

# 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 June 11, 2012.

Permit Number: **R30-03900102-2012**  
Application Received: **June 25, 2015**  
Plant Identification Number: **03-54-039-00102**  
Permittee: **Covestro LLC**  
Facility Name: **South Charleston Plant**  
Mailing Address: **501 Second Avenue, South Charleston, WV 25303**

Permit Action Number: *MM03*    Revised: *December 22, 2015*

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Physical Location:	South Charleston, Kanawha County, West Virginia
UTM Coordinates:	439.65 km Easting • 4247.00 km Northing • Zone 17
Directions:	Traveling on I-64 West from Charleston, take the Montrose Exit (Exit 56) and turn right onto Montrose. Straight ahead is the main plant entrance at the corner of Montrose and MacCorkle Avenue.

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### Facility Description

The Covestro South Charleston Plant is a chemical manufacturing facility which produces polyether and polymer polyols. The facility is characterized by SIC and NAICS codes 2869 and 325199, respectively.

All of the changes in this minor modification are associated with the Polymer Polyols (PMPO) manufacturing units. This modification reflects the changes to Permit R13-2561K in the Title V Permit which are as follows:

- Change the service of seven (7) storage tanks.
- Use the new chemical/liquid catalyst to make polymer polyol products.
- Vent storage tank T-663 to the thermal oxidizer (Y-2124) instead of the atmosphere.
- Replace the catalyst mix tank (C-2405).

- Re-size the wastewater stripper column (C-2044) to handle reduced wastewater flows.
- Remove dust collector [venturi scrubber (V-2493)] requirement for PMPO catalyst addition.
- Remove the emergency vent (HV-616-09) for wastewater tank T-616.

## Emissions Summary

The change in potential emissions associated with the minor modification (MM03) is as follows:

Pollutants	Change in Potential Emissions, TPY
PM <sub>10</sub>	-0.01
VOC	+0.3165

## Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit >113 TPY of VOC. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Covestro LLC 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:	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources
	45CSR30	Operating permit requirement
State Only:	45CSR21	To Prevent and Control Air Pollution from the Emission of VOCs
	45CSR27	To Prevent and Control the Emissions of Toxic Air Pollutants

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the 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> )
R13-2561K	8/19/2015	

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," which may be downloaded from DAQ's website.

### Determinations and Justifications

The following changes are made in the Title V permit in order to incorporate the changes approved in the underlying NSR permit R13-2561K.

- Since company name has now changed to Covestro LLC from Bayer MaterialScience LLC, it was updated in the permit and the factsheet.
- Emission Units Table was updated per company's request.
- Conditions 4.1.1, 4.1.9, 4.1.10, 4.2.1, 4.2.2, 4.3.1, 4.4.1, 4.4.4, 4.4.5, 5.1.1, 5.2.1 and 5.4.3 were updated due to changes in the Emission Units Table.
- Attachment A was updated due to changes in the Emission Units Table.
- Part of 4.1.3 was deleted because the venturi scrubber (V-2493) is no longer needed and will be removed from service. The proposed catalyst replacement is a liquid with a very low vapor pressure (<0.75 mm Hg) so no dust collection is needed. The new catalyst mix & feed tank (T-2405) can be vented to the atmosphere instead of the venturi scrubber (V-2493).
- Since control valve HV-616-09 has been removed, condition 6.1.10 was deleted from this permit. This automatic control valve (HV-616-09) was installed on the wastewater tank (T-616) that feeds the stripper column in order to vent the tank to the atmosphere during periods of shutdown or malfunction. This control (vent) valve was only used during periods when the wastewater stripper or acrylonitrile treaters were malfunctioning or shutdown to prevent shutdown of the thermal oxidizer. It was determined that the atmospheric venting of T-616 was not required and the control valve (HV-616-09) was removed.
- Condition 6.1.9 was updated to match R13-2561K, condition 6.1.9.

- Condition 6.1.15. was added to this permit because of modification of wastewater stripper (C-2044) column design. The current wastewater stripper (C-2044) was sized to process the greater water flows needed when all PMPO Products were generated using the solid catalyst. The wastewater stripper column will be re-sized to handle the lower wastewater loads made possible from use of the new liquid catalyst.

### **Non-Applicability Determinations**

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

**40 CFR Part 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. None of the seven (7) process storage tanks involved with this modification are subject to NSPS, Subpart Kb requirements. T-663 was constructed after July 23, 1984, but the tank's capacity (15,500 gal) is less than the 19,813 gallon capacity limit that triggers NSPS, Subpart Kb applicability, i.e., T-663 is not subject to NSPS, Kb. T-2405 will be re-constructed, but the new tank's capacity (1,100 gallons) is less than the 19,813 gallon capacity limit that triggers NSPS, Subpart Kb. The remaining five (5) tanks (T-1461, T-1462, T-1467, T-1468 and T-2305) were constructed prior to July 23, 1984 and are not subject to NSPS, Subpart Kb.

### **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: Not Applicable for minor modifications  
Ending Date: Not Applicable

### **Point of Contact**

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

Beena J. Modi  
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. 1228 • Fax: 304/926-0478  
[Beena.j.modi@wv.gov](mailto:Beena.j.modi@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)**

**(Choose)** Not applicable.

**OR**

Describe response to comments that are received and/or document any changes to the final permit from the draft/proposed permit.