Fact Sheet

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

Permit Number: **R30-03900001-2017**  
Application Received: **April 22, 2016**  
Plant Identification Number: **03900001**  
Permittee: **The Chemours Company FC, LLC**  
Facility Name: **Belle Plant**  
Manufacturing Unit: **Specialty Chemical Intermediates (Group 5 of 5)**  
Mailing Address: **901 W. DuPont Ave., Belle, WV 25015**

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Physical Location: Belle, Kanawha County, West Virginia  
UTM Coordinates: 451.90 km Easting • 4,232.60 km Northing • Zone 17  
Directions: I-64 to Belle exit, Route 60 east to Belle exit, turn right and plant is on the left.

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**Facility Description**

The products in Group 5 of 5 are specialty chemical intermediates. The process units included are methyamines [monomethylamine (MMA), dimethylamine (DMA), trimethylamine (TMA), and ammonia storage], amides [dimethylformamide (DMF), monomethylformamide (MMF), and dimethylacetamide (DMAC)], dimethyl ether (DME), dimethyl sulfate (DMS), the carbon monoxide flare, and drum plant.

**Emissions Summary**

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Group 5 Potential Emissions</th>
<th>Group 5 2015 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>26.6</td>
<td>4.1</td>
</tr>
<tr>
<td>Nitrogen Oxides (NOx)</td>
<td>6.5</td>
<td>6.4</td>
</tr>
<tr>
<td>Particulate Matter (PM2.5)</td>
<td>0.7</td>
<td>0.7</td>
</tr>
</tbody>
</table>
## Group 5 of 5 Emissions Summary [Tons per Year]

<table>
<thead>
<tr>
<th>Regulated Pollutants</th>
<th>Group 5 Potential Emissions</th>
<th>Group 5 2015 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Particulate Matter (PM$_{10}$)</td>
<td>0.7</td>
<td>0.7</td>
</tr>
<tr>
<td>Total Particulate Matter (TSP)</td>
<td>2.4</td>
<td>2.4</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO$_2$)</td>
<td>0.05</td>
<td>0</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOC)</td>
<td>544.1</td>
<td>508</td>
</tr>
</tbody>
</table>

*PM$_{10}$ is a component of TSP.*

<table>
<thead>
<tr>
<th>Hazardous Air Pollutants</th>
<th>Group 5 Potential Emissions</th>
<th>Group 5 2015 Actual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total HAP’s</td>
<td>12.3</td>
<td>6.64</td>
</tr>
</tbody>
</table>

*Some of the above HAPs may be counted as PM or VOCs.*

### Title V Program Applicability Basis

Due to the facility-wide potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, The Chemours Company FC, LLC Belle Plant 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.

This facility has been found to be subject to the following applicable rules:

**Federal and State:**

- 45CSR6: Open burning prohibited.
- 45CSR7: Particulate matter and opacity limits for manufacturing sources.
- 45CSR11: Standby plans for emergency episodes.
- 45CSR13: Preconstruction permits for minor sources.
- WV Code § 22-5-4 (a) (14): The Secretary can request any pertinent information such as annual emission inventory reporting.
- 45CSR30: Operating permit requirement.
- 45CSR34: Emission Standards for Hazardous Air Pollutants.
- 40 C.F.R. Part 61: Asbestos inspection and removal
- 40 C.F.R. Part 63, Subpart EEEE: Organic Liquids Distribution (OLD) MACT.
- 40 C.F.R. Part 82, Subpart F: Ozone depleting substances

**State Only:**

- 45CSR4: No objectionable odors.
The Chemical Company FC, LLC
Belle Plant
Specialty Chemical Intermediates (Group 5 of 5)

45CSR§21-37
Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment.

45CSR§21-40
Control of VOC Emissions

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

<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>R13-0914B</td>
<td>October 31, 2008</td>
<td>NA</td>
</tr>
<tr>
<td>R13-2284A</td>
<td>January 26, 2006</td>
<td>NA</td>
</tr>
<tr>
<td>R13-3230</td>
<td>August 25, 2016</td>
<td>NA</td>
</tr>
<tr>
<td>CO-R21-10A(97)</td>
<td>April 17, 2001</td>
<td>NA</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," which may be downloaded from DAQ's website.

Determinations and Justifications

This Permit renewal incorporates R30-03900001-2011 MM01 (Group 5 of 5).

Miscellaneous:
Added R13-3230 to the Section 1.2 active permits table.

Changed the name on the Appendix A form to “The Chemical Company FC, LLC”.

R13-3230 – MM01
This NSR Permit covers the replacement of the following four tanks:

<table>
<thead>
<tr>
<th>R13-3230 Equipment ID</th>
<th>Title V Equipment ID</th>
</tr>
</thead>
<tbody>
<tr>
<td>S-102 Methanol Overhead</td>
<td>DMF32 Tank</td>
</tr>
<tr>
<td>S-110 DMF Product</td>
<td>DMF37 Tank</td>
</tr>
<tr>
<td>S-112 Methanol</td>
<td>AM82 Tank</td>
</tr>
<tr>
<td>S-113 DMF Off-Spec</td>
<td>DMF29 Tank</td>
</tr>
</tbody>
</table>
Storage Tanks AM82, DMF29, DMF32, and DMF37 have been replaced with similarly sized storage tanks. The new tanks will keep the same Emission Unit ID numbers. The installation date changes have been made to the Section 1.0 Equipment Table. Tanks DMF32 and DMF37 were previously out of service. Storage Tanks AM82 and DMF29 contain the same material they had previously. Storage Tanks DMF32 and DMF37 contain the same material the previous tanks had when they were in service.

