

# 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 December 14, 2016.

Permit Number: **R30-10700001-2016**  
Application Received: **March 30, 2017**  
Plant Identification Number: **107-00001**  
Permittee: **E. I. du Pont de Nemours and Company**  
Facility Name: **Washington Works**  
Manufacturing Unit: **Nylon Resins Production (Part 5 of 14)**  
Mailing Address: **P. O. Box 2800, Washington, WV 26181-2800**

Permit Action Number: MM01    Revised: July 31, 2017

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Physical Location: Washington, Wood County, West Virginia  
UTM Coordinates: 442.27 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.

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### Facility Description

Description of proposed change of the MPW-1 (melt process):

MPW-1 is a "melt process" for continuous production of nylon resins that is operated at DuPont Washington Works. It was originally constructed in 1968 and has not been expanded or modified since that time so no Rule 13 permits are applicable. The related but separate process, MPW-2 was constructed in 1977 and is subject to R13-1686G.

For the present process arrangement, molten polymer strands flow from the continuous process die to a quench bath then through a cutter to produce pellets. The pellets pass through a screener which separates oversize and undersize pellets from the correct size product. Most of the dust produced by the cutter is collected in the undersize bin, but some is emitted to the ambient air of the process room.

The intent of this project is to replace the screener with a device that will allow for cooling air to be pulled through the pellets as they pass through the device, making it a cooler/screener, in order to remove additional heat from the product pellets. The change in air flow will cause all of the dust to be collected and exhausted with the cooling air. The air will pass through a dual cyclone that provides 99% efficiency for the majority of the particulate. Because the cyclone precedes the air blower and must operate properly in order for the blower to remain in operation, it is considered an inherent device and is not an add-on air pollution control device.

The exhaust point from the blower will be a new emission point, to be designated as Z707. The source of emissions are the pelletization and cooler/screener (Z707S). DuPont believes that a construction permit is not required before the changes are made because the associated emissions of PM and PM-10, after product recovery but without a control device, are well below the thresholds of 6 pph and 10 tpy of regulated pollutants and do not include any HAP or TAP compounds. The Permittee received a Permit Determination (PD17-021) that no NSR permit was needed for these changes, though they would need to get a minor modification to their Title V Permit.

### Emissions Summary

The minor modification MM01 results in changes to emissions from the addition of an emission point (Z707) to move particulate matter from the pelletization operation of the MPW-1 process to the outside instead of to the inside ambient air. This process was approved in PD17-021. The change in emissions as a result of this modification are summarized below:

Overall

Regulated Pollutant	Emissions Change	
	lb/hr	tpy
PM <sub>10</sub>	0.04	0.16

### Title V Program Applicability Basis

With the proposed changes associated with this modification of the Nylon Area Permit, this facility as a whole 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 of aggregated HAPs. DuPont 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:

Federal and State:	45CSR7 45CSR30	Particulate Matter from Manufacturing Processes Operating Permit Requirement
State Only:	N/A	

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the draft Title V

permit that is enforceable by the State but is not Federally-enforceable is identified in the draft 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	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
None	N/A	

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

#### MM01

The Part 5 of 14 Nylon Resin Manufacturing unit MPW-1 is a melt process that produces nylon resins. During the pelletization process, there were particulate matter emissions that were emitted into the building. The facility has added a device to pull air from this process and vent it outside of the building into the open air. The emission point (Z707) and emission source (Z707S) have been added to the equipment table. The two cyclones (XQ465-21-2) are inherent to the design and are not considered air pollution control devices. 45CSR§7-4.1 limits the amount of particulate matter based upon the type and throughput of the manufacturing process. Since the pelletizer is a physical operation, the Rule 7 limit is based on a Type A source. The Particulate Matter limit for this process is 7.8 lbs/hr based upon a throughput of 7,800 lbs/hr. This has been added to Condition 6.1.4. 45CSR§7-3.1 limits the opacity to 20%, except as noted in 45CSR§7-3.2. This emission point has been added to the limit as given in Condition 6.1.3. The monitoring requirements are listed in Condition 6.2.1 and recordkeeping requirements are provided in Condition 6.4.1.

### Non-Applicability Determinations

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

N/A

### 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: N/A

Ending Date: N/A

### **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 57<sup>th</sup> 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)**

N/A