

Fact Sheet



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

Permit Number: **R30-03900003-2024**
Application Received: **May 19, 2022**
Plant Identification Number: **03-54-03900003**
Permittee: **Union Carbide Corporation**
Facility Name: **South Charleston Facility**
Mailing Address: **PO Box 8361**
South Charleston, WV 25303

Physical Location: South Charleston, Kanawha County, West Virginia
UTM Coordinates: 440.026 km Easting • 4,246.927 km Northing • Zone 17
Directions: I-64 West and take the Montrose Exit. Come down Montrose Avenue towards the river and proceed straight through the traffic light across MacCorkle Avenue directly into the South Charleston facility.

Facility Description

Union Carbide Corporation's South Charleston facility produces a variety of specialty chemicals under SIC #2869. Their business units are grouped into the following classes:

Process

End Use

Specialty Surfactants

TRITON™ – Hard Surface Metal Cleaners, Emulsion Polymerization, Paints and Coatings, Rinse Aids, Textile Processing, Degreasers, Industrial Laundry Applications, Car Wash Applications and Personal Care Applications

Oxide Adducts	The Oxide Adducts unit produces various Polyether Polyols used in surfactants, brake fluids, hydraulic and metal working fluids.
Chemical Mixing	Miscellaneous organic chemicals (e.g. mixing and blending of organic chemical raw materials with other substances)
Energy Systems & Pipeline/Environmental Operations	Site Utilities – e.g. steam, plant air/nitrogen, etc. Operations include water treatment plant, waste water flume/sump system, and ethylene oxide distribution.
Remediation Operations	Soil and groundwater corrective action.
Infrastructure Operations	Maintenance Operations and Bulk Shipping/Receiving of raw materials and products.

Emissions Summary

Plantwide Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions	2022 Actual Emissions
Carbon Monoxide (CO)	196	48.43
Nitrogen Oxides (NO _x)	434	69.58
Lead	0	0
Particulate Matter (PM _{2.5})	30	1.66
Particulate Matter (PM ₁₀)	30	1.66
Total Particulate Matter (TSP)	30	5.40
Sulfur Dioxide (SO ₂)	89.54	0.52
Volatile Organic Compounds (VOC)	228	55.40
<i>PM₁₀ is a component of TSP.</i>		
Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Vinyl Acetate	1.1	0.0
Benzyl Chloride	3.4	0.90
Hexane	5.73	1.44
Hydrogen Chloride	3.4	0
Glycol Ethers	8	1.09
Propylene Oxide	7	1.80
Acetaldehyde	0.03	0.02
Acetonitrile	<0.01	<0.01
Arsenic	<0.01	<0.01

Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Benzene	0.42	0.01
Benzyl Chloride	3.4	0.90
Cadmium	<0.01	<0.01
Carbon Tetrachloride	<0.01	<0.01
Chlorine	<0.01	<0.01
Chlorobenzene	<0.01	<0.01
Chloroform	0.03	<0.01
Chromium	<0.01	<0.01
Cobalt	<0.01	<0.01
Cresol cresylic acid (mixed isomers)	0.1	0.04
Cumene	0.04	<0.01
1,4 dichlorobenzene	<0.01	<0.01
Diethanolamine	0.96	0.03
p-dioxane	<0.01	<0.01
Ethyl Acrylate	<0.01	<0.01
Ethyl Benzene	0.48	0.14
Ethylene Dichloride ²	6.68	0.01
Ethylene Glycol	0.39	0.10
Ethylene Oxide	0.25	0.12
Formaldehyde	0.50	0.10
Glycol Ethers	8	1.09
Hexane	5.78	1.44
Manganese	0.03	<0.01
Mercury	<0.01	<0.01
Methanol	0.55	0.04
Methyl Chloride	0.03	0.03
Methyl Isobutyl Ketone	0.23	0.02
Naphthalene	0.36	0.02
Nickel	0.04	<0.01
PAH, total	<0.01	<0.01

Hazardous Air Pollutants	Potential Emissions	2022 Actual Emissions
Propionaldehyde	<0.01	<0.01
Propylene Dichloride	<0.01	<0.01
Propylene Oxide	7.09	1.80
Styrene	0.02	<0.01
Tetrachloroethylene	<0.01	<0.01
Toluene	0.18	0.02
Trichloroethylene ¹	1.7	<0.01
Vinylidene Chloride ¹	0.65	0.01
Xylenes (mixed isomers)	1	0.99

¹From Title V permit Chlorobenzene remediation process.

