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west virginia department of environmental protection

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# Response to Public Comments

R30-03900005-2023 (Group 2 of 2)

Union Carbide Corporation

Logistics Institute Facility

Date: July 14, 2023

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## **BACKGROUND INFORMATION**

Logistics (Group 2 of 2) is Union Carbide Corporation's (UCC) distribution system for ethylene oxide (EtO). At the ethylene oxide distribution operation, rail cars of ethylene oxide are unloaded into storage tanks. The storage tanks are two double-walled earthen covered pressurized tanks. From the tanks, ethylene oxide is distributed to consumers at Institute facilities and at South Charleston facilities by distribution systems. The ethylene oxide distribution facility uses a primary flare and a secondary flare to control ethylene oxide emissions.

Public notice for the Draft Title V Permit was published in *The Charleston Gazette-Mail* on Saturday, October 15, 2022. During the public comment period, several requests for a public hearing were received and the Director agreed to hold a public hearing. Notice of the in-person public meeting and virtual public hearing was published in *The Charleston Gazette-Mail* on December 9, 2022. The in-person public meeting was held on January 9, 2023. The virtual public hearing was held on January 10, 2023.

The West Virginia Division of Air Quality (WV DAQ) received written comments during the public comment period (October 15, 2022 to January 20, 2023) and oral comments during the January 10, 2023 public hearing. Pursuant to §45-30-6.8.e, all comments received during the public comment period and during the public hearing have been reviewed and are addressed in this document.

## **ORGANIZATION OF COMMENT RESPONSE**

The DAQ's response to comments defines issues over which the DAQ and its Title V Program has authority and by contrast, identifies those issues that are beyond the purview of the DAQ and its Title V Program. The response also describes the statutory basis for the issuance/denial of a permit

This document does not reproduce all the comments here (they are available for review in the R30-03900005-2023 (2 of 2) application file accessible on Application Xtender at <https://dep.wv.gov/daq/permitting/titlevpermits/Pages/default.aspx>). Instead, comments are summarized and key points are listed. In some cases, similar individual comments were combined into one general comment. The DAQ makes no claim that the summaries are complete; they are provided only to place the responses in a proper context. For a complete understanding of submitted comments, please see the original documents in the file. The DAQ responses, however, are directed to the entirety of comments received, not just to what is summarized.

## **RESPONSE TO COMMENTS**

### ***Statutory Authority of the DAQ***

The statutory authority of the DAQ is given under the Air Pollution Control Act (APCA) - West Virginia Code §22-5-1, et. seq. - which states, under §22-5-1 ("Declaration of policy and purpose"), that:

It is hereby declared the public policy of this state and the purpose of this article to achieve and maintain such levels of air quality as will [underlining and emphasis added] protect human health and safety, and to the greatest degree practicable, prevent injury to plant and animal life and property, foster the comfort and convenience of the people, promote the economic and social development of this state and facilitate the enjoyment of the natural attractions of this state.

Therefore, while the code states that the intent of the rule includes the criteria outlined in the latter part of the above sentence, it is clear by the underlined and bolded section of the above sentence that the scope of the delegated authority does not extend beyond the impact of air quality on these criteria. Based on the language under §22-5-1, et. seq., the DAQ, in making determinations on issuance or denial of permits under WV Legislative Rule 45CSR30 - Requirements for Operating Permits (45CSR30 or Title V) and 45CSR13 - Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, Permission to Commence Construction, and Procedures for Evaluation (45CSR13 or NSR), does not take into consideration substantive non-air quality issues such as job creation, economic viability of proposed project, strategic energy issues, non-air quality environmental impacts, nuisance issues, etc.

### ***DAQ Title V Program***

Under the authority of 45CSR30, the WV DAQ issues Title V operating permits to major sources of emissions. A major source for Title V is defined as a facility having potential emissions of one or more criteria pollutants that are 100 tons per year or more; one or more hazardous air pollutants that are 10 tons per year or more; and/or aggregate hazardous air pollutants that are 25 tons per year or more.

The Title V program was established in the 1990s to issue operating permits that include all of a facility's applicable air requirements. 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 Draft Title V Permit for UCC's Institute Facility for Logistics (Group 2 of 2) which went out for public comment on October 15, 2022 included all the source's applicable air regulatory requirements at that time, specifically requirements from their Rule 21 and Rule 27 consent orders, state rules, and federal regulations.

The Title V operating permit does not establish new emission or operating limitations. Emission and operating limitations are established through new source review permits, state rules, and federal regulations.

Title V permits are issued for a fixed term of five (5) years and must be renewed. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration. UCC submitted a complete application to renew their Title V permit for Logistics (Group 2 of 2) on November 30, 2021. The renewal application was due on February 1, 2022. Therefore, because the application for Logistics (Group 2 of 2) was timely and complete, UCC received an application shield which allows them to continue to operate Logistics (Group 2 of 2) under the conditions of their previous Title V permit until the Secretary takes final action on this Title V permit renewal application.

