

ROY COOPER  
Governor

JOHN NICHOLSON  
Interim Secretary

MICHAEL ABRACZINSKAS  
Director



NORTH CAROLINA  
Environmental Quality

June 29, 2021

Ms. Dawn Hughes, Plant Manager  
The Chemours Company FC, LLC  
Fayetteville Works  
22828 NC Hwy 87 West  
Fayetteville, North Carolina 28306-7332

Subject: Emissions Estimation Technique for Plant-Wide C3 HFPO Dimer Acid  
The Chemours Company, Fayetteville, Bladen County, North Carolina  
Facility ID No. 0900009, Permit No. 03735T48

Dear Ms. Hughes,

Recent performance testing at your facility in March of 2021 has revealed an issue associated with the procedures and use of performance testing results for emission estimation in the periods between the periodic performance tests. The procedure in question is the use of emission test "averaging" to create an "emission factor" as the basis for emissions estimation over the periods of time between actual tests. The North Carolina Division of Air Quality (NCDAQ) has reviewed these procedures and has determined that they are not appropriate for emissions estimation at Fayetteville Works facility for the reasons outlined below. The NCDAQ is, therefore, requiring The Chemours Company (Chemours) to change the emissions estimation technique and requiring Chemours to recalculate and resubmit its emission estimates for the period beginning in January 2020 through March 2021 pursuant to permit requirements.

## BACKGROUND

The NCDAQ required Chemours to conduct performance testing beginning in 2018 for the purpose of quantifying emissions of certain per- and polyfluoroalkyl substances (PFAS) from process operations at the Fayetteville Works facility. The initial focus of the testing was emissions of Hexafluoropropylene Oxide Dimer Acid (HFPO dimer acid, C3 HFPO dimer acid (DA), or GenX, CAS No. 13252-13-6). This required modification of existing testing methods to capture and quantify GenX emissions from various process operations. The testing methodology was later expanded to quantify other PFAS from process operations at the Fayetteville Works facility.

Ultimately, the performance test data was used, in part, in the Consent Order that was finalized in the spring of 2019 to establish emissions reductions and target dates. In addition, the Consent Order requirements for air emissions control were incorporated into Chemours' Title V permit. Per their Title V permit, Chemours is required to provide routine reports to NC DAQ on emissions estimates based upon the performance test results.



North Carolina Department of Environmental Quality | Division of Air Quality  
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641  
919.707.8400

Ms. Dawn Hughes

June 29, 2021

Page 2

As we discussed during our meeting of June 24, 2021, the use of averaging emission test results can provide mathematically similar values for past emissions estimates when there is little variation in the test-to-test values and could provide some insight into future projected emissions. However, as was demonstrated by a recent performance test in March 2021 on the VEN carbon bed, this approach is flawed when there is significant variation between test results. This approach is also not consistent with DAQ's usual approach of estimating past air emissions from test-to-test. After reviewing all test data, Chemours agrees that the emission averaging approach is not appropriate an procedure for emissions estimation purposes and has agreed to change to the test-to-test approach.

NCDAQ is requiring this change be made retroactive to January 2020 for the emissions estimates provided to DAQ for calendar year 2020, and subsequent rolling 12-month total emissions estimates beginning in 2021, consistent with permit recordkeeping and reporting requirements. As of June 30<sup>th</sup>, emission estimates through the second quarter of 2021 can also be completed and submitted to NCDAQ for review. **Although NCDAQ recognizes that the second quarter 2021 report is not officially due until July 30, 2021, we are requesting that Chemours recalculates its emissions as expeditiously as possible and submit the updated 2020 and 2021 (to date) emissions summary to the NCDAQ by July 15, 2021.** If all monthly data from June production and operations cannot be gathered and included in the calculations by July 16, 2021, please submit data through May 2021 by this date and supplement your submittal with the June 2021 data by July 30, 2021.

We thank you for your prompt attention to this matter. Due to COVID-19 protocols, delivery through the US Mail Service may be delayed. Therefore, we are providing electronic copies of this letter to you. If there are any questions, please feel free to contact me at [gary.saunders@ncdenr.gov](mailto:gary.saunders@ncdenr.gov) or at (919) 707-8413.

Sincerely,



Gary L. Saunders, Supervisor  
Stationary Source Compliance Branch  
Division of Air Quality, NC DEQ

- cc. Christel Compton, Chemours (e-copy)  
Christie Richardson, ERM (e-copy)  
Mike Abraczinskas, Director, RCO (e-copy)  
Michael Pjetraj, Deputy Director, RCO (e-copy)  
Heather Carter, Regional Supervisor, FRO (e-copy)  
Greg Reeves, FRO (e-copy)  
Brent Hall, SSCB, RCO (e-copy)  
Heather Sands, Permits Branch, RCO (e-copy)  
IBEAM Documents (Facility ID No. 0900009)



North Carolina Department of Environmental Quality | Division of Air Quality  
217 West Jones Street | 1641 Mail Service Center | Raleigh, North Carolina 27699-1641  
919.707.8400