

West Virginia Department of Environmental Protection

Austin Caperton
Cabinet Secretary

Title V Operating Permit Revision



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

Permit Action Number: MM03 **SIC:** 2821
Name of Permittee: DuPont Specialty Products USA, LLC
Facility Name/Location: Washington Works
County: Wood
Permittee Mailing Address: P.O. Box 2800 Washington WV 26181-2800

Description of Permit Revision: This modification is for the installation of two new bulk fluff silos (DBFS7-S and DBFS8-S) adjacent to the already existing silos.

Title V Permit Information:

Permit Number: R30-10700001-2018 (Part 3 of 14)
Issued Date: January 9, 2018
Effective Date: January 23, 2018
Expiration Date: January 9, 2023

Directions To Facility: From I-77, take the exit for Rt-95/Camden Avenue. Proceed West until intersection with Rt-14 then turn right. After about ¼ mile turn left onto corridor D Bypass entrance. Follow the bypass to the exit just before the bridge. Turn left onto DuPont Rd, Rt-892. Proceed approximately 1 mile to facility on the right.

THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.VA. CODE §§ 22-5-1 ET SEQ.) AND 45CSR30 - "REQUIREMENTS FOR OPERATING PERMITS." THE PERMITTEE IDENTIFIED AT THE FACILITY ABOVE IS AUTHORIZED TO OPERATE THE STATIONARY SOURCES OF AIR POLLUTANTS IDENTIFIED HEREIN IN ACCORDANCE WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

A handwritten signature in blue ink, appearing to read "Laura M. Crowder".

Laura M. Crowder
Director, Division of Air Quality

November 13, 2019
Date Issued

Permittee: **DuPont Specialty Products USA, LLC**
Facility Name: **Washington Works**
Business Unit: **Acetal Resin Production (Part 3 of 14)**
Mailing Address: **P.O. Box 2800, Washington, WV 26181-~~1217-2800~~**

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Washington, Wood County, West Virginia
Mailing Address:	P.O. Box 2800, Washington, WV 26181- 1217-2800
Telephone Number:	(304) 863-4240
Type of Business Entity:	Corporation
Facility Description:	Polyacetal Production
SIC Codes:	2821
UTM Coordinates:	442.368 km Easting • 4,346.679 km Northing • Zone 17

Permit Writer: Mike Egnor

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Control Device
R217S-007	R217E-002	Oven	1982	None
R217S-008	R217E-002	Oven	1985	None
R217S-009	R217E-003	Oven	1982	None
R217S-010	R217E-003	Oven	1985	None
R217S-011	R217E-003	Oven	1985	None
R217S-012	R217E-003	Oven	1985	None
R217S-013	R217E-003	Oven	1985	None
R217S-023	R217E-001	Hood	1989	None
R217S-024	R217E-005	Tank	2000	None
200-S-211A	200-E-211-15	Research Laboratory Hood	1960	None
200-S-211B	200-E-211-16	Research Laboratory Hood	1960	None
200-S-211C	200-E-211-17	Research Laboratory Hood	1960	None
200-S-212A	200-E-212-18	Research Laboratory Hood	1960	None
200-S-212B	200-E-212-19	Research Laboratory Hood	1960	None
200-S-213A	200-E-213-20	Research Laboratory Hood	1960	None
200-S-213B	200-E-213-21	Research Laboratory Hood	1960	None
200-S-214A	200-E-214-22	Research Laboratory Hood	1960	None
200-S-214B	200-E-214-23	Research Laboratory Hood	1960	None
<u>DBFS7-S</u>	<u>DBFS7-E</u>	<u>#7 Storage Silo</u>	<u>2019</u>	<u>DBFS7-C</u>
<u>DBFS8-S</u>	<u>DBFS8-E</u>	<u>#8 Storage Silo</u>	<u>2019</u>	<u>DBFS8-C</u>

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-1596F	August 27, 2018
R13-1849N	August 28, 2014
R13-2381 <u>H</u>	January 11, 2019 <u>July 19, 2019</u>
R13-2617 <u>J-K</u>	October 5, 2017 <u>August 5, 2019</u>

