

Fact Sheet



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

Permit Number: **R30-03900692-2023**
Application Received: **February 1, 2022**
Plant Identification Number: **03-54-03900692**
Permittee: **Altivia Services, LLC**
Facility Name: **Institute Facility**
Business Unit: **Logistics Barge Operations (Group 3A 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

Organic liquids are pumped into barges at the facility. The barges are designed for submerged loading to reduce emissions. The barge emission unit source has been assigned Emission Unit ID L1B and the emission point (hatch vent) has been assigned Emission Point ID B1L. Barges are equipped with pressure/vacuum relief vents. Pressure relief is set at 1 psig. The loading line to the barge hook-up is approximately 3 inches in diameter. The loading operation can load 3, 6, and 8 compartment barges. Each compartment is loaded to approximately 130,000 – 140,000 gallons.

Three pumps are used in the unloading operations; an unloading pump, booster pump, and a vacuum pump. In the unloading of barges, a vacuum pump is utilized to initiate liquid flow and to remove any liquid (heel) left in the barge. Operation of this pump results in venting of volatile organic chemicals to the atmosphere. Due to the location of the barge in relation to the storage tanks, the system requires “priming” in order to initiate liquid flow and allow the unloading pumps to operate. The priming pump (liquid ring using water as the sealing fluid) is used to pull vacuum and fill the West Suction Pot installed in the suction line for the West Unloading Pump. Once fluid

flow is established to storage (using the West Unloading Pump and #1 Dock Booster Pump), the priming pump is shutdown and the West Suction Pot is bypassed.

Typically the West Suction Pot is filled to 60-80% capacity within 2 to 5 minutes. After raw material is unloaded and before re-loading with product (e.g. MIBK), the priming pump is used to suction the remaining barge heel. This operation occurs for a maximum of 30 minutes in any one hour and aggregates for approximately 90 minutes per barge. The West Suction Pot has been assigned Emission Unit ID L1B1 and vents through the priming pump to the West Knockout Pot (Emission Unit ID L1B2). The West Knockout Pot has been assigned Emission Point ID 2B1L. SIC 2869

Emissions Summary

Emissions Summary [Tons per Year]		
Regulated Pollutants	Potential Emissions Logistics Barge Operations	¹2021 Actual Emissions Logistics Barge Operations (fugitives included)
Carbon Monoxide (CO)	0	0
Nitrogen Oxides (NO _x)	0	0
Particulate Matter (PM _{2.5})	0	0
Particulate Matter (PM ₁₀)	0	0
Total Particulate Matter (TSP)	0	0
Sulfur Dioxide (SO ₂)	0	0
Volatile Organic Compounds (VOC)	3.30	0.0

PM₁₀ is a component of TSP.

Hazardous Air Pollutants	Potential Emissions Logistics Barge Operations	¹2021 Actual Emissions Logistics Barge Operations (fugitives included)
Ethylene Glycol	0.01	0.0
Methyl Isobutyl Carbinol	2.0	0.0
Methyl Isobutyl Ketone	1.12	0.0
Methanol	2.0	0.0

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

¹ According to the applicant, the facility did not load any product in barges in 2021 and there were no unloading emissions of ethylene glycol or methanol in 2021, so there were no actual emissions reported for this business unit. .

Title V Program Applicability Basis

Due to this facility's potential to emit 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:	45CSR6 45CSR11 45CSR13 WV Code § 22-5-4 (a) (14) 45CSR30 40 C.F.R. Part 61 40 C.F.R. Part 82, Subpart F	Open burning prohibited. Standby plans for emergency episodes. NSR permit The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Asbestos inspection and removal. 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 Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit (<i>if any</i>)
R13-2646B	August 16, 2019	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 contact information for US EPA has been updated in Condition 3.5.3.

