



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

November 13, 2023

Sushma Masemore, P.E.
Assistant Secretary
N.C. Department of Environmental Quality
1601 Mail Service Center
Raleigh, NC 27699-1601
sushma.masemore@ncdenr.gov

Re: Response to DEQ November 1, 2023, Letter “Waste Materials Received at the Chemours Fayetteville Works Facility”

Dear Ms. Masemore,

This letter is in further response to your November 1st letter, and supplements the initial response provided on November 7th. Before addressing your specific questions, there are several overarching points about the polymer processing aid recycling activities at Fayetteville Works that are helpful for your overall inquiry.

For many years, Fayetteville Works has been receiving used polymer processing aid material to be reclaimed from both its Washington Works and Dordrecht Works facilities and then recycling this material in the PPA process area for reuse as polymer processing aids at both those facilities. We know that DEQ and EPA share Chemours’ strong belief in the benefits of such recycling, which include reduced use of raw materials and energy, as well as reduced emissions of fluorinated compounds and greenhouse gases. In particular, this recycling activity reduces air emissions at Fayetteville Works; without the recycled material (i.e., if such material was disposed of rather than recycled), additional GenX compounds would be made from virgin materials, and air emissions from such virgin production would be higher than it is from recycled production.

Moreover, the PPA unit, where all the material to be reclaimed is processed, is operated as a stand-alone operation and all the wastewaters for such operations have always been collected and sent offsite for incineration. There have never been any wastewater discharges from the PPA unit to the site outfalls.

Finally, we want to clarify that the volume of material from Dordrecht Works to be recycled will be similar to prior year volumes, regardless of the volume identified in the recently approved EPA permit to import. There has been no change in the PPA unit’s production capability and no increase in production is planned for the foreseeable future.

In response to DEQ's specific questions, Chemours has addressed each below, in addition to sending DEQ on November 7, 2023, the multiple letters to EPA since 2019 addressing questions on this recycling program.

A. Imported Waste Materials Approved September 8, 2023

1. Will all the imported waste materials identified in the September 8, 2023, letters be recycled or otherwise used in processes at the facility? If so, identify the processes, provide the anticipated schedule or frequency for such activities and explain whether such activities will be linked to product campaigns at the facility.

Chemours will be recycling all the imported material at the PPA unit and then shipping the recycled material directly back to the Dordrecht Works facility for reuse. The recycled material will not be used at the Fayetteville facility in other process areas.

2. Will use of imported waste materials identified in the September 8, 2023, letters result in an increase in emissions of GenX chemicals or other Table 3+ compounds? Through which emissions controls will the waste materials be routed? Will Chemours be able to remain below its facility-wide permit condition of 23 lb./yr. of GenX?

As noted above, regardless of the volume of material noted in the EPA-approved permit, the volume of material received and recycled will be similar to prior years' recycling. Therefore, there will not be an increase in air emissions of Table 3+ compounds relative to prior years and the historical recycling operations. Consistent with prior years, the emissions will be routed through the PPA scrubber and the PPA carbon adsorber, and these recycling operations will be taken consistent with its facility-wide permit condition of 23 lb./yr. for HFPO-DA. As in the past, there will be no discharges to water.

3. How does the mass of imported waste materials identified in the September 8, 2023, letters differ from previous mass amounts imported by Chemours or Dupont? Why is the mass identified in the September 8, 2023, letters so much higher than in import/export notifications by Chemours?

There was an error in calculating the requested permitted volume that was not identified during the approval process, and 2000 tons is not a correct estimation of actual volumes. The actual quantity will remain at historical levels.

In addition, there were two notifications requested to allow for one main and one alternative shipping route for the same stream, both of which were approved by the international authority. The approval of these two routes will not increase import volumes.

4. Will the recycling or use of the waste materials identified in the September 8, 2023, letters lead to an increase in the levels of PFAS in effluent discharged through Outfall 001 or 002?

No. As noted above, the PPA unit was built as a stand-alone operation and all the wastewaters have always been collected and sent offsite for incineration. There have never been any wastewater discharges from the PPA unit to the site outfalls.

5. Provide the mass of waste materials identified in the September 8, 2023, letters that will be stored at the facility and identify the location(s) for such storage. What is the maximum storage mass amount?

