

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 and MM04                      **SIC:** 2821  
**Name of Permittee:** DuPont Specialty Products US, LLC  
**Facility Name/Location:** Washington Works  
**County:** Wood County  
**Facility Address:** P. O. Box 2800, Washington, WV 26181-2800  
**Description of Permit Revision:** Replacement of Air Filters (S293-C-04A, S293-C-04C, and S293-C-04D) with Cyclone Separators of equal removal efficiency. Replacement of 2 oversized 4.8 million BTU/hr natural gas fired hot water generators with three 0.399 million BTU/hr natural gas fired hot water tanks (S293-S-060, S293-S-061, and S293-S-062). These heaters will vent through new emission points (S293-E-060, S293-E-061, and S293-E-062). Replacement of an existing High Efficiency dry paper filter (HEAF) (S293-C-03C) control device with a wet recirculating type scrubber for the extrusion die vent (S293-S-02C).

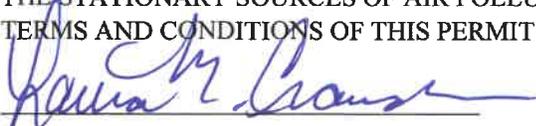
**Title V Permit Information:**

**Permit Number:** R30-10700001-2015 (Part 8 of 14)  
**Issued Date:** November 23, 2015  
**Effective Date:** December 7, 2015  
**Expiration Date:** November 23, 2020

**Directions To Facility:** 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.

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THIS PERMIT REVISION IS ISSUED IN ACCORDANCE WITH THE WEST VIRGINIA AIR POLLUTION CONTROL ACT (W.V.A. 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.

  
Laura M. Crowder  
Director, Division of Air Quality

July 29, 2019  
Date Issued

West Virginia Department of Environmental Protection  
Division of Air Quality

Earl Ray Tomblin  
Governor

Randy C. Huffman  
Cabinet Secretary

# Permit to Operate



Pursuant to  
**Title V**  
of the Clean Air Act

*Issued to:*

**E. I. du Pont de Nemours and Company**

**DuPont Specialty Products US, LLC**

Washington Works

Specialty Compounding Division (Part 8 of 14)

R30-10700001-2015

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*William F. Durham*

*Director*

*Issued: November 23, 2015 • Effective: December 7, 2015*  
*Expiration: November 23, 2020 • Renewal Application Due: May 23, 2020*

Permit Number: **R30-10700001-2015**

Permittee: **E. I. du Pont de Nemours and Company**

**DuPont Specialty Products US, LLC**

Facility Name: **Washington Works**

Business Unit: **Specialty Compounding Division (Part 8 of 14)**

Mailing Address: **P.O. Box 2800, Washington, WV 26181-2800**

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*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.*

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Facility Location:	Washington, Wood County, West Virginia
Mailing Address:	P. O. Box 2800, Washington, WV 26181-2800
Telephone Number:	(304) 863-4240
Type of Business Entity:	Corporation
Facility Description:	Production of polymer blends and mixtures
SIC Codes:	2821
UTM Coordinates:	422.27 km Easting • 4,346.57 km Northing • Zone 17

Permit Writer: Natalya V. Chertkovsky-Veselova

*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.*

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*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.*

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**APPENDIX A: R13-1533 Attachments**