6.0 Finishing

6.1. Limitations and Standards

- 6.1.1. The Acetal Resins Finishing Area shall be limited to five (5) individual polymer extrusion lines comprised of the emission sources, pollution control equipment, and associated emission points identified in Section 1.0 – *Finishing* of this permit.
 [45CSR13, R13-2381, 4.1.1]
- 6.1.2. Fabric filters for the purpose of controlling particulate matter shall be installed and maintained so to provide the performance and minimum control efficiency documented as Bagfilter Performance and Compliance Monitoring in APPENDIX D.1 of this permit.
 [45CSR13, R13-2381, 4.1.2 and APPENDIX A of R13-2381]
- 6.1.3. The maximum hourly and annual emission rates through the emission points identified in Section 1.0 - *Finishing* of this permit shall not exceed the emission rates documented as the Maximum Permitted Emission Rates in APPENDIX D.2 of this permit. For the purposes of determining compliance with these emission limits, the hourly and annual emission rates shall be calculated by the methods defined in 6.4.3 and 6.4.4, respectively. Compliance with the hourly PM emission limits for DQC-E/DQG-E, DQE-E, DQK-E, DQM-E, DQN-E, DQO-E, DQY-E, DRA-E, DRY-E/HCL-E, DSB-E, DSN-E, DSO-E, DST-E, DSZ-E, DTF-E, DTG-E, DTH-E, DTI-E, DTJ-E, DTK-E, DTL-E, DTM-E, DTN-E, DTO-E, DTZ-E, DUB-E, DUC-E, DUD-E, DUK-E, DUQ-E, DUR-E, DUW-E, DUX-E, DUY-E, DUZ-E, DVA-E, DVI-E, DVJ-E, DVN-E, DWA-E, DWK-E, DWU-E, DWV-E, DWW-E, DWX-E, DZB-E, DZG-E, HCA-E, HDW-E, HDY-E, HEE-E, HEG-E, HEO-E, HEQ-E, HES-E, HET-E, HFP-E, HFZ-E, HGW-E, ~~and DBFS7-E, and DBFS8-E~~ from APPENDIX D.2 shall demonstrate compliance with the less stringent hourly PM emission limits from 45CSR§7-4.1.
 [45CSR13, R13-2381, 4.1.3 and APPENDIX B of R13-2381; 45CSR§7-4.1]
- 6.1.4. The total maximum annual emissions from the Finishing Area shall be limited to the pollutants and associated emission rates as shown in Table 6.1.4.

Table 6.1.4.

Limit	PM	VOCs	HAPs
Annual (tons/year)	4.36	7.37	4.69

[45CSR13, R13-2381, 4.1.4]

- 6.1.5. The total speciated HAPs emissions from the Finishing Area shall be limited to those components and associated emission rates identified in Table 6.1.5.

Table 6.1.5.

Emission Limit	Formaldehyde	Methanol	Styrene
Hourly (pounds/hour)	1.73	0.02	0.08
Annual (tons/year)	4.27	0.08	0.34

[45CSR13, R13-2381, 4.1.5]

