

Fact Sheet



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

Permit Number: **R30-03900005-2017**
Application Received: **August 25, 2016**
Plant Identification Number: **03900005**
Permittee: **Union Carbide Corporation**
Facility Name: **Institute Facility**
Business Unit: **Logistics (Group 3 of 8)**
Mailing Address: **P.O. Box 8361, South Charleston, WV 25303**

Physical Location: Institute, Kanawha County, West Virginia
UTM Coordinates: 432.189 km Easting • 4,248.754 km Northing • Zone 17
Directions: From I-64, take the Institute exit, turn right onto State route 25. Plant entrance is located about 1/4 mile west on Route 25.

Facility Description

Group 3 of 8 is the Logistics Group (also known as Supply and Services). This Group includes an Ethylene Oxide (EO) Distribution Unit which unloads ethylene oxide; a Barge Operations Process to load and unload barges; a Tank Truck and Rail Car Operations Process to load and unload tank trucks and rail cars; and the Plant Lab.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Logistics Potential Emissions	Logistics 2015 Actual Emissions
Carbon Monoxide (CO)	9.20	5.49
Nitrogen Oxides (NO _x)	1.70	1.20

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Logistics Potential Emissions	Logistics 2015 Actual Emissions
Particulate Matter (PM _{2.5})	0.05	0.03
Particulate Matter (PM ₁₀)	0.05	0.03
Total Particulate Matter (TSP)	0.05	0.03
Sulfur Dioxide (SO ₂)	0.01	< 0.01
Volatile Organic Compounds (VOC)	5.4	0.41

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Logistics Potential Emissions	Logistics 2015 Actual Emissions
Total HAPs	3.0	0.41

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 TPY of CO, NO_x, and VOC's, as well as over 10 TPY of a single HAP and 25 TPY of total HAP's. Due to 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, Union Carbide Corporation 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.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Preconstruction permits for minor 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. 63, Subpart PPP 40 C.F.R. Part 82, Subpart F	Polyether Polyols MACT	
	Ozone depleting substances	
State Only:	45CSR4	No objectionable odors.

45CSR§§21-37 and 40
45CSR27

Control of VOC Emissions
Best Available Technology (BAT) for HAPs

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>)
R13-2646A	August 8, 2006	NA
CO-R21-97-41	October 20, 1997	June 14, 2006 letter from J. L. Blatt October 7, 2011 letter from T. J. London
CO-R27-99-14-A(92)	March 31, 1999	NA

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

- 1) Renumbered the Group ID from "3 of 5" to "3 of 8" throughout the permit.
- 2) Updated the contact information in Conditions 3.5.3, 3.5.5, and 3.5.6.
- 3) Corrected UTM coordinates.
- 4) Revised the equipment table to rename the barge unloading to provide consistency with R13-2646A.
- 5) In Condition 4.2.2, specified the time interval for visual emission observations.
- 6) Renamed "Institute Plant" to "Institute Facility" throughout the Permit.

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. 64 - Compliance Assurance Monitoring (CAM)

There has not been the addition of any pollutant-specific emission units that have potential pre-control device emissions of a regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as a major source.

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: June 16, 2017
Ending Date: July 17, 2017

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 57th 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)

Not applicable.