



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

September 30, 2019

Sheila Holman
Assistant Secretary for the Environment
1601 Mail Service Center
Raleigh, NC 27699-1601
sheila.holman@ncdenr.gov

Kemp Burdette
Cape Fear River Watch
617 Surry Street
Wilmington, NC 28401
(910) 762-5606
kemp@cfrw.us

Re: Submission Pursuant to Consent Order Paragraph 12.e

Dear Ms. Holman and Mr. Burdette,

Chemours is pleased to submit the enclosed reports pursuant to paragraph 12.e of the Consent Order (CO) entered by the Superior Court for Bladen County on February 25, 2019. The following reports are being transmitted:

- Old Outfall 002 Surface Water Sampling Results
- Engineering Report Old Outfall 002 GAC Pilot Study Results
- PlumeStop Phase 1 Pilot Study at Old Outfall 002

As required by paragraph 12.e of the CO, samples were required to be collected once per month beginning in March 2019 with results reported by September 30, 2019. These results are reported in the attached Old Outfall 002 Surface Water Sampling Results report. The sampling results show only minor variations from month to month for most constituents. Consistent with previous sampling conducted at Old Outfall 002, Hexafluoropropylene oxide dimer acid (HFPO-DA) was detected at the highest concentration of constituents analyzed via method 537 and Perfluoro-2-methoxyacetic acid (PFMOAA) was the highest detected Table 3+ constituent.

Paragraph 12.e of the CO requires the completion of a pilot study “to determine its control efficiency for all PFAS identified in Old Outfall 002. The results of this pilot testing shall be supported by at least three (3) months of sampling data and submitted to DWR for review and approval.” Accordingly, Chemours has completed bench and pilot scale testing of granular activated carbon (GAC) to remove PFAS constituents from the water at Old Outfall 002. The

bench and pilot scale testing found F400 GAC demonstrated effective removal of the indicator compounds PFMOAA and HFPO-DA along with other tracked and reported PFAS compounds.

The PlumeStop Pilot study was conducted to present a potential alternate technology to reduce mass flux to the Cape Fear River from the Old Outfall 002 Channel. Chemours completed bench scale testing and a 3-month long pilot study to evaluate this technology. The results of the bench scale study and the pilot study indicate that PlumeStop can significantly reduce the concentrations of HFPO-DA, PFMOAA, as well as many other PFAS compounds. Over time, these reductions can translate to a reduction in the contaminant mass flux.

Based on the findings of the three studies presented above, Chemours continues to recommend capture of the Old Outfall 002 base flow (dry conditions) followed by treatment using GAC vessels in order to comply with the requirements of Paragraph 12 of the CO. While PlumeStop was shown to be effective in remediating PFAS constituents, it is not able to meet the short-term remedial objectives outlined in the CO for Old Outfall 002. We are also continuing evaluation of other treatment technologies (e.g., ion exchange resins, other carbon-based media, biological treatment), and an alternative treatment technology may be implemented (upon approval by DEQ), either before or after installation of this proposed GAC treatment system.

Please let us know if you need further information, or if you would like to discuss these options further with us. We would appreciate receiving your approval soon, so that we may timely proceed with implementation.

Sincerely,

A handwritten signature in black ink that reads "Brian D. Long". The signature is written in a cursive style with a large initial "B" and a long, sweeping underline.

Brian D. Long
Plant Manager
Chemours – Fayetteville Works

Enclosures

Old Outfall 002 Surface Water Sampling Results
Engineering Report Old Outfall 002 GAC Pilot Study Results
PlumeStop Phase 1 Pilot Study at Old Outfall 002

Cc:

William F. Lane, DEQ

Francisco Benzoni, NC DOJ

Michael Abraczinskas, DAQ

Michael Scott, DWM

Linda Culpepper, DWR

David C. Shelton, Chemours

John F. Savarese, WLRK

Geoff Gisler, SELC