

# Fact Sheet



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

Permit Number: **R30-03900001-2023 (1 of 5)**  
Application Received: **January 30, 2023**  
Plant Identification Number: **03-54-03900001**  
Permittee: **The Chemours Company FC, LLC**  
Facility Name: **Belle Plant**  
Mailing Address: **901 West DuPont Avenue, 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: Exit onto U.S. Route 60. Turn right onto DuPont Avenue from Route 60. The plant gate is located on the left.

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### **Facility Description**

The Belle Plant manufactures various organic chemicals. Group (1 of 5) comprises the facility's wastewater treatment plant, powerhouse, fire water pumps, and gasoline fuel tank.  
SIC: 2869, 2821; NAICS: 325199, 325211

**Wastewater Treatment Plant.** The wastewater treatment plant operations consist of process and sanitary waste collection, equalization/isolation, neutralization, aeration, clarification, dewatering of waste sludge, and landfilling of dewatered sludge. The raw materials used at the wastewater treatment plant include 50% sodium hydroxide (caustic), 93% sulfuric acid, 35-40% phosphoric acid, anti-foams, and aqueous polymers.

**Powerhouse Boilers.** Steam is generated by burning natural gas in four indirect-fired boilers generating 450 psig steam. A segment of the 450 psig steam is used by plant processes. The remaining is reduced to 150 psig and 10 psig steam. Water used to feed each boiler is conditioned at the Powerhouse Filtered Water Plant where water travels through settling basins and is filtered through sand filters to remove sediment.

**Fire Water Pumps.** There are two diesel engines (755HP and 800 HP) which are used in emergencies for the fire water pumps.

**Underground Storage Tank.** The facility has one-8,000 gallon underground tank which is used for gasoline storage.

**Emissions Summary**

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions (1 of 5) Only</b>	<b>2021 Actual Emissions Facility-Wide</b>
Carbon Monoxide (CO)	360.2	86.48
Nitrogen Oxides (NO <sub>x</sub> )	1,202	262.10
Particulate Matter (PM <sub>2.5</sub> )	17.52	2.80
Particulate Matter (PM <sub>10</sub> )	17.52	2.80
Total Particulate Matter (TSP)	35.04	2.84
Sulfur Dioxide (SO <sub>2</sub> )	4.2	0.55
Volatile Organic Compounds (VOC)	116.7	550.58

*PM<sub>10</sub> is a component of TSP.*

<b>Hazardous Air Pollutants</b>	<b>Potential Emissions (1 of 5) Only</b>	<b>2021 Actual Emissions Facility-Wide</b>
Formaldehyde	1	3.19
Hexane	7.7	1.67
Methanol	65.2	45.71
Methyl Chloride	0.6	0.43
Methyl Methacrylate	0.9	2.99
Other HAPs	Not Reported for Group (1 of 5)	1.98
Total HAPs	75.4	55.97

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

**Title V Program Applicability Basis**

This facility has the potential to emit over 100 tons per year of Carbon Monoxide, Nitrogen Oxides, and Volatile Organic Compounds; over 10 tons per year of Carbon Tetrachloride, Chloroform, Methanol, and Methyl Methacrylate; and over 25 tons per year of aggregate HAPs. Due to this facility's 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 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:	45CSR2	To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.
	45CSR6	Open Burning Prohibited.
	45CSR7	To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations.
	45CSR10	To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.
	45CSR11	Standby Plans for Emergency Episodes.
	45CSR13	NSR Permit Requirements.
	45CSR16	Standards of Performance for New Stationary Sources.
	45CSR§21-23	To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds – Gasoline Dispensing Facility – Stage I Vapor Recovery.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating Permit Requirements.
	45CSR34	Emission Standards for Hazardous Air Pollutants.
	45CSR40	Control of Ozone Season Nitrogen Oxides Emissions.
	40 C.F.R. Part 60, Subpart III	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.
	40 C.F.R. Part 61	Asbestos Inspection and Removal.
	40 C.F.R. Part 63, Subpart ZZZZ	National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines.
	40 C.F.R. Part 63, Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters.
	40 C.F.R. Part 82, Subpart F	Ozone Depleting Substances.
	40 C.F.R. Part 1090, Subpart D	Diesel Fuel and ECA Marine Fuel Standards.
State Only:	45CSR4	No Objectionable Odors.

