targeted Analysis and Methods Interim Report #9 which provided an update on the characterization of previously unidentified PFAS in process wastewater, non-process wastewater, and stormwater.

### 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 second quarter of 2024 included:

#### Consent Order Addendum Paragraph 1

On June 27, 2024, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – First Quarter 2024 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 2024. This submission was also made as part of the quarterly reporting of mass loading sampling outlined in the Corrective Action Plan (Paragraph 16). In April and May 2024, Chemours conducted quarterly mass loading sampling required by Consent Order Addendum Paragraph 1.

#### Consent Order Addendum Paragraph 2

During the second quarter of 2024, Chemours operated and maintained the four flow-through cells, i.e., the interim remediation systems, at Seeps A-D. On June 27, 2024, Chemours submitted the CFR Long-Term Remedy Performance Monitoring Report #5, 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 January-March 2024.

#### Consent Order Addendum Paragraph 3

Details relating to COA paragraph 3b are being reported as described above for paragraph 2. On June 27, 2024, Chemours submitted the CFR Long-Term Remedy Performance Monitoring Report #5, which includes performance details relating to the long-term remedy components over the quarterly reporting period of January-March 2024. The report for the second quarter of 2024 will be submitted by September 30, 2024.

On May 7 – 9, 2024 the semi-annual stream monitoring event was conducted. The results from this monitoring event will be reported in the Annual Wetland Monitoring Report for 2024, submitted by January 31, 2025.

In May 2024, Chemours conducted quarterly 004 NPDES river transect sampling. The data were submitted as DMRs in June 2024 and will be reported in the 2024 annual report (due January 2025).

#### Consent Order Addendum Paragraph 4

Consistent with the Stormwater Sampling Plan, Chemours did not conduct any sampling events in April 2024, and conducted four sampling events in May 2024 and three sampling events in June 2024. The stormwater treatment system removed greater than 99% of PFAS and consistently captured stormwater runoff from precipitation events up to the 1-inch, 24-hour design during the second quarter of 2024. A quarterly bypass sample was collected on June 7, 2024 when rainfall exceeded 1" in 24 hours.

### Section 14 Toxicity Studies

#### Aquatic Toxicity Testing

The acute fish, acute ceriodaphnia, associated analytical methods validation, and the positive control reports are now available. The files will be supplied to NCDEQ using the existing mechanisms for large files. The anticipated submittal date is mid- to late-July. The chronic ceriodaphnia reports are in the report out stage. The anticipated time for the final report is approximately mid-August. NCDEQ may require a technical meeting between NCDEQ, Chemours, and Eurofins before approval of the suggested doses.

#### Mammalian Toxicity Testing

The in-life phase for the 28-day immunotoxicity rat study with hydro-PS acid is complete. There were no unexpected deaths during the in-life phase. The next stage is the sample analysis for clinical pathology, histopathology, and immunotoxicity endpoints. The additional work required by NCDEQ to validate the mouse ELISA assay is nearing completion. Upon completion, the 28-day immunotoxicity mouse study will be started, then onto the mouse 28-day study once that finishes. Suggested 28-day rodent immunotoxicity studies have been shared with NCDEQ. There will be a joint discussion of the dose levels between NCDEQ, Chemours, and CRL when NCDEQ has had adequate time to review the proposed dose levels. Protocol development for the 90-day studies will start following the dose selection for the 28-day studies.

### Section 16 Groundwater Remediation

On June 27, 2024, Chemours submitted to NCDEQ and Cape Fear River Watch the Cape Fear River PFAS Mass Loading Assessment – First Quarter 2024 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). Ongoing groundwater remediation activities are being conducted pursuant to Consent Order Addendum Paragraph 3 and are described earlier in this document under that paragraph.

On June 27, 2024, Chemours re-submitted the Annual Onsite and Offsite Groundwater Monitoring Report which reported on onsite and offsite groundwater data collected in July and August 2023. The report was re-submitted to incorporate corrected perfluoropropanoic acid (PFPrA) data from Eurofins-Sacramento after Chemours was alerted to a calculation error in the preparation of the PFPrA standards which resulted in a low bias for PFPrA for some results in the original report submittal.