²6.68 tons per year of Ethylene Dichloride from remediation process.

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

Title V Program Applicability Basis

This facility has the potential to emit 196 tons of CO per year, 434 tons of NO_x per year, 228 tons of VOC per year, and over 25 tons per year of aggregate HAPs. Due to this facility's potential to emit over 100 tons per year of criteria pollutants 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:	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 Particulate Air Pollution from Manufacturing Process Operations.
	45CSR10	To Prevent and Control Particulate Air Pollution from the Emission of Sulfur Oxides.
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits from Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits, and Procedures for Evaluation.
	45CSR16	Incorporation of NSPS Pursuant to 40CFR60.
	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	Incorporation of MACT pursuant to 40CFR63.
	45CSR40	Control of Ozone Season Nitrogen Oxide Emissions
	40 C.F.R. 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.
	40 C.F.R. Part 60	Subpart Db – Standards of Performance for Industrial- Commercial-Institutional Steam Generating Units
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 63	Subpart PPP – National Emission Standards for Hazardous Air Pollutants: Polyether Polyols Production.
	40 C.F.R. Part 63	Subpart DDDDD – National Emission Standards for Hazardous Air Pollutants of Industrial, Commercial, and Institutional Boilers and Process Heaters.
	40 C.F.R. Part 63	Subpart FFFF – National Emission Standard for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
	40 C.F.R. Part 63	Subpart GGGGG – National Emission Standards for Hazardous Air Pollutants: Site Remediation
	40 C.F.R. Part 63	Subpart ZZZZ - National Emission Standards for Reciprocating Internal Combustion Engines (RICE)
	40 C.F.R. Part 64	Compliance Assurance Monitoring (CAM)
	40 C.F.R. Part 68	Chemical Accident Prevention Provisions.
	40 C.F.R. Part 82	Subpart F – Protection of Stratospheric Ozone; Recycling and Emission Reduction.
State Only:	45CSR4	No objectionable odors.
	45CSR21	§45-21-40. Other Facilities that Emit Volatile Organic Compound (VOC). §45-21-37. Leaks from Synthetic Organic Chemical, Polymer, and Resin Manufacturing Equipment. §45-21-30. Solvent Metal Cleaning.
	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 (if any)
R13-1517E (TRITON® Plant)	09/21/2023	
R13-2033D (Boiler 26)	04/03/2013	
R13-2141C (Boiler 27)	04/19/2004	
R13-2414C (Portable Air Compressors)	08/08/2011	
R13-2840F (Groundwater/Soil Remediation Process)	12/20/2022	
R13-3025B (Middle Island Remediation)	05/26/2015	
R13-3308B (MIGCS)	01/02/2019	
CO-R21-98-22, as amended (VOCs)	06/06/1998	
CO-R40-C-2006-29 (CAIR)	10/03/2006	
CO-R27-2024-03	01/30/2024	

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

This Title V renewal includes changes submitted as Title V minor modifications R30-03900003-2018(MM06, MM07, and MM08); changes approved under R13-2840E, R13-2840F, and changes approved under Rule 27 consent order CO-R27-2024-03 which supersedes and replaces CO-R27-97-17-A(94-21). The following changes have been made since the most recent version of this permit:

Changes to Section 1.0

- From the Title V renewal application, Tanks 8345, 8346, 8355, 8356, 8365, 8366, 8375, 8376, and 9564 have been listed in the Section 1.1 Emission Units table as 'out of service'.
- Emission Units, T-1490 Gasoline Storage Tank and T-2206 Diesel Storage Tank, have been removed from Section 1.1 Emissions Units table and sections 9.1.10, and 9.2.2. According to the applicant, these tanks have been demolished.
- From the Title V renewal application, Tank 8738 and the Process Funnel for Tank 8738 is no longer listed as 'out of service' in the Section 1.1 Emission Units table.