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

Permit or Consent Order Number	Date of Issuance
R13-1567B	June 28, 2023
CO-R40-C-2016-30	January 04, 2017

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 Title V operating permit is a renewal of R30-03900001-2018 (1 of 5) and incorporates the changes made with the Class I Administrative Update permit R13-1567B. This revision removed the NSR permit requirements for the Water Activated Sludge (WAS) Stabilized Sludge Container (Emission Point ID: 00P-03).

The following changes have been made to the operating permit:

1. Section 1.0. – Emission Units and Active R13, R14, and R19 Permits
  - a. The table of active permits has been updated with R13-1567B which was issued on June 28, 2023.
2. Section 2.0. – General Conditions
  - a. In 45CSR30, the definition of “Secretary” was relocated to 45CSR§30-2.39. Therefore, in Condition 2.1.3., the reference to 45CSR§30-2.12. has been replaced with 45CSR§30-2.39.
  - b. The authority of Condition 2.11.4. has been updated to 45CSR§30-2.40. due to a change in 45CSR30.
  - c. The emergency and affirmative defense requirements of Section 2.17. have been removed from the operating permit, and Section 2.17. has been marked as “Reserved.” The authority for these conditions, 45CSR§30-5.7., has been removed from 45CSR30.
  - d. The authority of Condition 2.22.1. has been updated to 45CSR§30-5.3.e.3.B. due to the repeal of Rule 45CSR38 by Senate Bill No. 163.
3. Section 3.0. – Facility-Wide Requirements
  - a. In accordance with R13-1567B, the authorities of Conditions 3.1.4. and 3.4.1. have been updated to reference the NSR permit Conditions 4.1.6. and 4.4.1., respectively.
  - b. Condition 3.5.3. has been updated to show changes that have been made to the U.S. EPA designee/address.
  - c. 45CSR§30-8 has been revised and no longer requires the submission of certified emissions statements. Condition 3.5.4. has been updated accordingly.
  - d. The requirements of Conditions 3.5.7. and 3.5.8.a.1. have been removed from the operating permit and replaced with “Reserved.” due to the removal of 45CSR§30-5.7. from the rule.
  - e. Due to revisions in 45CSR§30-5.1.c.3.C.2., “telefax” has been updated to “email” in Condition 3.5.8.a.2.
  - f. Non-applicability determinations have been added to Condition 3.7.2. for a permit shield.

4. Section 4.0. – Wastewater Treatment Plant

- a. The WAS Stabilized Sludge Container (Emission Unit: 601.200; Emission Point ID: 00P-03) has been taken out-of-service and is no longer included in the operating permit. The emission point 00P-03 is currently used to reference the emission point of a Waste Collection Tank (Emission Unit: 601.012).
- i. The Belle Plant previously operated a sludge dewatering facility. This process included the use of the WAS Stabilized Sludge Container which was permitted under R13-1567A. As the sludge dewatering process was no longer in operation, the associated equipment was removed from the application for the previous permit renewal R30-03900001-2018 (1 of 5).

In the Emission Units Table of R30-03900001-2018 (1 of 5), the WAS Stabilized Sludge Container was replaced with the Waste Collection Tank and given the same emission point ID. However, this appears to have been inadvertently done as the Waste Collection Tank was a new emission unit (not a replacement for the WAS Stabilized Sludge Container) and the applicable requirements for the WAS Stabilized Sludge Container (from R13-1567A and 45CSR7) remained in the operating permit as well as the NSR permit.

