

# Fact Sheet



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

Permit Number: **R30-10700001-2009 (9 of 14)**  
Application Received: December 9, 2008  
Plant Identification Number: **107-00001**  
Permittee: **E. I. duPont de Nemours & Company, Inc.**  
Facility Name: **Washington Works**  
Business Unit: **Filaments Production**  
Mailing Address: **P. O. Box 1217, Washington, WV 26181-1217**

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Physical Location:	Washington, Wood County, West Virginia
UTM Coordinates:	422.27 km Easting • 4,346.57 km Northing • Zone 17
Directions:	Route 68 west from Parkersburg to intersection of Route 862. Continue west on Route 862 with the plant being on the north side about one mile from the intersection of Routes 68 and 862.

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### **Facility Description**

In the Filaments Production Unit (Part 9 of 14), various thermoplastic resins are melted and extruded to form monofilament and layered resin strand for use as thread or bristle. Resin pellets, consisting of any number of resins, are first blended in feed hoppers and/or tote bins to produce a homogeneous feed material. The bin or hopper is then directly placed upon any one of 19 extruders and the material fed directly from the bin to the extruder. The extruder melt-blends the polymers and extrudes the polymer into a long strand. After extrusion the strands are fed to a draw machine (which stretches and decreases the diameter of the strand). Finishing materials and surface additives are placed on the strand and it is fed to a conditioning unit to set the final properties of the strand. The final strand is either wound onto spools, packaged as "hanks" of fiber, or formed into bundles for shipment to off-site customers.

DuPont Washington Works has divided the Title V Permit Application into the following fourteen separate business units for which each will receive a Title V Permit:

Acrylic Resin Production	Part 1 of 14
Fluoropolymer Production	Part 2 of 14
Acetal Resin Production	Part 3 of 14
Polyvinyl Butyral Production	Part 4 of 14
Nylon Resins Production	Part 5 of 14
Engineering Polymers Compounding Production - East	Part 6 of 14
Engineering Polymers Compounding Production - West	Part 7 of 14
Specialty Compounding Production	Part 8 of 14
Filaments Production	Part 9 of 14
Power and Service Support Facilities	Part 10 of 14
Research and Development (R&D)	Part 11 of 14
Facilities, Construction and Support (FC&S)	Part 12 of 14
Central Laboratory Services	Part 13 of 14
Central Maintenance Services	Part 14 of 14

## **Emissions Summary**

### **Title V Program Applicability Basis**

Due to the facility-wide 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 aggregate 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.

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.
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR§21-30	Control of VOC emissions from Solvent Metal Cleaning.
	45CSR30	Operating permit requirement.
State Only:	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	45CSR4	No objectionable odors.

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> )
N/A	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

This is a renewal of the Title V permit. The following changes have been made to the most recent version of this Permit.

1. *45CSR7 – To Prevent and Control Particulate Matter Pollution From Manufacturing and Associated Operations*  
For Emission Point F06, the original application in the initial Title V Permit listed the throughput as 100 pounds per hour. The Permittee has corrected this in the renewal application, and states that the correct throughput is 200 pounds per hour. As a result, the 45CSR§7- 4.1 particulate matter limit for this emissions point has been changed to 0.24 lbs/hr. The initial Title V Permit had a value of 0.12 lbs/hr based upon a throughput of 100 pounds per hour. The corrected emission limit is given in Condition 4.1.2.
2. *45CSR30 – Requirements for Operating Permits*  
Since the issuance of the initial permit, some emission points were eliminated due to shutdowns and other modifications to the operations of the facility. The emission points F04, F10, F28, F15, F40, and F35 have been removed from this permit. Additionally, the Spinner #13 Die has been separated from the #13 Conditioner as a separate emission point. These are listed as Emission Units F46 and F42, respectively.

### 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 K - "Standards of Performance For Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After June 11, 1973, and Prior to May 19, 1978." There are no storage tanks in the Filaments manufacturing area subject to this requirement.
- b. 40 C.F.R. 60, Subpart Ka - "Standards of Performance for Storage Vessels For Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and

Prior to July 23, 1984.” There are no storage tanks in the Filaments manufacturing area subject to this requirement.