Changes to Section 3.0

- The language in Condition 3.1.10 was changed to match that of 45CSR§40-4.1.

Changes to Section 4.0

- In Condition 4.5.4, corrected the end of the first five year reporting period date from “December 31, 2021” to “December 31, 2020.”

Changes to Section 5.0

- Title V Minor Modification, MM07, was submitted to reassign storage tanks previously subject to the MON MACT (40 CFR 63 Subpart FFFF) to the Polyether Polyols MACT (40 CFR 63 Subpart PPP) because of recent predominant use determination per the storage vessel ownership determination procedure in 40 CFR §63.1420(f). This change affected only condition number 5.1.13 to remove such tanks. Tanks T8322, T8323, T8331, T8334, T8343, T8344, T8353, T8363, T8380, T8381, T8383, T8390, T8391, T8392, T8393, and T8420 were removed from Section 5.1.13 at the request of the applicant.
- Section 5.1.14 was changed to include the exception, ‘except as specified in 40 C.F.R. §63.2480(e) and (f).’
- The reference in 5.4.9 was changed from [**45CSR34, 40 C.F.R. §63.2470(e), §63.1253(f); Wastewater Stream (TR020/GR-7M Decant)**] to [**45CSR34, 40 C.F.R. §63.148(b)(3) Wastewater Stream (TR020/GR-7M Decant)**]. The requirement for this tank truck comes from the management of a Group 1 wastewater stream that comes from MON MACT Table 7 which references 63.148.
- The seventh bullet point of section 5.4.10 (‘Maintain a record each time a safety device is opened to the air that contains hazardous air pollutants to avoid unsafe conditions.’) was deleted. The applicant declared this recordkeeping requirement to be ‘Not applicable’.

Changes made to Section 5.0 Specialty Surfactants due to recent changes to 40CFR63 Subpart FFFF (MON MACT) as of April 4, 2024.

- Section 5.1.13 now references both 40 C.F.R. §§63.2485(i) and (j) and the complete text of paragraph (j) was added as follows:

The permittee must determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU.

- Due to similarities between pressure relief devices covered by 40CFR63 Subpart PPP and Subpart FFFF, The Subpart PPP section was re-numbered as 5.1.12 to follow 5.1.11 which also references Subpart PPP.
- Section 5.1.17 was added to include MON MACT requirements for equipment leaks.
- Section 5.1.18 was added to include MON MACT requirements for heat exchange systems.
- MON MACT recordkeeping for pressure relief devices and heat exchange systems was added to condition 5.4.10.

Changes to Sections 6.0, 10.0, and 11.0 for Groundwater/Soil Remediation

- Sections 6.1.1.j.iv. and vi were updated in accordance with the current version of 40 CFR §63.7935(h) revisions.
- Section 6.1.1.k. was updated. The phrase ‘except during periods of startup, shutdown, and malfunction’ was deleted in accordance with the current version of 40 CFR §63.7935(a).
- Section 6.1.1.l. was deleted in accordance with the current version of 40 CFR §63.7935(c).
- Section 6.1.2.j. was updated removing the by-pass and requiring that ‘Whenever gases or vapors containing HAP are vented through the closed-vent system to CATOX and GAC, the CATOX and GAC must be operating.’

