



The Chemours Company
Fayetteville Works
22828 NC Highway 87 W
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January 21, 2020

Michael Abraczinskas
Director, Division of Air Quality
1641 Mail Service Center
Raleigh, NC 27699-1641
michael.abraczinskas@ncdenr.gov

Re: 92% Facility-Wide Reduction of GenX Compounds Emissions Pursuant to
Consent Order Paragraph 8.b

Dear Mr. Abraczinskas,

This submittal is intended to satisfy Paragraph 8.b of the Consent Order, which requires Chemours to submit a final report documenting that Facility-wide air emissions of GenX Compounds from December 31, 2018 through December 30, 2019 have been reduced by at least 92% from 2017 Total Reported Emissions.

Please find in Table 1 attached a summary of the GenX Compounds emissions for the period from December 31, 2018 through December 30, 2019. This table demonstrates that Chemours has met the Consent Order's 92% requirement for plant-wide interim reductions of GenX Compounds emissions from 2017 Total Reported Emissions. These emissions were calculated pursuant to Paragraph 8.b and 8.d of the Consent Order, which require that Chemours submit monthly emissions reports for GenX Compounds and include fugitive, maintenance, malfunction and accidental emissions.

The spreadsheet file with the calculations underlying the GenX Compounds emissions presented in Table 1 was prepared by our consultant, ERM NC, Inc. ("ERM"). The spreadsheet file also provides the emissions test data, control device data, and production data underlying the calculations, as well as notes on the calculation methodologies. Because the spreadsheet file contains confidential business information of Chemours, we will send that spreadsheet file under separate cover directly to you, and the spreadsheet file will not be further distributed or posted on Chemours' website.

The emissions presented in Table 1 and in ERM's spreadsheet file have been updated from the last monthly emissions report, submitted on December 20, 2019. The emissions figures here incorporate the results from emissions testing at the Division stack on November 22 and December 4, 2019 and at the E2 stack on December 4 and 5, 2019. The Division stack testing was performed to refine test methods that will be used for testing the thermal oxidizer, and the E2 stack testing was performed during the first E2 product campaign of 2019, pursuant to Paragraph 8.b.i of the Consent Order. The emissions test reports from the Division and E2 stack testing, prepared by Weston Solutions, Inc., are enclosed.

The emissions presented in Table 1 and in ERM's spreadsheet file also incorporate the results from emissions testing at Vinyl Ethers South (VES) on November 20 and 21, 2019. The report from that testing was submitted with the last monthly emissions report on December 20, 2019. As noted in that submission, that testing at VES was conducted during periods of isotainer venting, following redirection of the vent line from the Vinyl Ethers North scrubber to the VES scrubber during the October plant turnaround, and the emissions measured were higher than those measured during previous testing events at VES. ERM has conservatively incorporated the November VES testing results into the emissions calculations, resulting in higher emissions for November and December than in prior months as presented in Table 1 (but still meeting the 92% reduction requirement). The isotainer vent line that was venting during the November VES testing was routed to the thermal oxidizer, which became fully operational on December 27, 2019.

Finally, please note that the emissions presented in Table 1 and in ERM's spreadsheet file do not incorporate the anticipated reductions associated with the thermal oxidizer for the time between its becoming operational on December 27, 2019 through the end of the reporting period here of December 30, 2019, as stack testing results for the thermal oxidizer are not yet available. Pursuant to the Consent Order, within 90 days of installation, Chemours and the Division of Air Quality will conduct testing to confirm that the thermal oxidizer is destroying 99.99% of all PFAS air emissions routed to it.

If you have any questions, please contact me at Brian.D.Long@chemours.com.

Sincerely,



Brian D. Long
Plant Manager
Chemours – Fayetteville Works

Attachment

Table 1. Inventory of Emissions of GenX Compounds Pursuant to Consent Order Paragraph 8.b

Enclosures

IXM Manufacturing Process E2 Stack Emissions Test Report, Test Dates: 4-5 December 2019

Fluoromonomers Manufacturing Process Division Stack Emissions Test Report, Test Dates: 22 November and 4 December 2019

Cc:

Sheila Holman, DEQ

William F. Lane, DEQ

Francisco Benzoni, NC DOJ

Michael Scott, DWM

Linda Culpepper, DWR

David C. Shelton, Chemours

John F. Savarese, WLRK

Kemp Burdette, CFRW

Geoff Gisler, SELC

Attachment -

**Table 1. Inventory of Emissions of GenX Compounds Pursuant to Consent Order
Paragraph 8.b**

Table 1

Inventory of Emissions of GenX Compounds
(Per Consent Order, Paragraph 8b)

January-20

Month	Notes	Status	GenX Compound Emissions (lbs)
December 31, 2018	1	Actual	0.3
January 2019		Actual	10.9
February 2019		Actual	31.7
March 2019		Actual	46.7
April 2019		Actual	9.7
May 2019		Actual	10.3
June 2019		Actual	11.9
July 2019		Actual	3.1
August 2019		Actual	4.3
September 2019		Actual	3.0
October 2019		Actual	0.7
November 2019		Actual	17.0
December 1-30, 2019	2	Actual	34.2
Total GenX Compound Emissions (12-Month Period from December 31, 2018 through December 30, 2019)			183.7
2017 Baseline Emissions			2,302.7
Percent Reduction			92.02%

Notes:

- 1) Contains emissions from December 31, 2018 only
- 2) Contains emissions from December 1, 2019 - December 30, 2019

Assumptions:

- 1) Emission rates for PPVE campaign runs determined using the following for the Feb/March campaign: 52.4% operating time ABR is on, 2.7% burnout, and 44.9% ABR is off. And the following for Dec 20-30, 2018 PPVE Campaign: 38.2% operating time ABR is on, 2.1% burnout, and 59.7% ABR is off.
- 2) Carbon bed became operational on VE-South process and equipment emissions on June 29, 2019. Emissions from July stack testing data were utilized for the period after installation and prior to the October TAR or after the October TAR when PPVE was not being produced in VE-North. Emissions from November stack testing data were utilized for the periods after the October TAR, when PPVE was being produced in VE-North. Dimer iso loading vent line was redirected to VE-South scrubber (from VE-North scrubber) during the October TAR.
- 3) [For March only] Emission rate for when the ABR only was operating was determined by subtracting the 230 kg/hr ABR on and ABR off runs from the February 2019 stack testing. Stack testing following the permeator tie-in (March 2019) was not utilized for determining ABR only emissions since those specific conditions were not tested independently. Therefore, emissions rates after the permeator was tied in to the scrubber were calculated using the following control efficiencies: 99.1% for Division Scrubber (obtained from acid fluoride testing conducted by Entec Services in 2013), 45% for Secondary Scrubber (most conservative efficiency from the Dec 2018 stack testing), and 95.1% for Carbon Bed (from March 2019 stack testing).
- 4) Unless otherwise noted, emissions are calculated using average stack test data from relevant stack testing.