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 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: December 9, 2022
Ending Date: January 9, 2023

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)

Public Comments

Public notice for the Draft Title V Permit was published in *The Charleston Gazette-Mail* on December 9, 2022. The comment period for the Draft Permit ended on January 9, 2023. On January 9, 2023, the West Virginia Division of Air Quality (WV DAQ) received written comments by email from a group of commenters which included the following individuals and their organizations:

- James Yskamp, Esq., Senior Attorney, Earthjustice
- Adam Kron, Esq., Senior Attorney, Earthjustice
- Kathleen Riley, Esq., Senior Associate Attorney, Earthjustice
- Michelle Mabson, Staff Scientist, Earthjustice
- Kathy Ferguson, Interim Executive Director, Our Future West Virginia
- Maya Nye, Ph.D., People Concerned About Chemical Safety
- Linda Frame, President, West Virginia Environmental Council

Pursuant to §45-30-6.8.e, all comments received during the public comment period were reviewed and are addressed as follows:

Comment 1

1. There are Serious Issues with the Improper Piecemealing of the Logistics Barge Operations, Other Institute Facility Units, and Their Title V Permitting

Commenters raise significant concerns regarding Altivia's and Union Carbide Corporation's ("UCC") piecemealing of the Institute Facility into separately owned and permitted units—and by DAQ's approval of this practice through the issuance of separate operating permits. This piecemealing prevents DAQ from issuing a permit that properly takes into account the Institute Facility's total emissions footprint, connected processes and controls, and full effect on neighboring communities' health. This may also result in the artificial circumvention of major source thresholds and therefore the improper avoidance of the legal requirements to obtain a Title V operating permit or to comply with more stringent federal and state standards. This piecemealing also has significant implications for public participation, given that DAQ has siloed the permitting decisions into a series of public comment periods. DAQ must not allow this improper piecemealing of the facility and should instead fulfill its obligations under the Clean Air Act by reviewing and permitting the facility in a way that takes all emissions and risks into account. Until very recently, Altivia's Logistics Barge Operations were part of UCC's Logistics unit, permitted together under Title V Permit No. R30-03900005-2017. In 2019, UCC requested an administrative amendment to this permit, dividing the barging operations from the Logistics unit's ethylene oxide distribution into two separate operating permits. DAQ approved of this "[s]eparation of the EO distribution and the barge operations processes into two different Title V permits." At some point thereafter, UCC transferred ownership of the barging operations— along with several other of the units at the Institute Facility—to Altivia. As DAQ provided in the recent fact sheet on the renewal of the Logistics unit's Title V permit—in which Commenters have

raised the same concerns regarding piecemealing—“Union Carbide Corporation has transferred ownership and control of several facilities,” and UCC “now only has two business units at its Institute Facility”: the Logistics unit (minus barge operations) and the Catalyst plant. These two units owned by UCC continue to operate side-by-side with the unspecified number of units owned by Altivia (at least five, according to DAQ’s Title V Permits and Applications webpage) at the Institute facility. First, Commenters raise doubt as to whether this transfer of ownership and DAQ’s decision to separately permit each of these business units are permissible under the Clean Air Act and DAQ’s regulations. Each of these business units is still within the fence line of the Institute Facility, and several of them have connected purposes, functions, and products. DAQ appears to acknowledge this reality at least with respect to units owned by the same corporation. For example, in DAQ’s recent proposed renewal of the Title V permit for UCC’s Logistics unit, DAQ considers the combined potential to emit of UCC’s Catalyst plant and Logistics unit but does not consider the potential emissions of the Logistics Barge Operations or any other unit operating at the Institute Facility. Even though the processes of the units remain connected in various ways, DAQ now looks the other way due to the new ownership arrangement. Second, one of the most serious consequences of this artificial segmentation is that DAQ suggests that separated and transferred units such as these can be considered non-major sources and therefore may request to opt out of the Title V permitting program. In other words, an operator could appear to bring its emissions below major-source thresholds merely by making a series of legal maneuvers. For example, while DAQ considers the Logistics Barge Operations to exceed major source thresholds, it takes the position that UCC’s Logistics unit—the former “home” of the barging operations—“does not have a potential to emit any criteria pollutant over 100 tons per year, any single HAP over 10 tons per year, or any combination of HAPs over 25 tons per year.” And while DAQ states that it will continue to consider UCC’s Logistics unit “a Title V source on the basis of once in always in,” DAQ also suggests that this will only continue “until such time the permittee requests review for removal from the Title V program and approval is granted by the Secretary.” Commenters strongly oppose DAQ’s position and actions allowing Altivia and UCC to circumvent Title V permitting requirements and major source status on this basis. Title V permitting—and the more stringent emissions standards for major sources (e.g., MACT)—exist to protect the public from large facilities’ emissions and associated health risks. A permittee should not be able to avoid these requirements merely by taking a series of legal and corporate actions to divide its operations into separate, allegedly “non-major” units. Allowing Altivia and UCC to take this approach would incentivize other large facilities to similarly divide operations and transfer ownership in order to avoid more stringent standards and to hide their full emissions footprint from the public.