- Section 10.1.8.1 was revised from 40CFR§63.7925(b)(1) to (b)(2).
- A new Section 10.1.8.4 was added for SVE3.
- Section 10.1.15. was updated with the deletion of the phrase, “except during periods of startup, shutdown, and malfunction.”
- Section 10.1.16. was updated in accordance with the current version of 40CFR§63.7935(b).
- Section 10.1.17 was deleted in accordance with the removal of startup, shutdown, and malfunction from 40CFR§63.7935(c). Sections that follow were renumbered.
- Section 10.1.17 (previously 10.1.18) was updated in accordance with 40CFR§63.7935(e). The sentence “This includes periods of startup, shutdown, and malfunction” was deleted.
- Section 10.1.18 (previously 10.1.19) was updated in accordance with the current version of 40CFR§63.7935(f).
- Sections 10.1.19.4 and 10.1.19.5 were added in accordance with 40CFR§§63.7935(g)(4) and (g)(5).
- Section 10.1.20 (previously 10.1.21) was updated in accordance with 40 CFR §§63.7935(h)(1-3).
- Section 10.1.24 was added for control device CLB2VGAC.
- Section 10.1.25 was added for the non-regenerable carbon adsorption system in accordance with 40CFR§63.7928(f).
- Section 10.2.7 was added in accordance with 40CFR§63.7945(d).
- Section 10.2.11 was added in accordance with 40CFR§63.7927(c).
- Section 10.4.1.3 as added according to the current 40CFR§63.7952(a).
- Section 10.5.7.4 was deleted. Sections that follow were renumbered.
- Sections 10.5.7.6 and 10.5.7.7 (previously 10.5.7.7 and 10.5.7.8) were updated.
- Previous Section 10.5.8 was deleted.
- Section 10.5.9 was added in accordance with 40 CFR §§63.7591(f).

- Title V Minor Modification, MM06 and R13-2840E, were submitted to add a new soil remediation system (Emission Unit CLB2VE) with vapor control utilizing the existing regenerative thermal oxidizer (RTO) (Control Device ID A42INC) and packed bed scrubber (PBS) (Control Device ID A42PBS) or new vapor phase granular activated carbon (VGAC) vessels (Control Device ID CLB2VGAC) for alternative control when the RTO or PBS is out of service for planned maintenance or unplanned outages.
- Title V Minor Modification, MM08 and R13-2840F, were submitted to modify operational conditions so that the vapor stream from the Chlorobenzene Area 2 Vapor Extraction System (Emission Unit CLB2VE), is treated solely by VGAC (Control Device ID CLB2VGAC) rather than relying on VGAC as an alternative control system. Additionally, UCC intends to utilize three VGAC vessels for control rather than the two VGAC vessels indicated in the previous modification application for MM06.
- The changes from the MM06 and MM08 applications are subject to 40 CFR 63 Subpart GGGGG: Site Remediation MACT. The applicable subsections of this subpart are those of the closed vent systems and control devices. These subsections require that VOC/HAP process vent emissions from CLB2VE be reduced by 95 percent weight. The applicant shall demonstrate compliance with this subpart by conducting operation, maintenance, recordkeeping, and reporting for the VGAC vessels (CLB2VGAC) in accordance with conditions of this subpart. These requirements are included in Sections 10 and 11 of the Title V permit.
- The changes from the MM06 and MM08 applications have resulted in CLB2VE being added to the Section 1.1 Emission Units table as follows:

CLB2VE	SVE3	Vapor Extraction System – Chlorobenzene Area 2	2022	908 scfm	CLB2VGAC
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- SVE3 was added to the titles of Section 10.0 and Section 11.0.