The NSR Permit incorporates 40CFR63 Subpart G - National Emission Standards for Organic Hazardous Air Pollutants from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (HON MACT). While the majority of these requirements were already contained in the Title V Permit, some additional requirements were added from the NSR Permit. Citations to the R13-3230 Permit were added to the existing Subpart G requirements and the following requirements were added to the Title V Permit:

**Section 4.0 (AM82)**

In general, citations for R13-3230 have been added to existing conditions in this section.

In section 4.0 where a flare is mentioned for reducing emissions for Tank AM82, the amines flare (AMCD01) has been added to specify the flare to be used.

Condition 4.1.2.1 has been expanded to explain the requirements of 40 C.F.R. §63.11(b).

Condition 4.1.2.2, which allowed for an existing control device that was 90% efficient has been changed to “Reserved” since the Amines Flare (AMCD01) has been specified as the control device in R13-3230.

The option of Condition 4.1.2.2 has been removed from Conditions 4.1.2.1, 4.1.2.3, 4.1.2.4, 4.1.2.5, 4.4.4, and 4.5.5.

Condition 4.2.3.2 has been revised to specify the requirements of 40 C.F.R. §63.11(b).

Condition 4.2.3.3 has been expanded to identify the leak requirements of 40 C.F.R. §63.148(d).

Condition 4.4.13 has been added to require that a copy of the most recent compliance determination for the Amine Flare be kept at the facility.

Condition 4.1.16 has been added for operation and maintenance of air pollution control equipment.

Conditions 4.4.14 and 4.4.15 have been added to require records of equipment inspections, maintenance procedures as well as occurrence, and duration of any malfunction or shutdown of air pollution control equipment.

**Section 5.0 (DMF29, DMF32, and DMF37)**

In general, citations for R13-3230 have been added to existing conditions in this section.

In section 5.0 where a flare is mentioned for reducing emissions for Tanks DMF29 and DMF32, the amines flare (AMCD01) has been added to specify the flare to be used. Tank DMF37 is a Group 2 tank and not required to be flared.

Condition 5.1.3.6 has been added to allow 8 calendar months for the connection of DMF29 to the control vent system.

Condition 5.1.3.1 has been expanded to explain the requirements of 40 C.F.R. §63.11(b).
Condition 5.1.3.2, which allowed for an existing control device that was 90% efficient has been changed to “Reserved” since the Amines Flare (AMCD01) has been specified as the control device in R13-3230.

The option of Condition 5.1.3.2 has been removed from Conditions 5.1.3.1, 5.1.3.3, 5.1.3.4, 5.1.3.5, 5.4.6, and 5.5.8.

Condition 5.1.4.1 has been added to include VOC and HAP emission limits, as well as storage requirements for Storage Vessel DMF37.

Condition 5.2.3.2 has been revised to specify the requirements of 40 C.F.R. §63.11(b).

Condition 5.2.3.3 has been revised to specify the requirements of 40 C.F.R. §63.148.

Condition 5.4.13 has been added to require the Permittee to keep monthly and 12-month rolling emissions of VOC and HAPs to meet the requirements of Conditions 5.1.4.b and c.

Non-Applicability Determinations
The following requirements have been determined not to be applicable to the subject facility due to the following:

a. 40 C.F.R. 60, Subpart Kb – “Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984.” All volatile organic liquid storage vessels in Group 5 of 5 with a capacity greater than or equal to 75 cubic meters (m³) were constructed before July 23, 1984 except for Tanks DMF32, DMF37, AM82, and DMF29.

Tanks DMF32, DMF37, AM82, and DMF29 are subject to 40CFR63, Subpart G. 40CFR§63.110(b)(1) states that “After the compliance dates specified in §63.100 of subpart F of this part, a Group 1 or Group 2 storage vessel that is also subject to the provisions of 40 CFR part 60, subpart Kb is required to comply only with the provisions of this subpart.” Therefore, although Tanks DMF32, AM82, and DMF29 would be subject to 40CFR60, Subpart Kb (DMF37 would not), any requirements from this Subpart will be met by 40CFR63, Subpart G.

b. 40 C.F.R. 60, Subpart NNN – “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.” The distillation operation in the Methylamines process unit was constructed before the December 30, 1983 applicability date and has not been modified or reconstructed.

c. 40CFR64 Compliance Assurance Monitoring (CAM)
There has not been the addition of any pollutant-specific emission units that have potential pre-control device emissions of a regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

Request for Variances or Alternatives
None

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

Comment Period
Beginning Date: December 27, 2016
Ending Date: January 26, 2017
Point of Contact

All written comments should be addressed to the following individual and office:

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
michael.egnor@wv.gov

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.

Response to Comments (Statement of Basis)

Not applicable.