Fact Sheet

For Final Minor Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on June 13, 2017.

Permit Number: R30-10700182-2017
Application Received: November 8, 2017
Plant Identification Number: 03-54-10700182
Permittee: The Chemours Company FC, LLC
Facility Name: Washington Works
Business Unit: Power and Service Support (Part 10 of 14)
Mailing Address: P.O. Box 1217, Washington, WV 26181-1217

Permit Action Number: MM01 Revised: June 19, 2018

Physical Location: Washington, Wood County, West Virginia
UTM Coordinates: 422.27 km Easting • 4,346.57 km Northing • Zone 17
Directions: Route 68 west from Parkersburg to intersection of Route 892. Continue west on Route 892 with the plant being on the north side about one mile from the intersection of Routes 68 and 892.

Facility Description
Chemours Washington Works is a multiple business, multiple product line facility that produces plastic and resins and their associated feedstock materials. Power and Services manages and operates the plant infrastructure to support the operating business units. As part of these operations Power and Services operates both gas and coal fired boilers to produce steam for on-site use. Power and Services personnel also operate an industrial wastewater treatment facility, a sanitary wastewater treatment facility, an air compressor system to supply plant air, and a water treatment facility to supply treated water for both process uses and sanitary uses on-site.
Emissions Summary

As a result of this modification, the facility will have the following change in emissions:

- PM: -3.43 TPY
- VOC’s: -4.01 TPY
- CO: -7.14 TPY
- NOx: -47.19 TPY
- SO2: -0.58 TPY
- Total HAPs: <0.01 TPY

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of an individual HAP, and over 25 tons per year aggregate HAPs. Therefore, Chemours Washington Works is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

The modification to this facility has been found to be subject to the following applicable rules:

<table>
<thead>
<tr>
<th>Federal and State:</th>
<th>45CSR16</th>
<th>Standards of Performance for New Stationary Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>45CSR30</td>
<td>Operating permit requirement.</td>
</tr>
<tr>
<td></td>
<td>45CSR34</td>
<td>Emission Standards for Hazardous Air Pollutants</td>
</tr>
<tr>
<td></td>
<td>40CFR60, Subpart III</td>
<td>Standards of Performance for Stationary Compression Ignition Internal Combustion Engines</td>
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<tr>
<td></td>
<td>40CFR63, Subpart ZZZZ</td>
<td>NESHAPs for Stationary Reciprocating Internal Combustion Engines</td>
</tr>
</tbody>
</table>

State Only: N/A

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the Title V permit as such.

The Secretary’s authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 et seq., 45CSR16, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

The following Permits/Consent Orders are affected by this modification:

<table>
<thead>
<tr>
<th>Permit or Consent Order Number</th>
<th>Date of Issuance</th>
<th>Permit Determinations or Amendments That Affect the Permit (if any)</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>None</td>
<td>PD17-085</td>
</tr>
</tbody>
</table>

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under
the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

**Determinations and Justifications**

A description of the changes made to the Title V Permit as part of this minor modification are summarized below:

On November 22, 2017, a Permit Determination (PD17-085) was issued to The Chemours Company FC, LLC to replace a 288 horsepower 1983 vintage #1 fire water emergency diesel driven pump (P122) with a new 2017 model. The new model is a 347 maximum horsepower fire water diesel driven pump with 8.9 liters spread over 6 cylinders (1.48 liters/cylinder). The pump does not have a diesel particulate filter, and does not have the capacity to provide electricity to anything other than the fire pump.

The change, although to a larger horsepower pump, results in a reduction in all pollutant emissions because of improvements in pollution control in the design of this manufacturer certified pump engine.

The new pump is subject to 40CFR63, Subpart ZZZZ. 40CFR§63.6590(c)(6) states that the facility will show compliance with 40CFR63, Subpart ZZZZ by showing compliance with 40CFR60, Subpart III, and that no further requirements apply for this pump under 40CFR63, Subpart ZZZZ.