### ***Comments on the Draft Title V Permit***

The DAQ received comments on the contents of the Draft Title V Permit. Some of these comments resulted in changes to the conditions of the permit while others did not. Comments received on the Draft Title V Permit are discussed in more detail below.

### **Affirmative Defense Provisions**

The affirmative defense provisions were included in the Draft Title V Permit that went out for public comment on October 15, 2022 because Section 5.7 of 45CSR30 (effective May 1, 2015) stated that each Title V operating permit shall have provisions for affirmative defense for emergencies. The provisions

for affirmative defense were removed from WV's revised rule 45CSR30 (effective March 31, 2023), therefore, the WV DAQ has removed the affirmative defense provisions from the Title V renewal for UCC's Logistics (Group 2 of 2).

### Collaborative Agreement

After the Draft Title V Permit was issued, the DAQ worked with UCC to reduce potential emissions of EtO through a unique site-specific state enforceable collaborative agreement, voluntarily entered into by UCC and not otherwise addressed by current law or regulation. This collaborative agreement was signed on January 18, 2023, and requires the following actions for UCC - Logistics (Group 2 of 2):

- Amend Consent Order No. CO-R27-99-14-A(92) to reduce the Facility's EtO emissions limitations to be reflective of its current business plan.
- Develop and implement a unique site-specific EtO emissions screening program for rail cars in EtO service at the Facility. The Facility EtO rail car emissions screening program shall include, at a minimum, the following requirements:
  - Each rail car shall be monitored for EtO emissions within twelve (12) hours of arriving at the Facility; for purposes of this section the Facility shall include the rail spurs within the Facility and just south of the unloading rack.
  - Each rail car shall be monitored by on-site inspection utilizing a testing device capable of detecting EtO concentrations down to at least 20 ppm.
  - Each rail car will be monitored at one or more openings in the dome.
  - Upon a reading indicating potential rail car emissions, appropriate action will be initiated based on developed response plans.
  - The Facility shall keep records of the screening for EtO emissions from the rail cars.
- In addition to its obligations to comply with the federal LDAR program, as set forth in 40 C.F.R. §63.1434(a), the facility shall be subject to the following State only requirements:
  - Skip periods authorized under the federal LDAR program shall not be utilized by UCC.
  - For readings, taken during compliance monitoring, that are at or above the action thresholds of 10 ppm, an attempt at repair shall be made (consistent with 40 CFR §63.1434(a)), after which re-monitoring will occur.

Component Type	Frequency	Weekly Visual	Action Threshold
Agitator	Monthly	Yes	10 ppm
Connector - NTM*	Annual		10 ppm
Connector - DTM**	Annual		10 ppm
Pump	Monthly	Yes	10 ppm

Component Type	Frequency	Weekly Visual	Action Threshold
Relief	Monitored After Release		10 ppm
Valve - NTM*	Quarterly		10 ppm
Valve - DTM**	Annual		10 ppm

\*NTM - Normal To Monitor

\*\*DTM - Difficult To Monitor

- The Facility shall keep records of any measurements at or above the action threshold including concentrations and repairs and/or repair attempts.
- Continue working with DAQ and the U.S. Environmental Protection Agency (EPA) by providing in-kind or other tangible resources relative to state and federal air agency research related to EtO to assist with the development of air quality related data collection, air quality modeling, development of fence line EtO monitoring protocols and securing meteorological data related to such research.

Amended Consent Order CO-R27-2023-06 was signed on May 25, 2023 and contains the reduced EtO emission limitations for the Facility. These changes were included in the Proposed Title V permit. The site-specific EtO emissions screening program for rail cars in EtO service at the Facility and the more stringent State only LDAR requirements are not required by federal or state law, were entered into voluntarily consistent with discretionary authorities under state law, and were not intended nor designed for incorporation into the Facility's Title V permit, so these were not included in the Proposed Title V permit.

The collaborative agreement can be found at:

<https://dep.wv.gov/key-issues/Documents/EtO/UCC-Collaborative-Agreement/UCC%20EtO%20Collaborative%20Agreement%202023-01-18.pdf>

The DAQ received a request to reopen or extend the comment period for the Title V permit renewal to allow commenters to provide additional comments after full consideration of the specific terms of the collaborative agreement and after reviewing DAQ's report on the EtO monitoring project. The collaborative agreement was in part a result of the comments received during the Draft Title V comment period as well as information gained from the EtO monitoring project. The collaborative agreement contains more stringent requirements to reduce potential and actual EtO emissions than what is required by state rules and federal regulations. The public comment period was open from October 15, 2022 to January 20, 2023 (10 days after the public hearing held on January 10, 2023). This provided commenters more than three months to provide comments. As such, DAQ does not need to extend or reopen the comment period for the Title V permit renewal.