### 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 2,286 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, 2024, approximately 19,542 residences not connected to public water have been identified within the current study area, of which 13,203 have been sampled, 2,687 additional residences have received at least one initial sample offer letter, and 2,841 are vacant/empty lots. Results of sampling that occurred throughout the second quarter of 2024 (152 residences) are presented at the beginning of this progress report. Current Step-out and Infill distance intervals range from 2.5 miles to 27.5 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 June 30, 2024, there are 2,286 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 met with NCDEQ on February 21, 2024, to discuss the status of delineation program and the overall drinking water mitigation. The meeting also discussed potential revisions to current DWCP that are currently under further discussion. Since then, Chemours and NCDEQ continue their interactions.

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 1<sup>st</sup> quarter 2024 progress report on April 30, 2024.

### 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 continues to assess Table 3+ compounds. Groundwater sampling was performed at nine permanent groundwater monitoring wells in New Hanover County between April 3, 2024 and April 12, 2024. Data validation and analysis is ongoing. Report preparation is in progress. 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 first 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 seventh quarterly follow-up mailing via regular mail was sent to unresponsive owners/residents across the four counties in May 2024. Three monthly reports (for March 2024, April 2024, and May 2024) were submitted to NCDEQ during the second quarter which documented the progress of this private well program. In Q1 2024, Chemours requested reanalysis for ~300 private well samples collected in 2023 with low matrix spike recoveries for PFMOAA, in order to improve the quantitation of PFMOAA. These results were shared with NCDDEQ in April and June 2024. On June 6, 2024, Chemours requested reanalysis of the remaining ~1,350 samples that had low recoveries and were non-detect for PFMOAA. Reanalysis results are expected to be received from the laboratories by mid to end of July 2024.

As of June 30, 2024, there are 33,872 addresses that have been screened for sampling eligibility, and 11,441 met the eligibility criteria. Of these 11,441 eligible locations, 9,128 have been scheduled for sampling and 8,057 have been sampled. Of the 7,915 samples with analytical results, 6,204 showed no exceedances of Consent Order Attachment C criteria and 1,711 samples had exceedances of the Consent Order criteria. Including these 1,711 sampled private wells and the 264 shared well users, there were 1,975 properties that were above the CO 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, 2024, bottled water was being provided to 870 residents/owners that qualified, 850 RO systems had been installed, 133 GAC systems had been installed, 5 combinations of both RO and GAC systems had been installed, and 145 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 Second Quarter 2024

Item	New Hanover County	Brunswick County	Pender County	Columbus County	Total
Total Number of Residences Sampled	3,606	1,134	2,874	443	8,057
Total Number of Residences with Sample Results	3,591	1,088	2,832	404	7,915
Residences Exceeding GAC Criteria (GenX >= 10 ng/L)	133	76	8	0	217
Residences Exceeding RO Criteria (ΣPFAS >= 70 ng/L or PFAS >= 10 ng/L)	740	202	545	7	1,494
Residences with Drinking Water Well Detections (Results <10 ng/L)	911	150	240	7	1,308
Residences with no Drinking Water Well Detections (All Attachment C PFAS Non-Detect)	1,807	660	2,039	390	4,896

**Notes:**

Values in this table do not include shared well users.

Four Counties Interim 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, 2024.

Metric	Total	New Hanover	Brunswick	Pender	Columbus
Total Number of Private Wells Above the CO Criteria Including Shared Well Users	1,975	1,037	283	648	7
Number of Sampled Private Wells Above the CO Criteria	1,711	873	278	553	7
Number of Shared Private Well Users Above the CO Criteria	264	164	5	95	0
Number of Locations Currently Being Provided Interim Replacement Drinking Water <sup>1</sup>	870	438	131	296	5

**Notes:**

1 – Number of Locations Provided Interim Replacement Drinking Water includes shared wells. The remaining eligible properties have had an RO or GAC system installed or have been connected to public water.



Four Counties Area Permanent Replacement Drinking Water

Metric	Total	Totals By County			
		New Hanover	Brunswick	Pender	Columbus
<b>RO</b>					
Total Number of Properties Sent an Offer Letter	1,711	860	205	639	7
Total Number of Responses to RO Offers	1,310	640	159	508	3
Total Number of Properties with RO Systems Installed	850	503	97	248	2
Total Number of Properties Connected to Public Water	135	9	14	112	0
<b>GAC</b>					
Total Number of Properties Sent an Offer Letter	258	172	77	9	0
Total Number of Responses to GAC Offers	227	151	67	9	0
Total Number of Properties with GAC System Installed	133	86	45	2	0
Total Number of Properties with RO and GAC Systems Installed	5	4	0	1	0
Total Number of Properties Connected to Public Water	10	0	6	4	0