



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

Sheila Holman
Assistant Secretary for the Environment
North Carolina Department of Environmental Quality
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Raleigh, NC 27699-1601
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March 11, 2019

Re: Consent Order Paragraph 19 - Public Water Feasibility Analysis

Dear Ms. Holman,

Paragraph 19 of the Consent Order states that “Chemours shall establish and properly maintain permanent replacement drinking water supplies in the form of public water or a whole building filtration system for any party (i.e., household, business, school, or public building) with a private drinking water well that has been found through testing validated by DEQ to be contaminated by concentrations of GenX compounds in exceedance of 140 ng/L, or any applicable health advisory, whichever is lower.” However, where connection to a public water supply would be “cost-prohibitive (i.e. greater than \$75,000) or unsafe”, DEQ may authorize provision of permanent water supply via whole building filtration system or reverse osmosis. Paragraph 19(c). Paragraph 19 of the Consent Order also requires that “Permanent replacement drinking water supplies established pursuant to this paragraph shall be installed no later than: (i) nine (9) months from the date Chemours becomes aware that the affected party qualifies for replacement drinking water; or (ii) if Chemours is aware that an affected party qualifies for replacement drinking water at the time this Consent Order is entered, nine (9) months from the date of entry of this Consent Order.”

Chemours directed its consultant Parsons to investigate comprehensively the extent to which public water connections are feasible for the impacted homes that have been found to exceed the 140 ng/L standard for GenX compounds. As part of this investigation, Chemours has also had discussions with officials from both Bladen and Cumberland Counties about the potential for connections to their respective public water systems. Attached please find the Feasibility Study Report (the “FS Report”) for Public Water Services, Chemours Fayetteville Works Fayetteville, North Carolina, prepared by Parsons on behalf of Chemours, June 2018, and the January 2019 updated analysis.

As you will see in the FS Report, as a result of differences in existing municipal water infrastructure, geography, and home density, the analysis focuses separately on each of four areas: (1) Bladen County west of the Cape Fear River, (2) Bladen County east of the Cape Fear River, (3) Cumberland County west of the Cape Fear River and, (4) Cumberland County east of the Cape Fear River. The report evaluates the extent to which the provision of municipal water to homes in these areas is technically feasible and addresses the availability of existing infrastructure and whether water of sufficient quality could be provided. It also assesses whether the installation of public water is cost-effective, applying the Consent Order standard. Also considered are the current state of the municipalities’ planning, and, relatedly, whether municipal water can be installed in a timely fashion in each area. The FS Report notes that public acceptance of municipal water connections will affect both feasibility and cost. As noted above, Chemours had a number of discussions with officials for both Bladen and Cumberland counties; the FS Report reflects those discussions.

There are 49 eligible households in Bladen County west of the Cape Fear River that are presently eligible for connection to public water.¹ The total cost of installing public for these 49 household is approximately \$3.47 million. Of the 49 eligible households, 13 homes in Bladen County west of the Cape Fear River are next to an existing water main and the running of a lateral connection is feasible, safe, and can be completed within nine months (assuming that all necessary permits and approvals can be obtained in a timely fashion). Chemours will connect any of these 13 homes that select this option to public water.

The remaining 36 homes present both cost and timing challenges, as connection to public water requires the installation of both a water main and a lateral connection. This significant work cannot be completed within the nine months, as required by the Consent Order. We estimate based on discussions with Bladen County that the

¹ Two additional homes have eligible wells but are already connected to public water and therefore are not included in this analysis.



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installations would be completed in approximately two to four years. For example, before public water can be extended, the County must obtain rights of ways and permits, and even these initial steps will take longer than 9 months. Therefore, we request that DEQ extend the 9-month implementation requirement if a sufficient number of these homes request a public water connection so that that connection is not “cost prohibitive.”

In the event that NCDEQ is willing to extend the installation period, Chemours proposes to connect these 36 homes to public water as long as a sufficient number of the homes agree to be connected to public water. For public water to these Bladen County west of the Cape Fear River homes to stay below the “cost prohibitive” threshold, at least 30 of the 36 homes would have to agree to be connected to public water. If only 29 homes, plus the 13 homes described above, agree to be connected to public water, the cost per home would be “cost prohibitive” at \$83,000.

In short, Chemours seeks your approval to proceed as follows:

- The 13 homes requiring only a lateral connection to be connected to public water would be offered either a public water hook up (with water bills to be paid by Chemours for 20 years), a whole house filtration system, or reverse osmosis systems on every kitchen and bathroom sink.
- For the remaining 36 homes, assuming that NCDEQ agrees to an implementation extension, Chemours would ask the homeowners preference, and if at least 30 homeowners opted for public water (with water bills to be paid by Chemours for 20 years), then that option would be available. If fewer than 30 of the homes agree to be connected to public water, all homes would be provided with the options of a GAC system or reverse osmosis units on every kitchen or bathroom sink.
- If no extension for implementation is granted, the 36 homes would be provided with the options of a GAC system or reverse osmosis units on every kitchen or bathroom sink.
- If a sufficient number of homes agree to a public water connection such that the cost remains below the “cost prohibitive” threshold, these homes would be offered a reverse osmosis system while waiting for the installation of public water.

For the 84 homes in Cumberland County west of the river, the lack of existing infrastructure and a definitive source of water means, as explained in the FS report, that the provision of municipal water is not currently feasible and is cost prohibitive, with estimated per home costs of \$233,800. We seek your concurrence in that determination, so we can move forward expeditiously in offering for these homes whole house filtration or reverse osmosis systems on every kitchen and bathroom sink.

In both Bladen and Cumberland Counties on the east side of the river, as explained in the FS report, municipal water is not technically feasible: there is no existing source for water, the long distance between possible sources and the low density of houses means that there would be poor water quality, and as there is little to no infrastructure it would be many years before municipal water could be installed. These challenges also result in costs that are prohibitive. For the five eligible homes in Bladen County, the cost would be approximately \$354,000 per home. For the 44 eligible homes in Cumberland County, the cost would be approximately \$272,000 per home. We seek your concurrence in that determination, so we can move forward expeditiously in offering the option of either whole house filtration or reverse osmosis systems on every kitchen and bathroom sink.

Please let me know if you require any further information to make your determinations, or if you would like to discuss the matter.

Sincerely,

Brian D. Long
Plant Manager
Chemours – Fayetteville Works



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Enclosure: Public Water Report