# **Fact Sheet**



# For Draft/Proposed Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act

Permit Number: **R30-05100009-2019**Application Received: **April 30, 2018**Plant Identification Number: **051-00009** 

Permittee: Covestro LLC

Facility Name: New Martinsville Facility

Mailing Address: 17595 Energy Road, Proctor, WV 26055

Physical Location: Natrium, Marshall County, West Virginia

UTM Coordinates: 514.50 km Easting • 4397.50 km Northing • Zone 17

Directions: The plant is approximately seven (7) miles north of New Martinsville on

WV State Route 2.

#### **Facility Description**

The New Martinsville facility is an integrated chemical plant whose primary purpose is to produce isocyantes, polyesters, polyethers, and acrylics. The majority of the production units in this plant are involved with the production of polyurethane products (isocyantes and polyols).

#### **Emissions Summary**

Plantwide Emissions Summary [Tons per Year]			
Regulated Pollutants	Potential Emissions	2017 Actual Emissions	
Carbon Monoxide (CO)	195.3	21.72	
Nitrogen Oxides (NO <sub>X</sub> )	291.1	78.45	
Particulate Matter (PM <sub>2.5</sub> )	19.5	2.30	
Particulate Matter (PM <sub>10</sub> )	32.5	3.18	

Regulated Pollutants	<b>Potential Emissions</b>	2017 Actual Emissions
Total Particulate Matter (TSP)	40.7	3.73
Sulfur Dioxide (SO <sub>2</sub> )	30	0.18
Volatile Organic Compounds (VOC)	114.6	15.31

 $PM_{10}$  is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2017 Actual Emissions
Benzene	0.05	0
Chlorobenzene	0.07	0
Formaldehyde	0.16	0.02
Ethylene Glycol	1.51	0.38
HCL	9.4	1.54
Hexane	3.51	0.40
Hydrazine	0.6	0
Toluene Diisocyanate	1.82	0.26
Methylene Bis(diphenylisocyanate)	0.51	0.37
Xylene	3.3	0.60
Ethylene Oxide	0.75	0.08
Propylene Oxide	1.5	0.12
Toluene Diamine	0.31	0.10
Totals	23.49	3.87

Some of the above HAPs may be counted as PM or VOCs.

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

This facility has the potential to emit over 100 tons per year of Carbon Monoxide, Nitrogen Oxides, and Volatile Organic Compounds. Due to this facility's potential to emit over 100 tons per year of criteria pollutants, the company 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:	45CSR2	To prevent and control particulate air pollution from combustion of fuel in indirect heat exchangers
	45CSR6	Open burning prohibited.
	45CSR7	To prevent and control PM air pollution
		from manufacturing processes and
		associated operations
	45CSR10	To prevent and control air pollution from the
		emission of sulfur oxides
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification,
		Relocation and Operation of Stationary
		Sources
	45CSR16	Standards of Performance for New
		Stationary Sources
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent
		information such as annual emission
		inventory reporting.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous Air
		Pollutants
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
	40 C.F.R. Part 60, Subpart Dc	Standards of Performance for Small
		Industrial-Commercial-Institutional Steam
		Generating Units
	40 C.F.R. Part 60, Subpart Kb	Standards of Performance for Volatile
		Organic Liquid Storage Vessels
	40 C.F.R. Part 63, Subpart EEE	National Emission Standard for Hazardous
		Air Pollutants from Hazardous Waste
	10 GTD D 62 G 1 DDD	Combustors
	40 C.F.R. Part 63, Subpart PPP	National Emission Standard for Hazardous
		Air Pollutants for Polyether Polyols
	40 CED D. 4 C2 C L. 4 VIVIVI	Production
	40 C.F.R. Part 63, Subpart V V V V	V National Emission Standards for Hazardous
		Air Pollutants for Chemical Manufacturing Area Sources
		Thea Boarees
State Only:	45CSR4	No objectionable odors.
•	45CSR27	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 (if any)
CO-SIP-2000-02	1/2000	
R13-0026	6/22/1983	
R13-0138B	6/22/1983	
R13-2677D	7/24/2008	
R13-0842F	5/15/2018	
R13-0863	7/18/1986	
R25 HW-10	10/12/2007	
R13-0537	3/7/1980	
R13-2507	10/29/2002	
R13-0459	12/21/1978	
R13-0555	6/24/1980	
R13-2443D	6/16/2018	
R13-1409B	11/21/2006	

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 were made to the Title V permit.

- Emission Unit IDs-033-162 and 033-162c were deleted from the ECD section since they underwent RCRA closure in 2018 and have been demolished.
- The 3 HCL tanks (5300-648, 5300-021, 5300-545) and their associated scrubbers were removed from the Emission Units Table.
- Emission Point IDs- CA26 and CA27 were moved to the Isomer Separation section
- Section 4 was renamed as "Boiler House".
- Condition 5.5.1 was modified to reflect the language in condition 3.3.1.c.
- Condition 3.3.1.d. was updated per company's request.
- Condition 5.2.2. was modified per company's request to change the method of ensuring the proper operation of the baghouse 033-021.
- The 3 HCL tanks and their associated scrubber were removed from the Emission Units Table, but the loading racks are still in use; therefore, conditions 6.1.1, 6.1.4, 6.1.5, 6.1.6, 6.1.7, the first half of 6.2.1, 6.2.4, 6.4.1.a, and 6.4.2 that reference 15NN and 15OO were kept in the permit, but have been renumbered.
- Section 9 was combined with Section 11 and Section 11 was renamed "Material handling Department & Isomer Separation."