- ii. In order to correct this, the permittee submitted an application for the Class I Administrative Update Permit R13-1567B which removed the requirements associated with emission point 00P-03 and the WAS Stabilized Sludge Container. As a result, the following changes have been made:
1. Conditions 4.1.2. and 4.2.2. of the operating permit previously contained the R13-1567A requirements of A.2. and B.2., respectively. These requirements have been removed from the permit with the issuance of R13-1567B. Therefore, the requirements of Conditions 4.1.2. and 4.2.2. have been removed from the operating permit and marked as “Reserved.”
  2. As the WAS Stabilized Sludge Container is also no longer located on-site nor subject to the requirements of the NSR permit, the requirement of Condition 4.4.2. has been removed from the operating permit and marked as “Reserved”, and the references to emission point 00P-03 have been removed from the authorities of Conditions 4.1.5., 4.2.3., 4.3.2., and 4.4.3.
  3. The formatting of the NSR permit has also been revised and the numbering of the permit conditions has changed with the issuance of R13-1567B. Therefore, the authorities of Conditions 4.1.1. and 4.1.3. have been updated.
- iii. The Waste Collection Tank (Emission Unit: 601.012; Emission Point: 00P-03) is a sump that collects the sanitary and process wastewater from the Belle Plant prior to the wastewater treatment plant. The tank has a capacity of 16,500 gallons (62.5 scm) and has potential emissions of 0.378 pph (1.7 tpy) of VOC and 0.193 pph (0.9 tpy) of Methanol. The Waste Collection Tank is not currently subject to any applicable requirements.

- b. Condition 4.1.6. has been added to the permit with the applicable mineral acid emission limits established by 45CSR§7-4.2. and Table 45-7B. Sulfuric acid and phosphoric acid are each utilized in the wastewater treatment process. The Wastewater Treatment Plant (WWTP) has two sources of mineral acid emissions:
- i. The WWTP Sulfuric Acid Tank (Emission Point 00P-01) which has the potential to emit 0.1 pph and 0.3 ppy of sulfuric acid mist; and
  - ii. The WWTP Phosphoric Acid System (Emission Point 00P-02) which has the potential to emit 0.5 pph and 1.2 ppy of phosphoric acid mist.

Both units were installed at the facility after July 01, 1970. Therefore, according to Table 45-7B, the allowable stack gas concentration from the Sulfuric Acid Tank is 35 mg/dscm of sulfuric acid mist and from the Phosphoric Acid System is 3 mg/dscm of phosphoric acid mist.

- c. Compliance with the emission limits of Condition 4.1.6. will be demonstrated by maintaining monthly records of the throughput and emissions as specified in Condition 4.4.4. of this renewal permit.

5. Section 5.0. – Powerhouse

- a. Condition 5.1.10. has been added to this renewal permit. The boilers at the facility are subject to the annual tune-up work practice standard, as detailed in Condition 5.1.8. of the operating permit. This condition now contains the applicable requirements of 40 C.F.R. §63.7515(d) which specifies that the annual tune-up of each boiler must be completed within 13 months of the previous tune-up.
- b. Boiler #10 (00B-02) has a design heat input of 275 mmBTU/hr and is not subject to a trading program for emissions of nitrogen oxides (NO<sub>x</sub>). Therefore, Boiler #10 is subject to 45CSR40 which controls ozone season NO<sub>x</sub> emissions. On January 04, 2017, the consent order CO-R40-C-2016-30 was issued to set a NO<sub>x</sub> emission limit for Boiler #10 during the ozone season and to require the use of a continuous emissions monitoring system (CEMS) in accordance with 40 C.F.R. Part 75 Subpart H. With the 2018 permit renewal, these requirements were incorporated into the operating permit as Conditions 5.1.7. and 5.4.2.

On March 15, 2018, The Chemours Company FC, LLC submitted an application for low mass emissions (LME) status for Boiler #10 to the EPA and WV DAQ. Per 40 C.F.R. §75.19(a)(1), the LME excepted methodology of §75.19(c) may be used for applicable units in lieu of a CEMS required under Part 75. Emissions data from the previous three ozone seasons (2015, 2016, and 2017 ozone seasons) was provided to demonstrate that NO<sub>x</sub> emissions from Boiler #10 during each of those periods were below 50 tpy. As no notice was received within 120 days following the date the application was received, the application was deemed certified per 40 C.F.R. §75.20(h)(3).