DAQ Response to Comment 1

DAQ’s rule 45CSR30 provides for the establishment of a comprehensive air quality permitting system consistent with the requirements of Title V of the Clean Air Act and 40 C.F.R Part 70. Section 2.26 of 45CSR30 and Section 70.2 of 40 C.F.R. 70 both define a “Major source” as:

- 1) Any stationary source (or any group of stationary sources that are located on one or more contiguous or adjacent properties); and

- 2) Are under common control of the same person (or persons under common control); and
- 3) Belong to a single major industrial grouping; and
- 4) Are a major source of hazardous air pollutants (10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of such hazardous air pollutants) or a major source of air pollutants (one hundred tons per year or more of any pollutant subject to regulation).

The definition sets forth criteria that must all be true for a facility to be classified as a major source under Title V. Although UCC, Altivia, and the other facilities at the Institute site are contiguous and adjacent and belong to the same industrial grouping, they are not under common control of the same person as explained below.

The equipment permitted under Altivia's Logistics Barge Operations Group 3A of 8 was once part of UCC's Logistics Group 3 of 8. The UCC's Logistics Group 3 of 8 was split into two separate Title V permits (Group 3A of 8 and Group 3 of 8) on September 26, 2019, because UCC was preparing for the sale of equipment and the transfer of DAQ permits to their new owner, Altivia. The Title V Permit for Group 3A of 8 along with several other UCC Institute Title V and minor NSR permits were transferred to Altivia on February 19, 2020. The DAQ did not consider the transfer of permits to their new owner as "piecemealing" or "circumvention" of the Title V regulations, as Altivia and UCC are not under common control and are considered separate Title V major sources.

When making the source determination for UCC and Altivia, WV DAQ referred to *Meadowbrook* in which EPA interpreted the term "control" for its Title V regulations to require more than the ability to merely influence, but on control over "operations relevant to air pollution, and specifically control over which operations that could affect the applicability of, or compliance with, air permitting requirements,"¹ such as Title V. The justification behind EPA's definition of control in *Meadowbrook* is that since EPA's regulations reference air pollution-emitting activities when defining what constitutes a single source, source determinations made in the context of Title V permitting programs and its requirements should pertain to the control and monitoring of air pollution emissions. Furthermore, "if the authority one entity has over another cannot actually affect the applicability of, or compliance with, relevant permitting requirements, then the entities cannot control what permit requirements are applicable to each other and whether another entity complies with its respective requirements."¹ EPA determined that when one entity does not have control over another's permitting requirements, "it is more logical for such entities to be treated as separate sources, rather than being grouped together artificially for permitting purposes."¹ EPA further clarified in *Meadowbrook* that "aggregating entities that cannot control decisions affecting applicability or compliance with permitting and other requirements would create practical difficulties and inequities. For Title V purposes, it may be impossible for the responsible official of one entity to accurately certify the completeness of a permit application for a permit

¹ *Meadowbrook* – Letter from William L. Wehrum, Assistant Administrator, Office of Air and Radiation, U.S. Environmental Protection Agency, to the Honorable Patrick McDonnell, Secretary, Pennsylvania Department of Environmental Protection (April 30, 2018)

modification (e.g., to incorporate requirements that are applicable to a new unit) that is entirely within the control of another entity, or to certify that the other entity has complied with existing permit requirements, as required by Title V.”¹