- 6.1.6. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 - *Finishing* and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.
[45CSR13, R13-2381, 4.1.7; 45CSR§13-5.10]
- 6.1.7. The permittee shall not cause, suffer, allow or permit emissions of smoke and/or particulate matter into the open air from any process source operation which is greater than twenty (20) percent opacity, except as noted in Section 6.1.8 of this permit. (*DQC-E/DQG-E, DQE-E, DQK-E, DQM-E, DQN-E, DQO-E, DQY-E, DRA-E, DRY-E/HCL-E, DSB-E, DSN-E, DSO-E, DST-E, DSZ-E, DTF-E, DTG-E, DTH-E, DTI-E, DTJ-E, DTK-E, DTL-E, DTM-E, DTN-E, DTO-E, DTZ-E, DUB-E, DUC-E, DUD-E, DUK-E, DUQ-E, DUR-E, DUW-E, DUX-E, DUY-E, DUZ-E, DVA-E, DVI-E, DVJ-E, DVN-E, DWA-E, DWK-E, DWU-E, DWV-E, DWW-E, DWX-E, DZB-E, DZG-E, HCA-E, HDW-E, HDY-E, HEE-E, HEG-E, HEO-E, HEQ-E, HES-E, HET-E, HFP-E, HFZ-E, and HGW-E, DBFS7-E, and DBFS8-E*)
[45CSR§7-3.1]
- 6.1.8. The provisions of Section 6.1.7 in this permit shall not apply to smoke and/or particulate matter emitted from any process source operation which is less than forty (40) percent opacity for any period or periods aggregating no more than five (5) minutes in any sixty (60) minute period. (*DQC-E/DQG-E, DQE-E, DQK-E, DQM-E, DQN-E, DQO-E, DQY-E, DRA-E, DRY-E/HCL-E, DSB-E, DSN-E, DSO-E, DST-E, DSZ-E, DTF-E, DTG-E, DTH-E, DTI-E, DTJ-E, DTK-E, DTL-E, DTM-E, DTN-E, DTO-E, DTZ-E, DUB-E, DUC-E, DUD-E, DUK-E, DUQ-E, DUR-E, DUW-E, DUX-E, DUY-E, DUZ-E, DVA-E, DVI-E, DVJ-E, DVN-E, DWA-E, DWK-E, DWU-E, DWV-E, DWW-E, DWX-E, DZB-E, DZG-E, HCA-E, HDW-E, HDY-E, HEE-E, HEG-E, HEO-E, HEQ-E, HES-E, HET-E, HFP-E, HFZ-E, and HGW-E, DBFS7-E and DBFS8-E*)
[45CSR§7-3.2]
- 6.1.9. Due to unavoidable malfunction of equipment, emissions exceeding those set forth in 45CSR7 may be permitted by the Director for periods not to exceed ten (10) days upon specific application to the Director. Such application shall be made within twenty-four (24) hours of the malfunction. In cases of major equipment failure, additional time periods may be granted by the Director provided a corrective program has been submitted by the owner or operator and approved by the Director.
[45CSR§7-9.1.]
- 6.1.10. The owner or operator of a cold cleaning facility shall:
- Provide a permanent, legible, conspicuous label, summarizing the operating requirements.
 - Store waste solvent in covered containers.
 - Close the cover whenever parts are not being handled in the cleaner.
 - Drain the cleaned parts until dripping ceases.
 - If used, supply a solvent spray that is a solid fluid stream (not a fine, atomized, or shower-type spray) at a pressure that does not exceed 10 pounds per square inch gauge.

- f. Degrease only materials that are neither porous nor absorbent.

(DGA-S) [45CSR§§21-30.3.a.4., 30.3.a.5., 30.3.a.6., 30.3.a.7., 30.3.a.8., 30.3.a.9.]

6.2. Monitoring Requirements

- 6.2.1. For the purpose of determining compliance with 6.1.2, the permittee shall perform routine monitoring and record keeping in accordance to the requirements set forth in APPENDIX D.1.

- a. For those bagfilter systems employed by sources with a maximum potential PM emission rate less than 6 pounds per hour, as identified in APPENDIX D.1, periodic opacity monitoring shall be required per 6.2.2 of this permit. (~~DQC-E/DQG-E, DQE-E, DST-E, DSZ-E, DTZ-E, DUK-E, DUQ-E, DUR-E, DUW-E, DUX-E, DUY-E, DUZ-E, DVA-E, DVI-E, DVJ-E, DZB-E, HDW-E, HEG-E, HEO-E, HES-E, HET-E, and HFZ-E, DBFS7-E, and DBFS8-E~~)
- b. For all bagfilter systems operating in conjunction with sources having potential PM emissions in excess of 6 pounds per hour, monitoring and record keeping of the parametric operating ranges shall be conducted and maintained in accordance with the requirements set forth in APPENDIX D.1 of this permit. (~~DZG-E and HFP-E~~)

[45CSR13, R13-2381, 4.2.1]