Therefore, the requirements of Condition 5.4.2. have been updated as follows:

- i. The requirement to operate Boiler #10 with a certified CEMS under Part 75 Subpart H, has been replaced with a requirement to use LME methodology in accordance with 40 C.F.R. §75.19(c) and Subpart H.
  - ii. A requirement was added to follow the monitoring plan submitted with the LME application and included in Appendix B of the operating permit. NO<sub>x</sub> emissions are calculated by multiplying a site site-specific emission factor (based on CEMS data from prior years) with the amount of natural gas consumed.
  - iii. The demonstration of compliance through reporting and recordkeeping of NO<sub>x</sub> mass emissions under Part 75 Subpart H has remained in Condition 5.4.2.
  - iv. The authority of Condition 5.4.2. has been updated to 45CSR§§40-6.1. and -6.2. Section 6 of 45CSR40 was amended in 2020 to include the various monitoring methodologies that may be used to demonstrate compliance with this rule. This change resulted in Subsection 6.2. containing the monitoring, recordkeeping, and reporting requirements associated with 40 C.F.R. Part 75 Subpart H.
- c. The following changes have been made to Condition 5.5.3.:
- i. As the boilers at the Belle Plant are subject to annual tune-up requirements, the references for 5-year reporting were corrected to annual reporting. (See 5.5.3.a.(xiv) and 5.5.3.c. of R30-03900001-2018 (1 of 5).)
  - ii. The requirement of paragraph b. has been removed from this renewal permit, and the subsequent paragraphs of this condition have been renumbered accordingly. In R30-03900001-2018 (1 of 5), Condition 5.5.3.b. contained the requirement to report that no deviations occurred from the work practice standards of Table 3 to Subpart DDDDD of Part 63, in accordance with Item 1.b. of Table 9 to Subpart DDDDD of Part 63. Table 9 has been updated since this condition was included in the operating permit and now specifies that this reporting requirement is for the Table 3 work practice standards for periods of startup and shutdown, which do not apply to the boilers.
  - iii. Paragraphs (1) and (2) from Condition 5.5.3.c. of R30-03900001-2018 (1 of 5) contain the requirements of 40 C.F.R. §§63.7550(b)(1) and (b)(2), which specify the compliance period and the postmark/submission date of the first compliance report. As the first annual compliance report was received by the DAQ on January 27, 2017, these requirements have been removed from this renewal.

iv. The language for the electronic reporting requirements in Condition 5.5.3.c. of this renewal has been updated in accordance with 40 C.F.R. §63.7550(h)(3).

6. Section 6.0. – Fire Water Pumps

- a. Condition 6.1.4. has been updated. 40 C.F.R. §60.4207(b) now requires Fire Water Pump FP#1 to use diesel fuel that meets the requirements of 40 C.F.R. §1090.305. As a result of this change, the standard for the sulfur content of locomotive or marine (LM) diesel fuel has been removed and the authority has been updated. The requirements of this condition applicable to nonroad (NR) diesel fuel have not changed as a result of this update.
- b. The requirement of Condition 6.1.7. has been removed from the operating permit and replaced with “Reserved.” This condition previously held the general requirements of 40 C.F.R. §63.6605 for complying with Part 63 Subpart ZZZZ. However, provided that the fire water pump engines FP#1 and FP#4D meet the definition of an emergency stationary RICE under 40 C.F.R. §63.6675 and comply with the applicable requirements of 40 C.F.R. §63.6640(f) (included in this permit as Condition 6.1.1.), the engines are subject to limited requirements under Subpart ZZZZ.
  - i. Per 40 C.F.R. §§63.6590(b)(1) and (b)(1)(i), FP#1 does not have to meet the requirements of Part 63 Subpart A nor Subpart ZZZZ, with the exception of initial notification requirements in 40 C.F.R. §63.6645(f).
  - ii. Per 40 C.F.R. §§63.6590(b)(3) and (b)(3)(iii), FP#4D does not have to meet the requirements of Part 63 Subpart A nor Subpart ZZZZ, including the initial notification requirements.

