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

June 10, 2019

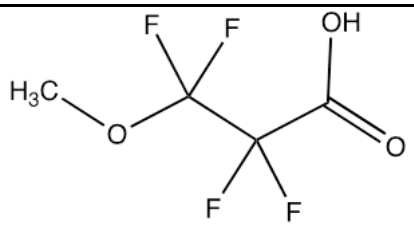
Linda Culpepper
Interim Director, Division of Water Resources
1611 Mail Service Center
Raleigh, NC 27699-1611
linda.culpepper@ncdenr.gov

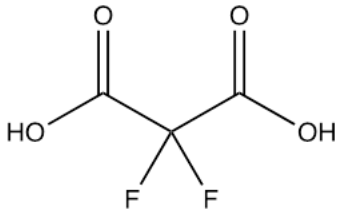
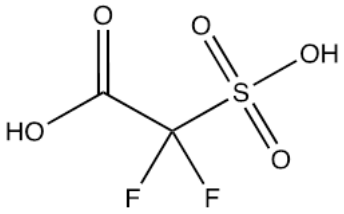
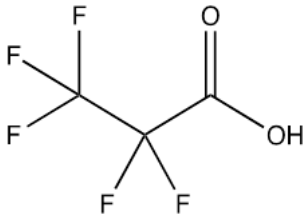
Re: Submission Pursuant to Consent Order Paragraph 11

Dear Ms. Culpepper,

Under Paragraph 11 of the Consent Order, Chemours is required to perform certain PFAS-related sampling at the Fayetteville Works facility under DEQ approved plans and, once approved, provide quarterly reports to DEQ identifying PFAS constituents and initial concentrations at any level above the practical quantitation limit in all process and non-process wastewater and stormwater at the facility, including Outfall 002. Such plans have been submitted but not been approved to date. Chemours also conducts other PFAS-related sampling at the facility. Paragraph 11(e) includes a duty to disclose any previously undisclosed PFAS and its concentrations in process and non-process wastewater and stormwater.

In April and May, Chemours (internal lab) and TestAmerica (external lab) began analyzing samples obtained from Outfall 002 for certain PFAS compounds for which analytical methods did not previously exist. These compounds include C4 or smaller compounds such as DFSA (which is a C2) and the others listed below that are quite difficult to quantify.

Acronym	Name	Molecular Formula	CASN	Chemical Structure
MTP	Perfluoro-2-methoxypropanoic acid	CH3-O-CF2-CF2-COOH	93449-21-9	

MMF	Difluoromalonic acid	HOOC-CF2-COOH	743478-63-9	
DFSA	Difluoro-sulfo-acetic acid	HOOC-CF2-SO3H	422-67-3	
PPF Acid	Perfluoropropionic acid	CF3-CF2-COOH	422-64-0	

The first round of results from TestAmerica, which reflect the results of 3.5 day of composite sampling, are enclosed herein. These results indicate that some of these PFAS compounds have concentrations in excess of the applicable detection limits, including one of the newly-detected compounds, DFSA. DFSA was reported by TestAmerica in one 3.5 day composite sample for the period ending on May 7 at a concentration of 80 ppb with a detection limit of 3.1 ppb. The subsequent 3.5 day composites, for the periods ending on May 9, May 14 and May 17, were reported, respectively, by TestAmerica at 6.9 ppb for the first sample and then non-detect for the next two.

Both Chemours and Test America have reason to believe that the 80 ppb quantification may not be accurate, for several reasons. First, Chemours' internal laboratory analysis of grab samples from the same period shows orders of magnitude lower results, with non-detects at a detection limit of 100 ppt on May 3 and 9, and a detection of 269 parts ppt, which would be non-detectable under TestAmerica's methodology, on May 7. Second, Chemours' process water continues to be segregated for off-site disposal, and we are not presently aware of any operating condition or upset that could have caused DFSA to be present at the level reported for the May 7th sample. Further, the analytical chemists we have consulted have told us that C4 or smaller compounds such as DFSA and others listed above are quite difficult to quantify, and both TestAmerica and Chemours are working to refine the appropriate testing methodology. TestAmerica has described some of these testing challenges in a brief technical memorandum, which is enclosed. Chemours will continue to work with TestAmerica to improve its methodology for quantifying DFSA, as well as exploring other possible explanations for these DFSA testing results.

Please let me know if you have any questions.

Sincerely,

Brian D. Long
Plant Manager
Chemours – Fayetteville Works

Enclosures

Outfall 002 Data

TestAmerica Technical Memorandum

Cc:

Sheila Holman, DEQ

William F. Lane, DEQ

Francisco Benzoni, NC DOJ

Michael Abraczinskas, DAQ

Michael Scott, DWM

David C. Shelton, Chemours

John F. Savarese, WLRK

Kemp Burdette, CFRW

Geoff Gisler, SELC