

Fact Sheet



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

Permit Number: **R30-03900692-2022**
Application Received: **November 17, 2021**
Plant Identification Number: **039-00692**
Permittee: **Altivia Services, LLC**
Facility Name: **Institute Facility**
Business Unit: **Acetone Derivatives Plant (Group 2 of 8)**
Mailing Address: **250 Carbide Road, Dunbar, WV 25064**

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 is located about ½ mile west on Route 25.

Facility Description

The Acetone Derivatives Plant converts isopropanol and/or acetone to produce various ketones and alcohols that are used in a wide range of applications including hair spray, nail polish remover, lacquer thinner, sinus tablets, and coatings used in the automobile industry. SIC 2869.

Emissions Summary

Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions Acetone Derivatives Plant	2021 Actual Emissions Acetone Derivatives Plant (fugitives included)
Carbon Monoxide (CO)	17.70	3.75
Nitrogen Oxides (NO _x)	21.00	4.65
Particulate Matter (PM _{2.5})	1.30	0.35
Particulate Matter (PM ₁₀)	1.30	0.35
Total Particulate Matter (TSP)	1.30	1.17
Sulfur Dioxide (SO ₂)	0.13	0.03
Volatile Organic Compounds (VOC)	87.80	28.01

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions Acetone Derivatives Plant	2021 Actual Emissions Acetone Derivatives Plant (fugitives included)
Benzene	0.01	0.00
Biphenyl	0.60	0.53
Isophorone	0.40	<0.01
Methyl Isobutyl Ketone	12.00	8.73
Methanol	1.00	<0.01
Toluene	0.01	0.00
Xylene	0.01	0.00

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

Title V Program Applicability Basis

Due to this facility's potential to emit over over 100 tons per year of criteria pollutants, over 10 tons per year of an individual HAP, and over 25 tons per year of aggregate HAPs, Altivia Services, 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.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Control of particulate matter from indirect heat exchangers.
	45CSR6	Open burning prohibited.

	45CSR10	To prevent and control air pollution from the emission of sulfur oxides.
	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.
	45CSR16	Standards of performance for new stationary sources pursuant to 40 C.F.R.60.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for hazardous air pollutants.
	40 C.F.R. 60, Subpart Kb	NSPS for Volatile Organic Liquid Storage Vessels
	40 C.F.R. Part 61	Asbestos inspection and removal.
	40 C.F.R. Part 63, Subparts F,G,H	Hazardous Organic NESHAP (HON)
	40 C.F.R. Part 63, Subpart FFFF	Miscellaneous Organic NESHAP (MON)
	40 C.F.R. Part 63, Subpart DDDDD	Boiler and Process Heater MACT
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances.
State Only:	45CSR4	No objectionable odors.
	45CSR21	Control of VOC Emissions

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>)
CO-R21-97-41 (Facility wide)	October 20, 1997	Note: as amended by June 14, 2006 letter from J.L. Blatt and October 7, 2011 letter from T.J. London

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 contact information for US EPA has been updated in Condition 3.5.3.
- Added the following emission units to the emission units table in Section 1.0 of the permit.
 - T1244 Tank (added in off permit change R30-03900005-2017 (2 of 8) (OP01)) stores IHBK(trimethylnonanone)
 - DIBC-REACT DIBC Reactors and Equipment Leaks. The DIBC project permit determination application was submitted and it was determined on April 29, 2021 that no permit was needed.

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. Part 63, Subpart EEEE - NESHAP for Organic Liquid Distribution (Non-Gasoline)** is not applicable because the liquid vapor pressures are less than 0.1 psia as written in condition 3.7.2.a. of the permit.
- **40 C.F.R. Part 63, Subpart FFFF - NESHAP: Miscellaneous Organic Chemical Manufacturing** - is subject to the rule but there are parts of the rule in which there are no requirements from the rule that apply. The non-applicable requirements are listed in permit condition 3.7.2.b.
- **40 C.F.R. Part 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: October 1, 2022
Ending Date: October 31, 2022

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)

None.