- The changes from the MM06 and MM08 applications have resulted in Sections 11.1.18 and 11.1.19 being added as follows:
 - 11.1.18. Emissions of regulated pollutants from the Chlorobenzene Area 2 Vapor Extraction System (CLB2VE) shall be routed to the vapor phase granular activated carbon vessels (CLB2VGAC).
[Permit Number R13-2840, Condition 4.1.12, Emission Point ID SVE3]
 - 11.1.19. Pollutant emissions CLB2VGAC shall not exceed the following:

Pollutant	Lb/hr	tpy
Ethylbenzene	0.01	0.01
Xylene	0.01	0.01
Naphthalene	0.08	0.17
Total VOC/HAPs	0.10	0.19

[Permit Number R13-2840, Condition 4.1.13, Emission Point ID SVE3]

- Sections 11.1.20 and 11.1.21 were added as follows:

11.1.20. The CLB2VE closed-vent system shall be designed to operate with no detectable organic emissions using the procedure specified in 40 C.F.R. §63.695(c)(2) and monitoring as specified in 40 C.F.R. §63.7928(b)(2).

[45CSR34; 40 C.F.R. §63.7925(c); Permit Number R13-2840, Condition 4.1.14, Emission Point ID SVE3]

11.1.21. Carbon replacement for the vapor phase granular activated carbon vessels (CLB2VGAC) shall be performed at the frequency determined during the initial design evaluation or when monitoring indicates breakthrough has occurred.

[45CSR34; 40 C.F.R. §63.7925(h)(2)(i); Permit Number R13-2840, Condition 4.1.15, Emission Point ID SVE3]

- Section 11.2.5 was added to require a design evaluation on the Chlorobenzene Area 2 vapor extractive system (CLB2VE).

- Sections 11.3.9, 11.3.10 and 11.3.11 were added as follows:

11.3.9. To show compliance with the emission limits in 11.1.19, the permittee shall use the monitoring results collected in accordance with 11.3.10 and recorded operational hours to calculate monthly emissions and a 12 month rolling total.

[45CSR13, Permit Number R13-2840, Condition 4.3.7, Emission Point ID (SVE3)]

11.3.10. To demonstrate compliance with the requirement of 11.1.21, the concentration of organic compounds in the exhaust vent stream of CLB2VGAC shall be monitored according to the requirements in 40 C.F.R. §63.693(d)(4)(iii)(A).

[45CSR34; 40 C.F.R. 63.7927(c); 45CSR13, Permit Number R13-2840, Condition 4.3.8, Emission Point ID (SVE3)]

11.3.11. The permittee shall maintain the following records relating to the CLB2VGAC.

11.3.11.1. Copy of equipment design and installation.

11.3.11.2. Completed maintenance and calibrations.

11.3.11.3. Copy of the site-specific monitoring plan. The plan may refer to the manufacturer's operation and maintenance manual or other documents for procedures covering operation, maintenance, calibrations and inspections, and startup and shutdown, and malfunctions.

11.3.11.4. Copies of all performance tests and design evaluations.

11.3.11.5. Records demonstrating compliance with emission limitations, work practice standards, and operation and maintenance requirements.

[45CSR34; 40 C.F.R. §63.7952(c); 45CSR13, Permit Number R13-2840, Condition 4.3.9, Emission Point ID (SVE3)]

- Section 11.4.2 has been added to require initial notification of compliance status of the Chlorobenzene Area 2 vapor extraction system.

