



NORTH CAROLINA  
*Environmental Quality*

ROY COOPER  
*Governor*

ELIZABETH S. BISER  
*Secretary*

May 2, 2022

Ms. Dawn Hughes  
Plant Manager  
Chemours Fayetteville Works  
22828 NC Highway 87 W  
Fayetteville NC 28306

RE: Notice Regarding Chemours' Obligations Under Consent Order and 15A NCAC 02L .0106 - Offsite Groundwater Assessment and Provision of Replacement Drinking Water Supplies.

Dear Ms. Hughes:

The North Carolina Department of Environmental Quality (DEQ) has reviewed the updated April 1, 2022 documents from Chemours in response to our November 3, 2021 Notice Regarding Chemours' Obligations Under Consent Order and 15A NCAC 02L .0106 - Offsite Groundwater Assessment and Provision of Replacement Drinking Water Supplies. Chemours' response included a cover letter, the Framework to Assess Table 3+ PFAS in New Hanover, Brunswick, Columbus, and Pender Counties, and the Interim Four Counties Sampling and Drinking Water Plan ("Interim Plan").

Recently, DEQ has collected additional groundwater data from the lower Cape Fear Region, provided as Appendix 1 to this letter. These data show the presence of Attachment C PFAS in a number of non-water supply wells. Chemours should update the Interim Plan to incorporate these data and address the comments below. As around the Chemours facility, the priority in the Lower Cape Fear counties is to identify impacted drinking water wells with these PFAS and to provide alternate drinking water as required by the Consent Order.

The April 1 submittal incorporates many of the comments NC DEQ provided in the March 2 response. In addition to those changes, NC DEQ directs Chemours to do the following:

- Prioritize the identification and expeditious sampling of private wells within ¼ mile of public water distribution lines and sanitary sewer network;
- Prioritize the identification and expeditious sampling of private wells within ¼ mile of the detections shown in monitoring data provided by NC DEQ;
- Provide a detailed description of the representative sampling methodology, including justification for any exclusionary criteria;



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- Provide a timeline to expeditiously complete sampling in the four counties; and
- Increase reporting on the sampling activities from quarterly to monthly until advised otherwise.

**1. Incorporation of new groundwater data.** In DEQ's March 2, 2022 letter, DEQ directed Chemours to expand the eligibility criteria described in Section 2.1.3 of the Interim Plan to include, among other things, wells located in the vicinity of areas where existing data shows the presence of PFAS associated with the Fayetteville Works Facility, and conduct representative sampling of wells meeting these criteria that is not limited to individuals who have requested sampling. In its April 1, 2022 response, Chemours agreed to expand the PFAS eligibility criteria to include private wells within a quarter-mile radius of known Attachment C PFAS concentrations in private and non-private wells exceeding CO-criteria.

NC DEQ previously provided Chemours with PFAS sampling data collected from 2019-2021 at private water supply wells, public water supply wells, and non-water supply wells located in New Hanover County. These data indicate known locations of Attachment C PFAS compounds. As shown in Appendix 1, NC DEQ has collected additional PFAS data from non-water supply wells in 2022 in Brunswick, Pender and Columbus counties. These data again indicate known locations of Attachment C PFAS compounds and are consistent with the theory that wastewater collection lines and/or water distribution lines are a likely source of groundwater contamination in the four counties.

Based on this information, Chemours shall incorporate the data provided with this letter into Section 2.1.1 of the Interim Plan to inform the eligibility criterion of proximity to Consent Order exceedances. DEQ further directs Chemours to prioritize identification of private wells and expeditiously conduct sampling within  $\frac{1}{4}$  mile of the detections shown in DEQ's data as well as public water distribution lines and sanitary sewer networks.

**2. Representative sampling.** While Chemours has agreed to expand the sampling eligibility criteria and perform representative sampling in the future, Chemours has indicated that further data is required before representative sampling can proceed. Chemours proposes to contact properties by mail and proceed to sample responsive properties. Chemours further states that "Based on the analytical results from the sampling described above, additional private wells will be sampled within a quarter mile radius of Attachment C PFAS concentrations exceeding CO criteria."

It is unclear from this response to what extent and how quickly Chemours proposes to conduct representative sampling that is not limited to those that have requested sampling.