- 6.2.2. For the purpose of determining compliance with the opacity limits of 45CSR§§7-3.1 and 3.2 set forth in 6.1.7 and 6.1.8, the permittee shall conduct opacity monitoring for all emission points and equipment subject to an opacity limit under 45CSR7, including the emission points addressed in 6.1.3. The opacity monitoring shall include visual emission checks for all emission points subject to a particulate matter emission limit contained in this permit. Monitoring shall be conducted at least once per month with a maximum of forty-five (45) days between consecutive readings. These checks shall be conducted by personnel trained in the practices and limitations of 40 C.F.R. 60, Appendix A, Method 22 during periods of operation of emission sources that vent from the referenced emission points for a sufficient time interval to determine if there is a visible emission. If visible emissions are identified during the visible emission check, or at any other time regardless of operations, the permittee shall conduct an opacity reading using the procedures and requirements of 45CSR7A within three (3) days of the first signs of visible emissions. A 45CSR7A evaluation shall not be required if the visible emission condition is corrected within seventy-two (72) hours after the visible emission and the sources are operating at normal conditions. (~~DQC-E/DQG-E, DQE-E, DQK-E, DQM-E, DQN-E, DQO-E, DQY-E, DRA-E, DRY-E/HCL-E, DSB-E, DSN-E, DSO-E, DST-E, DSZ-E, DTF-E, DTG-E, DTH-E, DTI-E, DTJ-E, DTK-E, DTL-E, DTM-E, DTN-E, DTO-E, DTZ-E, DUB-E, DUC-E, DUD-E, DUK-E, DUQ-E, DUR-E, DUW-E, DUX-E, DUY-E, DUZ-E, DVA-E, DVI-E, DVJ-E, DVN-E, DWA-E, DWK-E, DWU-E, DWV-E, DWW-E, DWX-E, DZB-E, HCA-E, HDW-E, HDY-E, HEE-E, HEG-E, HEO-E, HEQ-E, HES-E, HET-E, HFZ-E, and HGW-E, DBFS7-E and DBFS8-E~~)

[45CSR13, R13-2381, 4.2.2; 45CSR§30-5.1.c]

- 6.2.3. For the purpose of determining compliance with the emission limitations established in 6.1.3, 6.1.4, and 6.1.5 of this permit, the permittee shall monitor the production and material transfer rates, and the associated process conditions necessary for calculating actual hourly and annual emissions from the operation of all affected sources associated with each extrusion line, the

Emission Point Identification	Source Identification	Source Description	Control Device ID	Service (VOC/HAP/TAP)	Affected R13 Permit	Included in the Original R21 RACM Plan	Currently Subject to:		Other Applicable Regulations – Citation (MACT/BACT/NSPS/NESHAP etc.)
							R21	R27	
200-E-214-22	200-S-214A	Laboratory Hood	None	TAP-F	R13-2381	No	No	Yes	
200-E-214-23	200-S-214B	Laboratory Hood	None	TAP-F	R13-2381	No	No	Yes	
DBFS7-E	DBFS7	BF Storage Silo	None	TAP-F	R13-2381	No	No	Yes	40 CFR 63.2550(i), 40 CFR 63.6(e)(3) excluding 40 CFR 63.2525(i), 40 CFR 63.2480(a)
DBFS8-E	DBFS8	BF Storage Silo	None	TAP-F	R13-2381	No	No	Yes	40 CFR 63.2550(i), 40 CFR 63.6(e)(3) excluding 40 CFR 63.2525(i), 40 CFR 63.2480(a)

Note #1 - Formaldehyde (TAP-F) does not qualify as a MACT Wastewater under any Standard.

Note #2 - MON MACT has a process vent definition cut-off at 50 ppm. Below this there are no controls since it is not considered to be a process vent.

Note #3 - The WWTP located at Washington Works does not receive any Group 1 Streams as defined by the rule. Hence the applicability of 45 C.F.R. 63.135 and 45 CSR 63.145 are very, very limited.

Note #4 - The Affected R13 Permit refers to the most current version of that Permit.

