

# Fact Sheet



## For Final Reopening for Cause Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Reopening for Cause, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on July 10, 2012.

Permit Number: **R30-10700001-2012**  
Application Received: **January 7, 2014**  
Plant Identification Number: **03-54-107-00001**  
Permittee: **E. I. du Pont de Nemours and Company**  
Facility Name: **Acetal Resin Production (Part 3 of 14)**  
Mailing Address: **P.O. Box 1217, Washington, WV 26181-1217**

Permit Action Number: *RE01*      Revised: *July 8, 2014*

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Physical Location:                      Washington, Wood County, West Virginia  
UTM Coordinates:                      442.368 km Easting • 4,346.679 km Northing • Zone 17  
Directions:                                From I-77, take the Route 50 bypass around Parkersburg towards Ohio. Take the last exit prior to the bridge exit from the Route 50 Bypass onto DuPont Road. At the light turn left onto DuPont road. The facility is on the right approximately ½ miles from the turn.

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### Facility Description

The Acetal Resin Business Unit permit is divided into three sections: Formaldehyde, Polymerization, and Finishing. In the Formaldehyde section, liquid methanol is vaporized and mixed with process gas (a mixture of recycle gas from the absorber and fresh air) to create formaldehyde gas. The formaldehyde gas is then fed to an absorber train where the formaldehyde is condensed and absorbed in water to produce an aqueous formaldehyde solution. The formaldehyde solution is then stored for internal consumption.

The polymerization of acetal resin homopolymer starts with the purification of the formaldehyde monomer stream. This feedstock is fed to a polymerizer. The product of the polymerizer is a homopolymer and solvent slurry mixture. The mixture produced in the polymerizer is fed to a separation device that isolates the solids and drops them into a conveyor/dryer system.

The solids are then placed into a set of intermediate storage bins. The final product from the polymerization process is called fluff. This fluff material is transferred to bins for the Finishing Area. The Finishing Area converts the fluff into pelletized polymer that is delivered to customers.

In the Finishing Area the pelletized polymer is produced on five extrusion lines. These extrusion lines provide various product enhancements through the use of additives, heat, and pressure. The fluff and additives are fed directly to extruders to make blends for the production of a final product. The pelletized polymer is shipped to customers.

### **Emissions Summary**

There are no changes in potential or actual emissions associated with this permitting action.

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

With the proposed changes associated with this permitting action, this facility maintains the facility-wide potential to emit over 100 tons per year of criteria pollutants, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs. Therefore, 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 reopening for cause permitting action has been found to be subject to the following applicable rules:

|                    |                             |  |
|--------------------|-----------------------------|--|
| Federal and State: | 45CSR30                     | Operating permit requirement.  |
|                    | 45CSR34                     | Emission Standards for Hazardous Air Pollutant   |
|                    | 40 C.F.R. 63, Subpart DDDDD | National Emission Standards for Hazardous Air Pollutants:<br>Industrial/Commercial/Institutional Boilers and Process Heaters |
| State Only:        | None                        |  |

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> ) |
|--------------------------------|------------------|--|
| R13-1596E                      | March 15, 2011   | None   |
| R13-1849M                      | January 17, 2014 | None   |
| R13-2381F                      | March 16, 2011   | None   |
| R13-2617F                      | March 29, 2012   | None   |

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

- **40CFR63, Subpart DDDDD – National Emission Standard for Hazardous Air Pollutants: Industrial/Commercial/Institutional Boilers and Process Heaters**

The facility has discovered that the Comparable Fuels Boiler (DOM) in the Polymerization Section of the Acetal Resins Production unit is subject to 40CFR63, Subpart DDDDD.

The following Conditions have been added/revised in the Title V Permit:

The Permit Shield for 40CFR63, Subpart DDDDD has been removed from this Permit. Condition 3.7.2.k has been removed and the following condition letters have been revised accordingly.

Placeholder language and requirements have been added as Condition 5.1.15 for the Industrial, Commercial, and Institutional Boilers and Process Heaters MACT, 40 CFR 63, Subpart DDDDD for which the DuPont Comparable Fuels Boiler (DOM) is subject. The following language has been included:

- a. The Comparable Fuels Boiler (DOM), shall comply with all applicable requirements for existing affected sources pursuant to 40 CFR 63, Subpart DDDDD, "National Emission Standards for Hazardous Air Pollutants for Industrial/Commercial/Institutional Boilers and Process Heaters no later than the existing source compliance date of January 31, 2016.  
**[45CSR34; 40 CFR §63.7495(b)]**
- b. If required to submit a Notification of Compliance Status (NOCS) pursuant to 40 CFR 63, Subpart DDDDD, the permittee shall also submit a complete application for significant modification to the Title V permit to incorporate the specific requirements of the rule no later than the maximum time allowed for the NOCS submittal in 40 CFR §63.7545(e).

If requested, this Title V permitting deadline may be changed upon written approval by the Director. The permittee shall request the change in writing at least 30 days prior to the application due date.

**[45CSR34; 40 CFR §63.7545(e); 45CSR§30-6.5.b.]**

### **Non-Applicability Determinations**

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

None

### **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: May 21, 2014

Ending Date: June 23, 2014

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)**

None