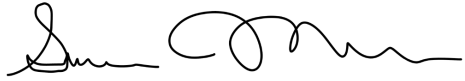
Within 30 days of receipt of this letter, Chemours shall revise the Interim Plan as follows:

- Provide a detailed description of the methodology to be used to identify properties for sampling outside of direct mailings to residents. Include in your response, any specific data gaps that Chemours claims will prevent the identification of wells that meet eligibility criteria and commencement of representative sampling. Additionally, please update the maps in the Appendices of the Interim Plan to show the public water service area for each county. Currently, only the Brunswick County and Pender County appendices display this information;
- Provide a detailed description of the methodology Chemours proposes to use to conduct representative sampling of wells **not limited to properties that have requested sampling** and an expeditious timeline for conducting such sampling;
  - Water supply wells located closest to the wells with known Attachment C PFAS concentrations should be prioritized for sampling.
  - This should include water supply wells with the closest horizontal distance, but also may include the closest water supply wells screened in the same aquifer as known detections, even if these wells are not the closest lateral distance
- Chemours should commence representative sampling as soon as possible and mobilize sufficient resources to respond to sampling requests within 48 hours with projected scheduled for sampling to be included in the monthly reporting.
- In addition to the phone and mail options, Chemours should provide an email or online form for residents to submit sampling requests.

**3. Monthly reporting.** DEQ directs Chemours provide a written monthly update regarding residents who respond to Chemours' mailings, including (1) the date and number of responsive residents (2) the number of residents who meet one or more of the eligibility criteria, including which eligibility criterion has been met; (3) the projected date of sampling for those who meet one or more eligibility criteria; (4) the number of residents who do not meet any eligibility criteria, including for each ineligible resident, a brief explanation of why the resident does not meet any eligibility criteria; (5) the number of residents sampled; and (6) the results of the sampling.

We appreciate your attention and prompt response in this matter. If you have any questions, please feel free to contact me at (919) 707-8700.

Sincerely,

A handwritten signature in black ink, appearing to read 'Sushma Masemore', with a stylized flourish at the end.