**APPENDIX B: R13-2617 Attachment**

**1.0 Emission Units and Active R13, R14, and R19 Permits****1.1 Emission Units**

<b>Emission Point ID</b>	<b>Control Device</b>	<b>Emission Unit ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>
S293-E-049 General Area	S293-C-031 Baghouse #1	S293-S-038	Area Hoods	1991
S293-E-078	S293-C-078	S293-S-078	Miscellaneous Hoods	1991
S293-E-050	S293-C-050 Baghouse #2	S293-S-075	Blend Scales	1999
		S293-S-077	Tornado Mill	1999
S293-E-01A	S293-C-01A Bag Filter	S293-S-01A	Bulk Storage Silo	1991
S293-E-01B	S293-C-01B Bag Filter	S293-S-01B	Bulk Storage Silo	1991
S293-E-01C	S293-C-01C Bag Filter	S293-S-01C	Bulk Storage Silo	1991
S293-E-01D	S293-C-01D Bag Filter	S293-S-01D	Bulk Storage Silo	1991
S293-E-01E	S293-C-01E Bag Filter	S293-S-01E	Bulk Storage Silo	1991
S293-E-01F	S293-C-01F Bag Filter	S293-S-01F	Bulk Storage Silo	2011
S293-E-02A	None	S293-S-02A	SA Extruder – Vacuum Port	1991
S293-E-03A	S293-C-03A Wet Venturi Scrubber (Replaced 2018)	S293-S-02A	Extruder Die*	1991 and 2018
S293-E-02B	None	S293-S-02B	SB Extruder – Vacuum Port	1991
S293-E-03B	S293-C-03B Wet Venturi Scrubber	S293-S-02B	Extruder Die*	2016
S293-E-02C	None	S293-S-02C	SC Extruder – Vacuum Port	1991
S293-E-03C	S293-C-03C <del>Air Filter (HEAF)</del> <u>Wet recirculating type venturi scrubber</u>	S293-S-02C	Extruder Die*	1991
S293-E-02D	None	S293-S-02D	SD Extruder – Vacuum Port	1991

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Year Installed
S293-E-03D	S293-C-03D Wet Venturi Scrubber	S293-S-02D	Extruder Die*	2015
S293-E-02F	None	S293-S-02F	SF Extruder – Vacuum Port	1995
S293-E-03F	S293-C-03F Air Filter (HEAF)	S293-S-02F	Extruder Die	1995
S293-E-04A	S293-C-04A Air Filter	S293-S-03A	Screen A	1991
	Cyclone Separator	S293-S-14A	Receiver Bin A	1991
	None	S293-S-10A	Extruder Pelletizer*	1991
S293-E-04B	S293-C-04B Cyclone Separator	S293-S-03B	Screen B	1991
		S293-S-14B	Receiver Bin B	1991
	None	S293-S-10B	Extruder Pelletizer*	1991
S293-E-04C	S293-C-04C Air Filter	S293-S-03C	Screen C	1991
	Cyclone Separator	S293-S-14C	Receiver Bin C	1991
	None	S293-S-10C	Extruder Pelletizer*	1991
S293-E-04D	S293-C-04D Air Filter	S293-S-03D	Screen D	1991
	Cyclone Separator	S293-S-14D	Receiver Bin D	1991
	None	S293-S-10D	Extruder Pelletizer*	1991
S293-E-04F	S293-C-04F Air Filter	S293-S-03F	Screen F	1995
	Cyclone Separator	S293-S-14F	Receiver Bin F	1995
	None	S293-S-10F	Extruder Pelletizer*	1991
S293-E-05A	None	S293-S-04A	Impact Separator A	1991
S293-E-05B	None	S293-S-04B	Impact Separator B	1991
S293-E-05C	None	S293-S-04C	Impact Separator C	1991
S293-E-05D	None	S293-S-04D	Impact Separator D	1991
S293-E-05F	None	S293-S-04F	Impact Separator F	1995
S293-E-06A	None	S293-S-06A	SA Quench Bath	1991
		S293-S-07A	SA Plop Buggy	2011
S293-E-06B	None	S293-S-06B	SB Quench Bath	1991
		S293-S-07B	SB Plop Buggy	2011
S293-E-06C	None	S293-S-06C	SC Quench Bath	1991