The new pump will be subject to 40CFR60, Subpart III. The new (2017) fire water pump is a Cummins model CFP9E-F40 certified engine. It is classified under 40CFR60, Subpart III as a Fire Pump Engine, <30 l/cyl, and 347 hp.

The previous firewater pump (P122) was not in any existing NSR permits. It did have requirements in the R30-10700182-2017 Part 10 of 14 Title V Permit.

The following changes have been made as a result of this changeout.

A) The Equipment Table in Section 1.0 has been updated to include the new replaced #1 fire water emergency diesel driven pump (P122).

B) The engine (P122) has been removed from Condition 9.1.1 and Condition 9.3.1.

C) 40CFR§60.4205(c) references Table 4 for emission limits for NMHC + NOx, and PM. The appropriate emission standards are taken from (300<HP<600) for engines built after 2009. The HP of 347 for this engine would result in the following emission limits: 347 HP * (3.0 g/HP*hr) = 1,041 g/hr of NMHC + NOx 347 HP * (0.15 g/HP*hr) = 52.05 g/hr of PM 40CFR§60.4206 requires these limits to be met throughout the entire life of the engine. These emission limitations are given in Condition 9.1.4.(a).

D) 40CFR§60.4207(b) requires the Permittee to use diesel fuel that meets the requirements of 40CFR§80.510(b) for nonroad diesel fuel. This is given in Condition 9.1.4.(b).

E) 40CFR§60.4209(a) requires the Permittee to install a non-resettable hour meter prior to startup. This given in Condition 9.2.1.
F) 40CFR§60.4211(a) requires the Permittee to operate and maintain the engine according to manufacturer’s emission-related written instructions, change only those emission-related settings that are permitted by the manufacturer, and meet the requirements of 40 CFR Parts 89, 94, and/or 1068 as they apply to the engine. This is given in Condition 9.1.4.(c).

G) 40CFR§60.4211(c) requires the Permittee to purchase an engine certified to the emission standards in Condition 9.1.4.(a), as well as install and configure the engine according to the manufacturer’s emission-related specifications, except as provided by Condition 9.1.4.(f).

H) 40CFR§60.4211(f) gives hours of operation requirements, testing requirements, demand response, and other usage requirements. The engine does not have the ability to be used for emergency demand response, so those Conditions have not been added. This is given in Condition 9.1.4.(e).

I) 40CFR§60.4211(g)(2) requires that if the Permittee does not install, configure, operate, and maintain the engine according to the manufacturer’s emission-related written instructions, they must provide maintenance plans and records of conducted maintenance to show that the Permittee has operated and maintained the engine in a manner consistent with good air pollution control practices. In addition, an initial performance test must be completed within one year to demonstrate compliance with emission standards given in Condition 9.1.4.(a). These requirements are given in Condition 9.1.4.(f).

J) 40CFR§60.4212 provides testing requirements for the engine if the engine does not meet the engine requirements given in Condition 9.1.4.(f). These requirements are given in Condition 9.3.3.

K) 40CFR§60.4214(b) provides recordkeeping requirements for the engine if it does not meet the standards applicable to non-emergency engines, which include the number of hours of operation the engine was in emergency and non-emergency service. This is given in Condition 9.4.3.

L) 40CFR§60.4214(d) requires annual reports during operation in certain circumstances with the information specified in the Subpart. This is given in Condition 9.5.5.

Non-Applicability Determinations
None

Request for Variances or Alternatives
None

Insiginificant Activities
Insignificant emission unit(s) and activities are identified in the Title V application.

Comment Period
Beginning Date: N/A
Ending Date: N/A

All written comments should be addressed to the following individual and office:
Mike Egnor
Title V Permit Writer
West Virginia Department of Environmental Protection
Procedure for Requesting Public Hearing
During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Point of Contact
Mike Egnor
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV  25304
Phone: 304/926-0499 ext. 1208  •  Fax: 304/926-0478

Response to Comments (Statement of Basis)
Not applicable.