UCC is on a site owned by Altivia and sends wastewater to Altivia’s wastewater treatment system and receives steam from Altivia’s boilers. Beyond these functions, the two facilities do not have connected purposes, functions, and products. Because of the relationship between the two facilities regarding the wastewater treatment system and the boilers, WV DAQ also reviewed the EPA source determination for Ameresco and JCL (referred to as *Ameresco*). In this source determination, EPA provided an example of two separately owned manufacturing companies that operate independently with respect to all their emissions-related activities, except for a shared wastewater treatment plant over which they share control due to practical and economic convenience. While this is not exactly the same as UCC and Altivia’s relationship because Altivia is the sole owner and operator of the wastewater treatment system and boilers and just supplies these services to UCC, it is similar enough to apply EPA’s determination from *Ameresco* that in the case of the shared wastewater treatment system, “it would stretch the plain meaning of ‘persons under common control’, and the notion of a ‘common sense notion of a plant,’ to consider these two entities to be a single source due to one piece of shared equipment. Such an overbroad reading could result in inequitable outcomes. The potential inequities associated with this situation mirror the concerns addressed in the Meadowbrook Letter: one entity could be unfairly held accountable for, or otherwise impacted by, the actions of another entity that were entirely beyond the first entity’s control.”²

Based on the definitions of “control” in *Meadowbrook* and *Ameresco*, DAQ concluded that UCC and Altivia do not have “control” over decisions that could affect air permitting obligations of the other and that they are two separate business entities.

Furthermore, by issuing separate Title V permits to UCC and Altivia, there was no improper avoidance of the legal requirements to obtain a Title V operating permit because both facilities are considered Title V major sources and both facilities have Title V operating permits. Section 5.1 of 45CSR30 states that each Title V operating permit issued shall include all applicable requirements that apply to the source at the time of permit issuance. The DAQ has done this. It does not matter if there is one permit for Altivia and one permit for UCC or five permits for Altivia and two permits for UCC, all applicable requirements have been included in the Title V permits. Issuing multiple Title V permits to one facility has been a practice used by WV DAQ since the first Title V permits were issued for the larger chemical facilities. These permits were divided by process groups and instead of issuing one large permit with hundreds of pages of requirements, it was more manageable to divide the facility into smaller Title V permits. This did not change the Title V applicability of the facility and it did not change the applicable requirements included within the Title V permits. In addition, dividing the process groups into separate Title V permits did not change any of the public comment requirements under Title V. For each Title V permit, a Class I legal notice is published which begins the comment period;

² *Ameresco* – Letter from Anna Marie Wood, Director, Air Quality Policy Division, United States Environmental Protection Agency, Research Triangle Park, to Ms. Gail Good, Director, Bureau of Air Management, Wisconsin Department of Natural Resources (October 16, 2018)

there is a mailing list that is free to join on WVDEP's website (<https://apps.dep.wv.gov/ListServ/>) which provides a copy of the notice; and all current Title V permits are included on DAQ's website with those currently out for public comment indicated. This is common practice as many large complex facilities are managed this way and this practice has been reviewed and approved by US EPA.

The DAQ does not agree that issuing separate Title V permits to Altivia and UCC circumvented the Title V permitting requirements, MACT standards, or major source status. The definition of major source under Title V, includes the requirement that sources are under common control of the same person which is not the case for Altivia and UCC. Also, there is no circumvention of Title V permitting requirements or MACT standards. Both facilities are considered major sources for Title V and MACT, and the Title V permits include all the facilities' applicable air quality requirements, including those from MACT.

Comment 2

2. The Draft Permit Improperly Includes an Affirmative Defense for Emergencies

DAQ must remove the unlawful affirmative defense for "emergencies" contained in the Draft Permit, which would allow Altivia to emit unlimited amounts of dangerous pollutants without penalty. The D.C. Circuit has held that affirmative defenses are unlawful, and EPA has repeatedly recognized the same. Because Congress created a private right of action for citizens in the Clean Air Act, only "the Judiciary, not any executive agency" may limit available remedies under that private right of action. "[I]t is for the courts to decide whether to create an affirmative defense in these private civil suits," not DAQ. Of further relevance to DAQ's specific permitting decision here is that EPA has issued a proposed rule to remove the affirmative defense provisions from the applicable Title V regulations and to require states to remove affirmative defenses from their state Title V rules and Title V permits. EPA expects to finalize its rule in March of this year. Additionally, the DAQ must remove the affirmative defense from the Draft Permit because emission standards must apply at all times. Following the decision in *Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008), finding that exemptions for emissions during periods of malfunction were unlawful, the EPA has removed such exemptions from many national emission standards for hazardous air pollutants, including the general standards. The affirmative defense is plainly unlawful under binding D.C. Circuit precedent, and DAQ should remove the defense from Altivia's Title V permit now, rather than waiting for EPA to finalize its rule requiring states to remove the affirmative defense from their rules and permits. It does not matter that the affirmative defense may be contained in West Virginia's Title V rules: those state rules cannot supersede the clear intent of Congress in enacting the Clean Air Act. Further, affected community members should not have to wait years for the state to remove affirmative defenses from its Title V permits. Any delay in removing the affirmative defense from the permit here is especially problematic because of the environmental justice concerns presented by the Institute facility.