The Fayetteville Works facility will only receive as much material at one time that it can process at the PPA unit, which for Dordrecht Works, is in the range of 10,000 – 17,000 kg/month. The material received is stored in an enclosed building on the plant site. Fayetteville Works coordinates shipping with Washington Works and Dordrecht Works to ensure that storage capacity and processing capacity are maintained. In 2021, the total material received from Dordrecht Works and Washington Works ranged from 15% to 60% of the total storage capacity of the enclosed building. All material received by Fayetteville Works in 2021 for recycling was reprocessed in 2021.

As EPA did not approve the 2022 permit, no material from Dordrecht Works was stored in 2022.

6. Provide the results of testing and any analysis demonstrating that the waste material identified in the September 8, 2023, letters is not a characteristic hazardous waste or a listed hazardous waste under RCRA.

Please see the analytical results in the November 7, 2023, submission by Chemours to DEQ Attachment 1 to the March 23, 2023, letter to EPA.

7. How will the empty containers be managed? Will they be reused or shipped off-site?

The empty containers are rinsed using a spray ball inserted into the tote. The wash water is then pumped to the PPA scrubber. The tote is sent offsite for additional cleaning and refurbishing.

8. Describe the spill contingency plans/notification process for shipments of the waste materials identified in the September 8, 2023, letters to the Fayetteville Works facility from domestic US ports.

Chemours has Corporate Distribution Guidelines and a team that works with the sites and the transportation partners to ensure the safest transport for all Chemours shipments. Only approved vendors can be used for Chemours shipments. In addition, if manifests are used, each lists the number of Chemtrec, the company used by Chemours to respond to distribution incidents.

B. Background on Waste Materials (2018-2023)

1. Provide the name, location and contact information for any off-site facility which has sent and/or is sending waste materials to the Chemours Fayetteville Works.

Dordrecht Works
Netherlands

Washington Works
Parkersburg, West Virginia

2. For each off-site facility identified, identify the time period during which the waste materials have been sent, and describe the specific manufacturing processes from which these waste materials were produced. Provide analytical data sufficient to identify PFAS or PFAS precursors present in the waste material. Explain why these waste materials were sent to the Chemours Fayetteville Works and identify any that were used in a manner that resulted in an increase in discharges through the Chemours facility Wastewater Treatment Plant.

These materials have been sent to Fayetteville Works to achieve the benefits of recycling discussed above. The analytical data is referenced in response to Question A6 above. As noted above, the PPA unit was built as a stand-alone manufacturing unit and there have never been any wastewater discharges to the facility wastewater treatment system nor our Outfall 002. Accordingly, no aspect of the recycling process resulted in an increase in discharges through the Fayetteville Works Wastewater Treatment Plant. Further information is provided in the materials we sent you on November 7th.

3. Describe the management practices for waste materials received, including how the waste materials are transported to the Chemours facility, how, where and in what volumes are the waste materials to be stored at the Chemours facility, and the type of practices are used to manage wastewater generated through the use of these materials (reclamation, recycling, treatment for disposal, etc.) and any solids associated with such wastewater, where it is managed, and any sampling/analysis procedures.

Please see Attachment 5 of the March 23, 2023, letter to EPA.

4. Identify when waste materials were first sent to the Chemours facility, and the average mass and volume per shipment per year and average mass and volume per month since that period.

Chemours, and previously DuPont, has implemented recycling of the material reclaimed from both the Washington Works and Dordrecht Works facilities as part of its use of the GenX technology. The average volume per month from Dordrecht Works has been 10,000 – 17,000 kgs/month.

5. Describe any spills and/or releases related to the management of waste materials received from any off-site facility.

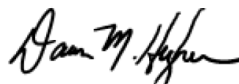
Chemours has not identified any spills or releases at the Fayetteville Works site relating to the management of used polymer processing aid materials received from the two off-site facilities.

6. For each waste material stream sent to the Chemours facility from an off-site facility, provide any waste characterizations that have been made under RCRA or other federal or state environmental laws, import or export notifications provided to the country of import or export, and any regulatory approvals allowing the import or transport of the waste material to the Chemours facility.

Please refer to the Attachments in the March 23, 2023, letter to EPA for this information.

If you have any further questions, please contact me at Dawn.M.Hughes-1@chemours.com.

Sincerely,



Dawn M. Hughes
Plant Manager
Chemours – Fayetteville Works