Changes to Section 8.0 from CO-R27-2024-03

- Reference to Consent Order CO-R27-97-17-A(94-21) was removed from Section 5.1.6 due to this order being superseded and replaced by CO-R27-2024-03. CO-R27-2024-03 was not included in the reference to Section 5.1.6 because there are no requirements in this section derived from the order.
- Consent order changed to CO-R27-2024-03 in the Section 8.0 heading.
- In Section 8.1.5 the consent order was changed to CO-R27-2024-03. Also, the reference to LDAR program in the last sentence was changed to BAT controls.
- In Section 8.1.5, Table 8.1.5.a, the emission limits were revised per CO-R27-2024-03.
- In Section 8.1.5, Table 8.1.5.b, the emission limits were revised per CO-R27-2024-03.
- Section 8.1.5.c. was deleted. All of the units are subject to federal regulations for fugitive emissions and according to 45CSR§27-4.1 they shall not be required to comply with provisions more stringent than such federal regulations.
- Section 8.1.6 was changed to “Reserved” since this section was not included in CO-R27-2024-03 and this order superseded and replaced consent order CO-R27-97-17-A(94-21) from which Section 8.1.6 was derived.
- Section 8.1.7 was added. It includes a 500 pound per year ethylene oxide limit and a 1,000 pound per year formaldehyde emission limit. This limit is from CO-R27-2024-03.
- Section 8.2.1. was changed to “Reserved” with the removal of 8.1.5.c.
- In section 8.2.5, reference to CO-R27-97-17-A(94-21), I.5 was removed.
- Section 8.2.7 was changed to “Reserved”, since this section was not included in CO-R27-2024-03 and this order superseded and replaced consent order CO-R27-97-17-A(94-21) from which Section 8.2.7 was derived.
- Section 8.2.8. was changed to reserved since this section is not in the revised Consent Order.
- Section 8.4.1 was changed from N/A to now include the section 8.4.1 recordkeeping requirement necessary to demonstrate compliance with sections 8.1.5.a, 8.1.5.b, and 8.1.7.
- Section 8.5.1 was changed to “Reserved.” This section was based solely on CO-R27-97-17-A(94-21) which has been superseded and replaced.

Changes to Section 12.0

- Section 12.1.3 was changed to include the exception, ‘except as specified in 40 C.F.R. §§63.2480(f)’.

Changes made to Section 12.0 Chemical Mixing (due to recent changes to 40CFR63 Subpart FFFF (MON MACT) as of April 4, 2024.)

- The requirement of 40 C.F.R. §63.2485(j) was added to Section 12.1.4 as follows:

The permittee must determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU.

Changes to Section 13.0

- Changes were made to permit condition 13.1.7 due to the 40CFR63 Subpart ZZZZ (RICE MACT) rule changes of August 10, 2022 which removed vacated sections §§63.6640 (f)(2)(ii) and (iii).

40CFR64 Compliance Assurance Monitoring (CAM)

Vapor Extraction System (Emission Point SVE3) is being added during this permit renewal. SVE3 was permitted in the New Source Review permit modification R13-2840E and later modified in permit modification R13-2840F.

This emission unit does not have potential pre-control device emissions of VOCs or HAPs equal to or greater than 100 percent of the amount, in tons per year, required for the source to be classified as a major source. The uncontrolled potential to emit of this unit is 3.8 tons of VOC per year which is less than the 100 tons per year major source threshold for VOCs.

The uncontrolled potential to emit of HAPs is 3.8 tons per year (all VOCs are HAPs) which is less than the major source thresholds which are 10 tons per year for a single HAP and 25 tons per year of aggregate of HAPs. As a result, no new CAM requirements were included in the permit renewal.

Non-Applicability Determinations

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

45CSR7	<p>Sulfuric acid mist/vapours and Phosphoric Acid vapours Tanks used to store sulfuric acid or phosphoric acid from concentration limits. Per Section 10.6 of Regulation 7, sources with potential to emit less than 0.1 lbs/hr, 100 lbs/yr are exempt from the concentration limits of Section 4.2. The following tanks have been found to meet this criteria:</p> <p>Tank 9750 is used to store sulfuric acid at the Oxide Adducts Plant. Tank 8372 is used to store sulfuric acid at the Specialty Surfactants Plant. Tank 8433 is used to store phosphoric acid at the Specialty Surfactants Plant. Tank T01 is used to store sulfuric acid at the Water Treatment Plant.</p>
45CSR7	<p>The carpentry shops (B463) and welding shops (B307) are used for fabrication of materials to support site operations. These activities are incidental (support) operations to the South Charleston Facility and are not manufacturing processes. Carpentry and welding shop activities are not covered by 45CSR7.</p>
45CSR10A 45CSR10	<p>Testing, Monitoring, Record Keeping, and Reporting Requirements under Section 8 of 45CSR10 are not applicable to Boilers 26 and 27 since they only combust natural gas. 45CSR§10-10.3</p> <p>Boilers 26 and 27 are also exempt from the 2000 ppm SO₂ requirements of 45CSR§10-4 due to the exemption from 45CSR§10-4.1.e by having a potential of less than 500 lbs/yr SO₂ from any manufacturing processes venting to these boilers. Additionally, Boilers 26 and 27 are exempt from 45CSR§10-5 for combustion of refinery or process gases containing hydrogen sulfide in excess of 50 grains/100 ft³ due to process gas streams having no known potential for sulfur contamination.</p>
40CFR60, Subpart Kb	<p>The following tanks associated with the Oxide Adducts Plant are greater than or equal to 19,813 gallons but less than 39,890 gallons and were constructed or modified after July 23, 1984 and have a maximum true vapor pressure less than 2.2 psia: 9513.</p> <p>The following tanks associated with the Oxide Adducts Plant are greater than or equal to 39,890 gallons and were constructed or modified after July 23, 1984 and have a maximum true vapor pressure less than 0.51 psia: 9510, 9511, and 9512.</p> <p>All tanks over 19,813 gallons capacity located at the Specialty Surfactants Plant store materials with < 2.2 psia vapor pressure at storage conditions.</p>