Emission Point ID	Control Device	Emission Unit ID	Emission Unit Description	Year Installed
		S293-S-07C	SC Plop Buggy	2011
S293-E-06D	None	S293-S-06D	SD Quench Bath	1991
		S293-S-07D	SD Plop Buggy	2011
S293-E-06F	None	S293-S-06F	SD Quench Bath	1991
		S293-S-07F	SD Plop Buggy	2011
S293-E-042	None	S293-S-070	Dinamec Oven	1996
S293-E-066	None	S293-S-066	Cold Solvent Cleaner	1991
S293-E-067	None	S293-S-067	Rework Conveyor	2006
S293-E-068	None	S293-S-068	Packaging Transfer Station	2006
S293-E-048	None	S293-S-048	#1 Hot Water Generator, Natural gas fired; 4.8 MM Btu/hr	1990
S293-E-049	None	S293-S-049	#2 Hot Water Generator, Natural gas fired; 4.8 MM Btu/hr	1990
<u>S293-E-060</u>	<u>None</u>	<u>S293-S-060</u>	<u>Hot Water Generator, Natural gas fired, 0.40 MM Btu/hr</u>	<u>2019</u>
<u>S293-E-061</u>	<u>None</u>	<u>S293-S-061</u>	<u>Hot Water Generator, Natural gas fired, 0.40 MM Btu/hr</u>	<u>2019</u>
<u>S293-E-062</u>	<u>None</u>	<u>S293-S-062</u>	<u>Hot Water Generator, Natural gas fired, 0.40 MM Btu/hr</u>	<u>2019</u>

\* As a result of the modification from Permit R13-1533J, the Extruder Cutter/Pelletizers which had currently vented to S293-E-03(A-D) were to be rerouted to S293-E-04(A-D). However, this change has not yet occurred. When this change is made, the facility is required to provide notice within 30 days to DAQ.

## 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
R13-1533M	July 20, 2018
<u>R13-1553N</u>	<u>May 30, 2019</u>
R13-2617I	December 8, 2014

### 3.5. Reporting Requirements

- 3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.  
[45CSR§30-4.4. and 5.1.c.3.D.]
- 3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.  
[45CSR§30-5.1.c.3.E.]
- 3.5.3. Except for the electronic submittal of the annual compliance certification and semi-annual monitoring reports to the DAQ and USEPA as required in 3.5.5 and 3.5.6 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, or mailed first class or by private carrier with postage prepaid to the address(es), or submitted in electronic format by e-mail as set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

#### DAQ:

Director  
WVDEP  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

#### US EPA:

~~Associate Director~~ **Section Chief**  
~~Office of Air Enforcement and Compliance Assistance (3AP20)~~  
U. S. Environmental Protection Agency  
Region III  
**Enforcement and Compliance Assurance**  
**Division Air Section (3ED21)**  
1650 Arch Street  
Philadelphia, PA 19103-2029

#### DAQ Compliance and Enforcement<sup>1</sup>:

DEPAirQualityReports@wv.gov

<sup>1</sup>For all self-monitoring reports (MACT, GACT, NSPS, etc.), stack tests and protocols, Notice of Compliance Status reports, Initial Notifications, etc.

- 3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.  
[45CSR§30-8.]
- 3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The