- The equipment number 5300-580 refers to the old thermal oxidizer on the HCL recovery unit. This was permitted in 1993 as R13-1521. It was subsequently closed, and the permit was inactivated in January 2008. Therefore, it was removed from the citation in conditions 5.1.6 and 5.1.7.
- Renamed the "MPP" section to "Isomer Separation" in the Emission Units Table.
- Since tanks 558 and 559 are subject to subpart Kb, condition 3.7.2 was updated.
- R13-0842F was issued on 5/15/18, but the changes didn't result in changes to any Title V permit conditions, just Table 1.2 was updated.
- Since Subpart PPP was revised on March 27, 2014, section 7 was updated.
- 40 CFR 64 Compliance Assurance Monitoring

CAM was determined to not apply to this facility during the last renewal. There have been no additions of pollutant specific emission units since the last revision of this Permit. Therefore, CAM does not apply.

#### **Non-Applicability Determinations**

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

40 C.F.R. §§60.40-60.48	Standards of Performance for Fossil-Fuel-Fired Steam Generators for
NSPS Subpart D	Which Construction Is Commenced After 8/17/71. Boiler #9 and
(August 17, 1971)	Boiler #10 started up in 1971 but prior to August 17, 1971; Current
	capacities are all < 250 MM BTU/hr essentially as built; maintenance
	& capital work on boilers have been routine maintenance, repair &
	replacement, and not "modifications"
40 C.F.R. §§60.40b-	Standards of Performance for Industrial-Commercial-Institutional
60.49b NSPS Subpart Db	Steam Generating Units. Boiler #11 (98 MM Btu/hr) started up in
(June 19, 1984)	December 2007; The capacity is below 100 MM Btu/hr.
40 C.F.R. §§60.110-113	Standards of Performance for Storage Vessels for Petroleum Liquids
NSPS Subpart K	For Which Construction, Reconstruction, or Modification
(June 11, 1973)	Commenced after June 11, 1973 and prior to May 19, 1978.
	Petroleum liquid storage vessels have capacities less than 40,000
	gallons.
40 C.F.R. §§60.110a-	Standards of Performance for Storage Vessels for Petroleum Liquids
115a NSPS Subpart Ka	For Which Construction, Reconstruction, or Modification
(May 19, 1978)	Commenced after May 18, 1978 and prior to July 23, 1984.
	Petroleum liquid storage vessels have capacities less than 40,000
	gallons.
40 C.F.R. §§60.150-	Standards of Performance for Sewage Treatment Plants. The
60.156 NSPS Subpart O	Permittee does not operate a municipal treatment plant.
40 C.F.R. §§60.610-	Standards of Performance for Volatile Organic Compound (VOC)
60.618 NSPS Subpart III	Emissions from the Synthetic Organic Chemical Manufacturing
(October 21, 1983)	Industry (SOCMI) Air Oxidation Unit Process. This facility does not
	produce any of the listed chemicals as a product, co-product, by-
	product, or intermediate.
40 C.F.R. §§60.660-	Standards of Performance for Volatile Organic Compound (VOC)
60.668 NSPS Subpart	Emissions From Synthetic Organic Chemical Manufacturing Industry
NNN (12/30/83)	(SOCMI) Distillation Operations. This facility does not produce any
	of the listed chemicals as a product, co-product, by-product, or
	intermediate.
40 C.F.R. §§60.700-	Standards of Performance for Volatile Organic Compound Emissions
60.708 NSPS Subpart	form Synthetic Organic Chemical Manufacturing Industry (SOCMI)
RRR (6/29/1990)	Reactor Processes. This facility does not produce any of the listed
	chemicals as a product, co-product, by-product, or intermediate.
40 C.F.R. §§ 60-480-	Standards of Performance for Equipment Leaks of VOC in the
60.489 NSPS Subpart	Synthetic Organic Chemicals Manufacturing Industry. This facility
VV (1/5/1981)	does not produce final or intermediate products as defined in §60.489.

40 C.F.R. § 63 (Except for Subpart EEE, Subpart PPP, and Subpart VVVVVV)  40 C.F.R. 60, Subpart E  - "Standards of Performance for Incinerators."	National Emission Standards for Hazardous Air Pollutants for Source Categories (MACT). The facility is not subject to the major source requirements of the standard. The facility PTE for an individual HAP is not greater than 9.4 tons and aggregate total of all HAPs is not greater than 24.4 tons.  The Covestro-New Martinsville plant incinerator is covered under the Combustion MACT, which has more stringent requirements
40 C.F.R. 60, Subpart DDD – "Standards of Performance for Volatile Organic Compound (VOC)	Emissions from the Polymer Manufacturing Industry." The Covestro -New Martinsville plant does not manufacture polypropylene, polyethylene, polystyrene, or poly(ethylene terephthalate) for which this rule applies.
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 Covestro -New Martinsville plant.
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 Covestro -New Martinsville plant is not subject to 45CSR17 because it is subject to the fugitive particulate matter emission requirements of 45CSR7.

### **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: Monday, February 11, 2019 Ending Date: Wednesday, March 13, 2019

#### **Point of Contact**

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

Beena 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

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#### **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.