APPENDIX D.1

APPENDIX A of R13-2381

Bagfilter Performance and Compliance Monitoring

Control Device ID	Emission Point ID	Uncontrolled PM Emissions (lb/hr)	Control Efficiency (%)	Controlled PM Emissions (lb/hr)	Compliance Monitoring		
					Activity	Parameter and/or Limit	Frequency
DQC-C	DQC-E	0.01	99.9	0.01	Opacity	20%	Monthly
DQG-C	DQG-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUK-C	DUK-E	3.76	99.9	0.04	Opacity	20%	Monthly
DTZ-C	DTZ-E	0.02	99.95	0.01	Opacity	20%	Monthly
HDW-C	HDW-E	0.01	99.9	0.01	Opacity	20%	Monthly
HEF-C	HEG-E	0.01	99.9	0.01	Opacity	20%	Monthly
HFZ-P	HFZ-E	0.01	99.9	0.01	Opacity	20%	Monthly
DWD-P	DZG-E	20.07	99.9	0.08	Pressure Drop	0-7 inches of H ₂ O	Daily Average
HEW-P	DZG-E	20.07	99.9	0.08	Pressure Drop	0-5 inches of H ₂ O	Daily Average
HER-P	DZG-E	20.07	99.9	0.08	Pressure Drop	0-25 inches of H ₂ O	Daily Average
HFO-P	HFP-E	18.56	99.9	0.02	Pressure Drop	0-15 inches of H ₂ O	Daily Average
DST-C	DST-E	0.01	99.9	0.01	Opacity	20%	Monthly
DQE-P	DQE-E	4.06	99.9	0.01	Opacity	20%	Monthly
DUR-C	DUR-E	0.03	99.0	0.01	Opacity	20%	Monthly
HEO-C	HEO-E	0.01	99.9	0.01	Opacity	20%	Monthly
HET-C	HET-E	0.01	99.9	0.01	Opacity	20%	Monthly
HES-C	HES-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUZ-C	DUZ-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUY-C	DUY-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUX-C	DUX-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUW-C	DUW-E	0.01	99.9	0.01	Opacity	20%	Monthly
DVI-C	DVI-E	0.03	99.9	0.01	Opacity	20%	Monthly
DVJ-C	DVJ-E	0.03	99.9	0.01	Opacity	20%	Monthly
DVA-C	DVA-E	0.01	99.9	0.01	Opacity	20%	Monthly
DUQ-C	DUQ-E	2.47	99.95	0.01	Opacity	20%	Monthly
DZB-C	DZB-E	0.01	99.9	0.01	Opacity	20%	Monthly
<u>DBFS7-C</u>	<u>DBFS7-E</u>	<u>1.50</u>	<u>98.0</u>	<u>0.03</u>	<u>Opacity</u>	<u>20%</u>	<u>Monthly</u>
<u>DBFS8-C</u>	<u>DBFS8-E</u>	<u>1.50</u>	<u>98.0</u>	<u>0.03</u>	<u>Opacity</u>	<u>20%</u>	<u>Monthly</u>

Emission Point	Control Device	Pollutant	Permitted Emissions	
			Hourly (lb/hr)	Annual (ton/yr)
		Total HAP	0.01	0.01
		Formaldehyde	0.01	0.01
HFP-E	HFO-P	PM ₁₀	0.02	0.09
HFV-E	None	VOC	0.01	0.01
		Total HAP	0.01	0.01
		Formaldehyde	0.01	0.01
		Styrene	0.01	0.01
HFZ-E	HFZP	PM ₁₀	0.04	0.15
HGW-E	None	PM ₁₀	0.01	0.01
		VOC	0.01	0.06
		Total HAP	0.01	0.05
		Formaldehyde	0.01	0.05
		Styrene	0.01	0.01
<u>DBFS7-E</u>	<u>DBFS7-C</u>	<u>PM₁₀</u>	<u>0.03</u>	<u>0.14</u>
		<u>VOC</u>	<u>0.01</u>	<u>0.01</u>
		<u>Total HAP</u>	<u>0.01</u>	<u>0.01</u>
		<u>Formaldehyde</u>	<u>0.01</u>	<u>0.01</u>
		<u>Methanol</u>	<u>0.01</u>	<u>0.01</u>
<u>DBFS8-E</u>	<u>DBFS8-C</u>	<u>PM₁₀</u>	<u>0.03</u>	<u>0.14</u>
		<u>VOC</u>	<u>0.01</u>	<u>0.01</u>
		<u>Total HAP</u>	<u>0.01</u>	<u>0.01</u>
		<u>Formaldehyde</u>	<u>0.01</u>	<u>0.01</u>
		<u>Methanol</u>	<u>0.01</u>	<u>0.01</u>