Emission Point ID Number	Control Device ID Number	Emission Source Name and ID No.	Pollutant	Maximum Emissions		
				Lb/hr	(tpy)	
S293-E-03C	S293-C-03C	Extrusion Die Exhaust S293-S-02C	PM	0.08	0.34	
			PM <sub>10</sub>	0.08	0.34	
			VOC	0.08	0.32	
			CO	0.03	0.11	
			Formaldehyde	<del>0.08</del> 0.01	<del>0.32</del> 0.04	
			Total HAPs <sup>1</sup>	<del>0.11</del> 0.04	<del>0.45</del> 0.17	
S293-E-03B S293-E-03D	S293-C-03B S293-C-03D	Extrusion Die Exhaust (Each) S293-S-02B S293-S-02D	PM	0.08	0.34	
			PM <sub>10</sub>	0.08	0.34	
			VOC	0.08	0.32	
			CO	0.03	0.11	
			Formaldehyde	0.01	0.04	
			Total HAPs <sup>1</sup>	0.04	0.17	
S293-E-04A S293-E-04B S293-E-04C S293-E-04D	S293-C-04A S293-C-04B S293-C-04C S293-C-04D	Cooler/Screeners (Each) S293-S-03A S293-S-03B S293-S-03C S293-S-03D	PM	0.54	2.34	
			PM <sub>10</sub>	0.03	0.12	
			PM <sub>2.5</sub>	0.02	0.06	
			Formaldehyde	0.09	0.37	
		Receiver Bins S293-S-14A S293-S-14B S293-S-14C S293-S-14D	Pelletizer Exhaust S293-S-10A S293-S-10B S293-S-10C S293-S-10D			
S293-E-05A S293-E-05B S293-E-05C S293-E-05D	None	Impact Separator (Each) S293-S-04A S293-S-04B S293-S-04C S293-S-04D	PM	0.02	0.05	
			Formaldehyde	0.01	0.02	
S293-E-06A S293-E-06B S293-E-06C S293-E-06D	None	Quench Bath (Each) S293-S-06A S293-S-06B S293-S-06C S293-S-06D	Acetaldehyde	0.01	0.01	
			Carbon Monoxide	0.01	0.01	
			Formaldehyde	0.02	0.04	
			PM <sub>10</sub>	0.18	0.03	

S293-E-05F	S293-S-04F	3
S293-E-06F	S293-S-06F, S293-S-07F	6
S293-E-042	S293-S-070	2.4
S293-E-067	S293-S-067	10
S293-E-068	S293-S-068	3

[45CSR§7-4.1]

- 4.1.13. 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]

- 4.1.14. The Permittee shall meet the following requirements for the operation of wet scrubbers S293-C-03A, S293-C-03B, S293-C-03C, and S293-C-03D based on a sixty minute rolling average while material is being produced:

- a) Minimum pressure drop across the venturi throat of 26 inches water.
- b) Minimum liquor flow rate to the scrubbers of 20 12 gal/min.

[45CSR13, R13-1533, 4.1.12]

## 4.2. Monitoring Requirements

- 4.2.1. For the purpose of determining compliance with the opacity limits set forth in Sections 4.1.5, 4.1.6, and 4.1.7 the permittee shall conduct visual emissions monitoring for all emission points and equipment subject to a visual emissions or opacity limit under 45CSR7, including, the emission points addressed in Section 4.1.1 and S293-E-050, S293-E-02F, S293-E-03F, S293-E-04F, S293-E-05F, S293-E-06F, S293-E-042, S293-E-067 and S293-E-068.

Monitoring shall be conducted at least once per month ~~with a maximum of forty five (45) days between consecutive readings~~. These checks shall be performed during periods of normal 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 a visual emission evaluation per 45CSR7A within three (3) days of the first identification 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.

*(S293-E-02A, S293-E-02B, S293-E-02C, S293-E-02D, S293-E-03A, S293-E-03B, S293-E-03C, S293-E-03D, S293-E-04A, S293-E-04B, S293-E-04C, S293-E-04D, S293-E-05A, S293-E-05B, S293-E-05C, S293-E-05D, S293-E-049, S293-E-050, S293-E-02F, S293-E-03F, S293-E-04F, S293-E-05F, S293-E-06F, S293-E-042, S293-E-067 and S293-E-068)*

[45CSR13, R13-1533, 4.2.1; 45CSR§30-5.1.c]

- 4.2.2. The Permittee shall continuously monitor the pressure drop across the venturi throat and liquor flow rates to Scrubbers S293-C-03A, S293-C-03B, S293-C-03C, and S293-C-03D during periods of operation.  
[45CSR13, R13-1533, 4.2.2]

