West Virginia Department of Environmental Protection Division of Air Quality

Fact Sheet



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

Permit Number: **R30-03900004-2020** (Group 2 of 2) Application Received: **February 7, 2020** Plant Identification Number: **039-00004** Permittee: **Union Carbide Corporation** Facility Name: **Technology Park Operations** Mailing Address: **P.O. Box 8361 South Charleston, WV 25303**

Revised: N/A

Physical Location: UTM Coordinates: Directions: 1840 South Charleston, Kanawha County, West Virginia
439.250 km Easting • 4,245.237 km Northing • Zone 17
From Charleston, WV take Interstate I-64 west toward Huntington.
Take Kanawha Turnpike exit. Proceed approximately 0.6 mile to
West Virginia Regional Technology Park. UCC Technology Park
Operations are located at the West Virginia Regional Technology
Park.

Facility Description

UCC Technology Park Operations (TPO) is located at the West Virginia Regional Technology Park. UCC facilities include research and development laboratories, pilot plant operations and supporting offices. The Bulk Gas Area provides chemical storage for R&D operations. UCC operations also include a surface impoundment (Holz Impoundment) managed and operated by the Union Carbide Corporation South Charleston Facility. Holz Impoundment is used for disposal of grit, sludge, and other waste water solids from the City of South Charleston Waste Treatment Works and sewer cleanouts from the City of South Charleston and Technology Park. The UCC Technology Park Operations Title V Permit has been issued in two parts (Groups). Group 1 covers research and development activities. Group 2 covers Holz Impoundment. Primary SIC Code for this Facility: 2869

Emissions Summary

Plantwide Emissions Summary [Tons per Year]				
Regulated Pollutants	Potential Emissions	2019 Actual Emissions		
	(Technology Park including Univation)	(Technology Park including Univation)		
Carbon Monoxide (CO)	38.00	3.36		
Nitrogen Oxides (NO _X)	11.00	3.59		
Particulate Matter (PM _{2.5})	1.00	0.14		
Particulate Matter (PM ₁₀)	1.00	0.14		
Total Particulate Matter (TSP)	1.00	0.34		
Sulfur Dioxide (SO ₂)	0.10	0.03		
Volatile Organic Compounds (VOC)	128.00	22.77		

 PM_{10} is a component of TSP.

Hazardous Air Pollutants	Potential Emissions	2019 Actual Emissions	
	(Technology Park including Univation)	(Technology Park including Univation)	
Chloroform	0.5	<0.01	
p-Cresol	<20 pounds	<0.01	
Hexane	0.5	<0.01	
Methylene Chloride	<1 pound	<0.01	
Phenol	<20 pounds	<0.01	
Styrene	1.3	<0.01	
Toluene	0.5	1.47	
Total HAPs	7.20	1.50	

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 VOCs. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, Union Carbide Corporation Technology Park Operations is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

The Union Carbide Corporation Technology Park Operations (03900004) and Univation Technologies, LLC South Charleston Catalyst Plant (03900618) are considered a single source for Clean Air Act permitting purposes.

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 emissions.
	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.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

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	Date of	Permit Determinations or Amendments That
Consent Order Number	Issuance	Affect the Permit (<i>if any</i>)
None	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," which may be downloaded from DAQ's website.

Determinations and Justifications

The following changes have been made to the most recent version of this Permit:

General Changes:

- The UTM Coordinates for this facility have been corrected from "438.7 km Easting and 4,245.5 km Northing" to "439.250 km Easting and 4,245.237 km Northing".
- The contact information for DAQ and US EPA has been updated in Conditions 3.5.3, 3.5.5, and 3.5.6.

Non-Applicability Determinations

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

45CSR27 – To Prevent and Control the Emissions of Toxic Air Pollutants: The emissions of toxic air pollutants at the facility does not exceed the threshold values in 45CSR27 Table A, so the facility is not subject to Best Available Technology requirements.

40 C.F.R. Part 64—Compliance Assurance Monitoring: The Union Carbide Corporation's Technology Park's Environmental Operations are not subject to the Compliance Assurance Monitoring (CAM) rule because the Group 2 of 2 Permit has no emission sources with control devices.

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:	October 16, 2020
Ending Date:	November 16, 2020

Point of Contact

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

Jonathan Carney, P.E. West Virginia Department of Environmental Protection Division of Air Quality 601 57th Street SE Charleston, WV 25304 Phone: 304/926-0499 ext. 41247 Jonathan.W.Carney@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)

No comments were received.