Therefore, the general requirements of 40 C.F.R. §63.6605 are not applicable to the fire water pump engines.

- c. The reference to “emergency demand response” has been removed and the language has been updated in Condition 6.1.8. in accordance with the amendments made to 40 C.F.R. §60.4211(f). The requirements of §§60.4211(f)(3) and (f)(3)(i), which relates to the use of the engine in the permitted 50 hours of non-emergency operations, have been added to the permit.
- d. The compliance requirements of 40 C.F.R. §60.4211(a) have been added to the permit as Condition 6.2.1. §60.4211(a) is applicable to FP#1 which is subject to the emission standards of Part 60 Subpart IIII. This condition requires that the permittee operate and maintain the engine in accordance with the manufacturer’s instructions and that the permittee meet any applicable requirements of 40 C.F.R. Part 1068.
- e. The requirements of 40 C.F.R. §§60.4211(g) and (g)(3) have been added to the permit as Condition 6.3.1. §60.4211(g) is a conditional provision that the permittee must meet only if the fire water pump engine FP#1 is not operated and maintained according to the manufacturer’s instructions as was specified in Condition 6.2.1.
- f. Condition 6.5.1. has been added to the permit with the provisions of 40 C.F.R. §60.4214(d). §60.4214(d) is a conditional reporting requirement from Subpart IIII of the NSPS. The facility is subject to this requirement if the fire water pump engine FP#1 is operated in the manner described in 40 C.F.R. §60.4211(f)(3)(i) and Condition 6.1.8.c.1. of this permit.

### Non-Applicability Determinations

The following requirements have been determined not to be applicable to the subject facility due to the following:

1. **40 C.F.R. Part 60 Subpart D** – *Standards of Performance for Fossil Fuel-Fired Steam Generators* – As the powerhouse boilers were constructed before August 17, 1971, the subpart is not applicable to the boilers (Emission Unit IDs: 00B-01, 00B-02, 00B-03, and 00B-04) per 40 C.F.R. §60.40(c).
2. **40 C.F.R. Part 60 Subpart Db** – *Standards of Performance for Industrial-Commercial Institutional Steam Generating Units* – As the powerhouse boilers were constructed before June 19, 1984, the subpart is not applicable to the boilers (Emission Unit IDs: 00B-01, 00B-02, 00B-03, and 00B-04) per 40 C.F.R. §60.40b(a).
3. **40 C.F.R. Part 63 Subparts F, G, and H** – *National Emission Standards for Organic Hazardous Air Pollutants (HON MACT)* – The Belle Plant contains emission units with wastewater streams that are subject to the standards

of these subparts. However, as the wastewater treatment plant subject to this operating permit does not accept any wastewater streams designated as Group 1 before pretreatment, these subparts do not apply to the emission units of Group (1 of 5).

4. **40 C.F.R. Part 63 Subpart FFFF** – *National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing* (MON MACT) – The Belle Plant contains emission units with wastewater streams that are subject to the standards of this subpart. However, as the wastewater treatment plant subject to this operating permit does not accept any wastewater streams designated as Group 1 before pretreatment, this subpart does not apply to the emission units of Group (1 of 5).

### **Request for Variances or Alternatives**

On March 19, 2018, the DAQ received an application for Boiler #10 to be operated with Low Mass Emissions (LME) methodology as an alternative for a Continuous Emissions Monitoring System (CEMS). As no notice was provided within 120 days of the submission of the completed application, this request was considered certified per 40 C.F.R. §75.20(h)(3).

### **Insignificant Activities**

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

### **Comment Period**

Beginning Date: August 1, 2023  
Ending Date: August 31, 2023

### **Point of Contact**

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

Sarah Barron  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
304/926-0499 ext. 41915  
sarah.k.barron@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)**

None.