### 4.3. Testing Requirements

- 4.3.1. **Stack testing.** At such reasonable times as the Secretary may designate, the permittee may be required to conduct or have conducted stack tests to determine the particulate matter loading in exhaust gases when the Secretary has the reason to believe that an emission limitation is being violated. For cause, the Secretary may request the permittee to install such stack gas monitoring devices as the Secretary deems necessary to determine continuing compliance. The data from such devices shall be readily available for review on-site or at such other reasonable location that the Secretary may specify. At the request of the Secretary, such data shall be made available for inspection or copying and the Secretary may require periodic submission of excess emission reports. Compliance with this streamlined requirement assures compliance with 45CSR§7-8.1 and 45CSR§13-6.1. [45CSR13, R13-1533, 4.3.1; 45CSR§7-8.1; 45CSR§13-6.1]
- 4.3.2. **Compliance testing.** Any such test to determine compliance with particulate matter limitations set forth in Section 4.1.1 shall be conducted in accordance with Method 5 of 40 C.F.R. 60, Appendix A, Method 201 or 201A of 40 C.F.R. 51, or other such appropriate method approved by the Secretary. All such compliance tests must consist of not less than three (3) test runs; any test run duration shall not be less than sixty (60) minutes and no less than thirty (30) standard cubic feet of exhaust gas must be sampled during each test run. Such tests shall be conducted under such reasonable operating conditions as the Secretary may specify. The Secretary, or a duly authorized representative, may option to witness or conduct such stack tests. Should the Secretary exercise this option to conduct such tests, the registrant shall provide all necessary sampling connections and sampling ports located in a manner as the Secretary may require, power for test equipment and required safety equipment in place such as scaffolding, railings and ladders in order to comply with generally accepted good safety practices.  
[45CSR13, R13-1533, 4.3.2; 45CSR§7-8.1]
- 4.3.3. Any stack serving any process source operation or air pollution control device on any process source operation shall contain flow straightening devices or a vertical run of sufficient length to establish flow patterns consistent with acceptable stack sampling procedures.  
[45CSR13, R13-1533, 4.3.3; 45CSR§7-4.12]
- 4.3.4. **Opacity testing.** Any test to determine compliance with the visible emission (opacity) limitations set forth in Sections 4.1.5, 4.1.6, and 4.1.7 shall be conducted by personnel appropriately trained for the task. Personnel performing the visual emissions observation shall be trained and familiar with the limitations and restrictions associated with 40 C.F.R. 60, Appendix A, Method 22. Any person performing an opacity observation for compliance assessment in the event of visible emissions must be a certified visible emission observer in accordance with 45CSR7A – “Compliance Test Procedures for 45CSR7 – *To Prevent and Control Particulate Air Pollution from Manufacturing Process Operations.*” Nothing in this section, however, shall preclude any permittee or the Secretary from using opacity data from a properly installed, calibrated, maintained and operated continuous opacity monitor as evidence to demonstrate compliance or a violation of visible emission requirements. If continuous opacity monitoring data results are submitted when determining compliance with visible emission limitations for a period of time during which 45CSR7A or Method 22 data indicates noncompliance, the 45CSR7A or Method 22 data shall be used to determine compliance with the visible emission limitations.  
[45CSR13, R13-1533, 4.3.4]

**6.0 Hot Water Generators (~~S293-S-048 and S293-S-049~~ S293-S-060, S293-S-061, and S293-S-062) Requirements**

**6.1. Limitations and Standards**

- 6.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.  
[45CSR§2-3.1]

**6.2. Monitoring Requirements**

- 6.2.1. Compliance with the visible emission requirements of 6.1.1 shall be determined in accordance with 40 CFR Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of subsection 3.1. Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.  
[45CSR§2-3.2]

**6.3. Testing Requirements**

- 6.3.1. None.

**6.4. Recordkeeping Requirements**

- 6.4.1. None.

**6.5. Reporting Requirements**

- 6.5.1. None.

**6.6. Compliance Plan**

- 6.6.1. None.