- c. 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.” There are no storage tanks in the Filaments manufacturing area subject to this requirement.
- d. 40 C.F.R. 60, Subpart VV - “Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry.” The Filaments manufacturing area does not produce as intermediates or final products any of the materials listed in 40 C.F.R. §60.489.
- e. 40 C.F.R. 60, Subpart DDD - “Standards of Performance for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry.” The Filaments manufacturing area does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
- f. 40 C.F.R. 60, Subpart HHH – “Standards of Performance for Synthetic Fiber Production Facilities.” The Filaments manufacturing area does not produce filaments which are solvent-spun.
- g. 40 C.F.R. 60, Subpart RRR - “Standards of Performance for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.” Filaments manufacturing area does not produce any of the chemicals listed in 40 C.F.R. §60.707 as a product, co-product, by-product, or intermediate.
- h. 40 C.F.R. 61, Subpart V - “National Emission Standards for Equipment Leaks (Fugitive Emissions Sources).” Applies to sources in VHAP service as defined in 40 C.F.R. §61.241. VHAP service involves chemicals that are not used in a manner that qualifies them under the rule in the Filaments manufacturing area.
- i. 40 C.F.R. 63, Subpart H - “National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks.” 40 C.F.R. 63 Subparts F, G, and H do not apply to the Filaments manufacturing area, as it does not meet the criteria in 40 C.F.R. §§63.100(b)(1), (b)(2), and (b)(3).
- j. 40 C.F.R. 63, Subpart JJJ - “National Emission Standards for Hazardous Air Pollutant Emissions: Group IV Polymers and Resins. The Filaments manufacturing area does not produce the materials listed in 40 C.F.R. §63.1310.
- k. 40 C.F.R.63, Subpart FFFF – “National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing.” The Filaments production area does not manufacture any material or family of materials defined in §§63.2435(b)(1)(i) through (v).
- l. 40 C.F.R. 63, Subpart MMMM - “National Emission Standards for Hazardous Air Pollutants: Surface Coating of Miscellaneous Metal Parts and Products.” There are no surface coating activities conducted in Filaments manufacturing area subject to the requirements of this rule.
- m. 40 C.F.R. 63, Subpart OOOO – “National Emission Standards for Hazardous Air Pollutants: Printing, Coating, and Dyeing of Fabrics and Other Textiles.” There are coating and printing, slashing, or dyeing and finishing operations conducted in the Filaments manufacturing area that use materials containing organic HAPs as defined by §63.4371.
- n. 40 C.F.R. 63, Subpart PPPP – “National Emission Standards for Hazardous Air Pollutants: Surface Coating of Plastic Parts and Products.” The Filaments manufacturing area does not

- produce as an intermediate or final product that meets the definition of “surface coated” plastic part.
- o. 40 C.F.R. 63, Subpart WWWW - “National Emission Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production.” The Filaments manufacturing area does not engage in reinforced plastics composites production as defined in 40 C.F.R. §63.5785 and does not manufacture composite material as defined in 40 C.F.R. §63.5935.
  - p. 40 C.F.R. 63, Subpart HHHHH – “National Emission Standards for Hazardous Air Pollutants: Miscellaneous Coating Manufacturing.” The Filaments manufacturing area does not produce, blend, or manufacture coatings as part of the manufacturing process.
  - q. 40 C.F.R. 82, Subpart B - “Protection of Stratospheric Ozone.” Requires recycling of Chlorofluorocarbons (CFCs) from motor vehicles and that technicians servicing equipment need to be licensed. The Filaments manufacturing area does not conduct motor vehicle maintenance involving CFCs on site.
  - r. 40 C.F.R. 82, Subpart C – “Protection of Stratospheric Ozone.” Bans non-essential products containing Class I substances and bans non-essential products containing or manufactured with Class II substances. The Filaments manufacturing area does not use, manufacture, nor distribute these materials.
  - s. 45CSR2 – “To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers.” The Filaments manufacturing area does not contain any fuel burning units.
  - t. 45CSR§7-3.7 – “To Prevent and Control Particulate Matter Air Pollution from Manufacturing Processes and Associated Operations; Storage Structure Requirements.” The Filaments manufacturing area does not have any storage structures required to be fully enclosed and equipped with a particulate matter control device.
  - u. 45CSR10 – “To Prevent and Control Air Pollution from the Emission of Sulfur Oxides.” The Filaments manufacturing area does not contain any fuel burning units subject to the sulfur dioxide weight emission standards of 45CSR§10-3. Also, per 45CSR§10-4.1.e, manufacturing process source operations in the Filaments manufacturing area are exempt from the sulfur dioxide concentration limits of 45CSR§10-4.1 because the potential to emit of sulfur dioxide is less than 500 pounds per year.
  - v. 45CSR16 – “Standards of Performance for New Stationary Sources Pursuant to 40 C.F.R. 60.” Filaments manufacturing area is not subject to any requirements under 40 C.F.R. 60.
  - w. 45CSR17 – “To Prevent and Control Particulate Matter Air Pollution from Materials Handling, Preparation, Storage and Other Sources of Fugitive Particulate Matter.” Per 45CSR§17-6.1, the Filaments manufacturing area is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.
  - y. 45CSR§21-40 – “Other Facilities that Emit Volatile Organic Compound (VOC).” None of the emission sources in the Filaments manufacturing area have maximum theoretical emissions of 6 pounds per hour or more and are not subject to the requirements of this section.
  - z. 45CSR27 – “To Prevent and Control the Emission of Toxic Air Pollutants.” The Filaments manufacturing area does not have emission sources of toxic air pollutants as listed in 45CSR27.

- aa. 45CSR34 – “Emission Standards for Hazardous Air Pollutants for Source Categories Pursuant to 40 C.F.R. 63.” The Filaments manufacturing area is not subject to any requirements under 40 C.F.R. 63.
- bb. **40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)**

The Business Group 9 of 14 Filaments Production at the facility does not have a pollutant specific emissions unit (PSEU) for any pollutant meeting the applicability requirements of 40 C.F.R. §64.2 and therefore does not need to have submitted a CAM plan in accordance with the CAM rule.

This facility is not subject for the following reasons:

40CFR§64.2(a)(2) - The Business Group 9 of 14 Filaments Production at the facility does not use any control devices to meet any emission limitations or standards.

### **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: April 28, 2009

Ending Date: May 28, 2009

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

Mike Egnor  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **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.

### **Point of Contact**

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

### **Response to Comments (Statement of Basis)**

Not applicable.