40CFR63, Subpart Y	<p>NESHAP for Marine Vessel Loading Operations. The North Charleston Distribution Terminal is exempt from Subpart Y requirements because they no longer load barges at this location or any other location covered by this permit</p>
40CFR63, Subpart JJ	<p>Wood Furniture Surface Coating. The South Charleston Facility is an incidental manufacturer and exempt from Subpart JJ. Less than 100 gallons per month surface coating and adhesive is used for wood furniture.</p>
40CFR63, Subpart EEEE	<p>The North Charleston Distribution Terminal (NCDT) and the Chemical Mixing Unit are exempt from the OLD MACT for one or more of the following reasons:</p> <p>Storage vessels located at NCDT are part of processing units covered by other MACTs, or streams (materials transferred) have annual average true vapor pressure of Subpart EEEE Table 1 OHAPs at 77°F less than 0.1 psia, or streams contain less than 5% by weight of Subpart EEEE Table 1 OHAPS and are not organic liquids subject to the OLD MACT.</p> <p>The EO distribution header system does not meet the definition of an OLD MACT affected source as defined in 40 C.F.R. §63.2338(b) and is therefore not covered by 40 C.F.R. 63, Subpart EEEE.</p> <p>The Specialty Surfactants Plant is not subject to the OLD MACT. The Specialty Surfactants Plant is covered by the Polyether Polyol and Miscellaneous Organic Chemical Manufacturing MACT. Annual average vapor pressure of Table 1 OHAP at 77°F used as heat transfer liquid is less than 0.1 psia, or no streams containing greater than or equal to 5% by weight Table 1 OHAPS.</p>
40CFR63, Subpart MMMM	<p>Coating of Metal Parts. The South Charleston Facility is an incidental manufacturer and exempt from Subpart MMMM due to 40CFR§63.3881(b). This provision establishes a lower cut-off at less than 250 gallons per month of paints/solvents used.</p>
40CFR63, Subpart FFFF	<p>The Triton unit has one reactor, which is subject to 40CFR63, Subpart PPP for polyether polyols production. As a result, reactor 8400 (Alkox Reactor) is exempt from the requirements of Subpart FFFF in accordance with §63.2435(b)(3).</p>

- According to the applicant, an assessment of the permitted processes was performed to determine if any of the equipment at the facility is in ethylene oxide service according to 40CFR63 Subpart FFFF §63.2492. It was determined from the compliance requirements in 40CFR§63.2492, that none of the equipment at the facility, including process vents, tanks, and equipment leaks, are in ethylene oxide service.

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 1, 2024
 Ending Date: June 13, 2024

Point of Contact

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

Jonathan Carney
West Virginia Department of Environmental Protection
Division of Air Quality
601 57th Street SE
Charleston, WV 25304
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)

(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.