DAQ Response to Comment 2

40 C.F.R. §70.6 (g) and 45CSR§30-5.7 state that each Title V operating permit shall have provisions for affirmative defense for emergencies. This is the reason why these provisions were included in the Draft Title V permit that went out for public comment on December 9, 2022. Revisions to WV's rule 45CSR30 were recently passed by the Legislature and the changes include the removal of the affirmative defense provisions. Although the final rule has not been signed by the Governor and filed as final, the WV DAQ has removed the affirmative defense provisions from Altivia's Title V renewal.

Comment 3

3. There are Significant Environmental Justice Concerns Associated with the Institute Facility and this Permit Renewal

Finally, as Commenters have raised in separate comments on the draft renewal Title V permit for UCC's Logistics unit, there are serious long-running environmental justice concerns associated with the Institute Facility, the Logistics unit's ethylene oxide emissions, the potential connection of these emissions to the Logistics Barge Operations, and DAQ's permitting decisions regarding the same. Both EPA and its Office of Inspector General have specifically identified the Institute Facility as one of 25 "high-priority" ethylene oxide-emitting facilities that contribute to elevated estimated cancer risks equal to or greater than 100 in one million at the census tract level. There are numerous articles and investigations as to the serious health impacts that residents of Institute—as one of West Virginia's only majority-Black communities—and surrounding communities experience from the UCC facility and the disproportionate cumulative impacts they face from the toxic emissions of the numerous facilities within "Chemical Valley." Such environmental justice concerns are especially germane in Title V permitting decisions in the permitting authority's duty to assure compliance with all underlying applicable requirements. Specifically, "Title V can help promote environmental justice through its underlying public participation requirements and through the requirements for monitoring, compliance certification, reporting and other measures intended to assure compliance with applicable requirements." For these reasons, DAQ must not renew the Draft Permit until DAQ can ensure that all such concerns have been properly addressed and that the Draft Permit can assure compliance with all requirements.

DAQ Response to Comment 3

Altivia's Logistics Barge Operations are not permitted to load or unload ethylene oxide. The Fact Sheet includes a list of potential HAP emissions from materials which are permitted to be loaded and unloaded including ethylene glycol, methyl isobutyl carbinol, methyl isobutyl ketone, and methanol. Furthermore, the draft permit does not include ethylene oxide emission limits or throughput limits because the loading and unloading of ethylene oxide is not permitted. In order

to be permitted to load or unload ethylene oxide, Altivia would be required to modify their permits under 45CSR13 and 45CSR30.

West Virginia Rule 45CSR§30-5.1 states that each Title V operating permit shall include all applicable requirements that apply to the source at the time of permit issuance. All current applicable requirements for Altivia Services, LLC's Logistics Barge Operations were included in the Draft Title V operating permit renewal issued on December 9, 2022. These requirements included monitoring, compliance certification, and reporting as specified in your comments.

The DAQ has provided the public ample opportunity to participate in the Title V permit renewal process. The notice for the Draft Permit was published in *The Charleston Gazette-Mail* on Friday, December 9, 2022, beginning the 30 day public comment period. In addition to publication in the newspaper, there is a mailing list which is free to join on WVDEP's website (<https://apps.dep.wv.gov/ListServ/>) which provides a copy of the notice. A copy of the Draft Permit, Fact Sheet and application have also been posted on DAQ's website with the beginning and ending dates for submitting public comments.

DAQ Action on the Title V Permit

Section 2.17 of the Title V permit which included the emergency provisions was deleted and the section was marked as "Reserved." Condition 3.5.7 which referred to Section 2.17 for reporting emergency situations was also marked as "Reserved."