Sushma Masemore, P.E.  
Assistant Secretary for the Environment

## Appendix 1

2022 Groundwater PFAS Results from Bladen, Brunswick, Columbus and Pender Counties							
Site Name	Well Type	Aquifer	County	Collection Date	Total Attachment C PFAS (ng/L)	Total PFAS (ng/L)	Total Attachment C PFAS:Total PFAS (%)
Calabash #7	DWR Monitoring Well	Surficial (S)	Brunswick	2/23/2022	741.54	1001.60	74
Southport RS 4 #6	DWR Monitoring Well	Surficial (S)	Brunswick	2/23/2022	463.67	628.45	74
Southport RS 4 #5	DWR Monitoring Well	Castle Hayne (Tch)	Brunswick	2/17/2022	135.55	153.25	88
Topsail Beach #5	DWR Monitoring Well	Surficial (S)	Pender	2/15/2022	100.25	108.34	93
Stanbury #3	DWR Monitoring Well	Surficial (S)	Brunswick	2/23/2022	71.78	89.79	80
Topsail Fire Tower #1	DWR Monitoring Well	Surficial (S)	Pender	2/15/2022	54.42	99.70	55
Bolivia #1	DWR Monitoring Well	Surficial (S)	Brunswick	2/17/2022	31.09	32.92	94
Waccamaw School #8	DWR Monitoring Well	Surficial (S)	Brunswick	2/23/2022	21.29	153.96	14
Topsail Beach #4	DWR Monitoring Well	Castle Hayne (Tch)	Pender	2/15/2022	12.60	13.79	91
Long Creek #1	DWR Monitoring Well	Surficial (S)	Pender	3/1/2022	6.46	8.10	80
Bladenboro #1	DWR Monitoring Well	Surficial (S)	Bladen	3/1/2022	BDL	BDL	N/A
Bladenboro #4	DWR Monitoring Well	Peedee (Kpd)	Bladen	3/1/2022	BDL	3.40	0
Dublin #1	DWR Monitoring Well	Upper Cape Fear (Kucf)	Bladen	3/1/2022	BDL	5.77	0
Dublin #2	DWR Monitoring Well	Black Creek (Kbc)	Bladen	3/1/2022	BDL	BDL	N/A
Dublin #3	DWR Monitoring Well	Upper Black Creek (Kubc)	Bladen	3/1/2022	BDL	2.54	0
Dublin #4	DWR Monitoring Well	Surficial (S)	Bladen	3/1/2022	BDL	2.73	0
Dublin #5	DWR Monitoring Well	Surficial (S)	Bladen	3/1/2022	BDL	7.69	0
Kelly #3	DWR Monitoring Well	Peedee (Kpd)	Bladen	3/1/2022	BDL	BDL	N/A
Kelly #4	DWR Monitoring Well	Surficial (S)	Bladen	3/1/2022	BDL	0.93	0
Kelly #5	DWR Monitoring Well	Black Creek (Kbc)	Bladen	3/1/2022	BDL	BDL	N/A
Kelly #6	DWR Monitoring Well	Upper Cape Fear (Kucf)	Bladen	3/1/2022	BDL	BDL	N/A
Smithfield McNair House #1	DWR Monitoring Well	Black Creek (Kbc)	Bladen	3/8/2022	BDL	BDL	N/A
Smithfield McNair House #2	DWR Monitoring Well	Upper Cape Fear (Kucf)	Bladen	3/8/2022	BDL	BDL	N/A
Bear Pen #3	DWR Monitoring Well	Peedee (Kpd)	Brunswick	3/15/2022	BDL	5.43	0
Boiling Springs RS 1 #1	DWR Monitoring Well	Surficial (S)	Brunswick	2/17/2022	BDL	3.13	0
Boiling Springs RS 2 #1	DWR Monitoring Well	Peedee (Kpd)	Brunswick	2/17/2022	BDL	8.42	0
Boiling Springs RS 2 #2	DWR Monitoring Well	Surficial (S)	Brunswick	2/17/2022	BDL	0.88	0
Long Wood #5	DWR Monitoring Well	Surficial (S)	Brunswick	2/23/2022	BDL	0.86	0
Maco #2	DWR Monitoring Well	Peedee (Kpd)	Brunswick	2/24/2022	BDL	2.68	0
Maco #5	DWR Monitoring Well	Surficial (S)	Brunswick	2/24/2022	BDL	BDL	N/A
Shallotte #4	DWR Monitoring Well	Peedee (Kpd)	Brunswick	2/23/2022	BDL	BDL	N/A
Southport RS 4 #4	DWR Monitoring Well	Peedee (Kpd)	Brunswick	2/23/2022	BDL	19.30	0
Sunset Harbor North #6	DWR Monitoring Well	Peedee (Kpd)	Brunswick	2/17/2022	BDL	2.51	0
Sunset Harbor North #7	DWR Monitoring Well	Surficial (S)	Brunswick	2/17/2022	BDL	BDL	N/A
Carver Moore #1	DWR Monitoring Well	Surficial (S)	Columbus	3/15/2022	BDL	BDL	N/A
Carver Moore #4	DWR Monitoring Well	Upper Black Creek (Kubc)	Columbus	3/15/2022	BDL	BDL	N/A
Clarendon #1	DWR Monitoring Well	Surficial (S)	Columbus	2/24/2022	BDL	18.52	0
Clarendon #3	DWR Monitoring Well	Upper Cape Fear (Kucf)	Columbus	2/24/2022	BDL	BDL	N/A
Clarendon #4	DWR Monitoring Well	Black Creek (Kbc)	Columbus	2/24/2022	BDL	1.90	0
Lake Waccamaw #6	DWR Monitoring Well	Peedee (Kpd)	Columbus	2/24/2022	BDL	3.44	0
Lake Waccamaw #8	DWR Monitoring Well	Black Creek (Kbc)	Columbus	2/24/2022	BDL	BDL	N/A
Lake Waccamaw #9	DWR Monitoring Well	Upper Cape Fear (Kucf)	Columbus	2/24/2022	BDL	1.43	0
Nakina #2	DWR Monitoring Well	Surficial (S)	Columbus	3/15/2022	BDL	0.85	0
Nakina #4	DWR Monitoring Well	Peedee (Kpd)	Columbus	3/15/2022	BDL	3.49	0
Burgaw #3	DWR Monitoring Well	Peedee (Kpd)	Pender	3/15/2022	BDL	94.09	0
Burgaw #7	DWR Monitoring Well	Black Creek (Kbc)	Pender	3/15/2022	BDL	2.83	0
Holly Shelter #1	DWR Monitoring Well	Surficial (S)	Pender	3/15/2022	BDL	BDL	N/A
Holly Shelter #3	DWR Monitoring Well	Peedee (Kpd)	Pender	3/15/2022	BDL	BDL	N/A
Long Creek #3	DWR Monitoring Well	Peedee (Kpd)	Pender	3/1/2022	BDL	5.08	0
Topsail Fire Tower #2	DWR Monitoring Well	Castle Hayne (Tch)	Pender	2/15/2022	BDL	BDL	N/A
Topsail Fire Tower #4	DWR Monitoring Well	Peedee (Kpd)	Pender	2/15/2022	BDL	BDL	N/A