#### Reductions in EtO 45CSR27 Emission Limits

As a result of the collaborative agreement, the EtO emission limits in UCC's 45CSR27 consent order were decreased. The revised emission limits are provided in condition 4.1.6 of the Title V permit and more closely reflect the facility's actual emissions of EtO. The revised 45CSR27 EtO emission limits and enhanced LDAR resulted in a decrease in potential emissions, as reflected in the revised Title V Fact Sheet.

UCC Institute Facility's 45CSR27 EtO Emission Limits (Title V Condition 4.1.6)				
Emission Point	Limits in Draft Title V Permit (October 15, 2022)		Limits in Proposed Title V Permit	
	lbs/hr	lbs/year	lbs/hr	lbs/year
410B/410A	0.29	2,539	0.29	1,900
Fugitives	N/A	N/A	N/A	

#### Destruction Efficiencies for the Flares are Inconsistent in the Draft Title V Permit

The DAQ received a comment that the Draft Title V Permit is inconsistent as to the required destruction efficiency of the flares, presenting numbers that range from 95 percent to 99 percent. The commenter gave an example of Attachment A of the Draft Title V Permit providing an efficiency of 99 percent while Section 4.1 provides for an efficiency of 95 percent or greater, and the Title V Application lists the efficiency at 98 percent.

The VOC emission limits and 99 percent destruction efficiency of the primary and secondary flares which are provided in Attachment A are from UCC's state-enforceable 45CSR21 consent order. The flare destruction efficiency of 95 percent or greater is included as condition 4.1.1.1.a of the Draft Title V Permit and the underlying requirement is from federal regulation 40 C.F.R. 63 Subpart PPP which further refers to the requirements of federal regulation 40 C.F.R. 63 Subpart G. Section 63.119(e)(1) states that "the control device shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater." The term greater is important in this limit. While the reduction does not have to be more than 95 percent, it can be more than 95 percent. This doesn't limit the control device to a 95 percent efficiency for HAPs, it only sets this as the limit to demonstrate compliance with the emission limitations of 40 C.F.R. 63 Subpart PPP. In fact, the emission limits provided in the Rule 27 and Rule 21 state-enforceable consent orders based on a 99 percent destruction efficiency are more stringent than the federal requirements under 40 C.F.R. §63.119(e)(1).

The Title V Application was updated to reflect a control efficiency for EtO of at least 99% for the primary and secondary flares.

This comment resulted in no changes to the Title V Permit.

#### Flare Monitoring Requirements of 40 C.F.R. §63.11(b) are Insufficient

The DAQ received a comment that the flare monitoring requirements of 40 C.F.R. §63.11(b) are not sufficient to ensure compliance with the emission limits. Section 63.119(e)(1) establishes that 40 C.F.R. §63.11(b) is the monitoring required to demonstrate compliance with the 95 percent or greater emissions reduction requirement of 40 C.F.R. 63 Subpart PPP. 40 C.F.R. 64, Compliance Assurance Monitoring (CAM), establishes criteria where a facility would have to implement monitoring or additional monitoring to demonstrate compliance with emission limits included in a Title V Permit. 40 C.F.R. §64.2(b)(1)(i) exempts emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112. Therefore, under the CAM regulation, additional monitoring would not be required for an emission limitation or standard from 40 C.F.R. 63 Subpart PPP or Subpart G because EPA recognizes that monitoring has already been addressed in these regulations and additional monitoring is not required. Therefore, until such time as the requirements of 40 C.F.R. 63 Subparts A, G, and/or PPP

are revised by EPA, the monitoring requirements for the flares will remain unchanged in the Title V Permit.

#### Monitoring is Insufficient to Demonstrate Compliance with Hourly PM and Opacity Limits

A comment was received that compliance demonstration with the 45CSR§6-4.1 hourly particulate matter emission limit for the flares (Title V condition 4.1.7) through stack testing upon request of the Director (Title V condition 4.3.4) is not adequate. The DAQ included this compliance demonstration because stack testing is the only compliance demonstration provided in 45CSR6 to measure hourly particulate matter emissions. The testing requirements were taken directly from Section 7.1 of 45CSR6. The commenter said that the testing in Title V condition 4.3.4 is ambiguous because it mentions EPA Method 5, but states that any other equivalent EPA approved method approved by the Director can be used. It should be noted that any testing, whether it be Method 5 or another EPA approved method must be approved by the Director. Title V condition 3.3.1.c requires all periodic tests to determine mass emission limits to be conducted in accordance with an approved test protocol. Such protocols must be submitted to the Director at least thirty (30) days prior to any testing.

Additionally, this emission source was reviewed for CAM applicability, but because pre-control device emissions of particulate matter are less than the major source thresholds and particulate matter emissions are not controlled by the flares, particulate matter emissions from the flares did not meet the criteria defined for a pollutant-specific emissions unit and therefore additional monitoring under CAM did not apply. Also, compliance with the particulate matter emission limits can be indirectly monitored through opacity monitoring. The monthly opacity monitoring (Title V condition 4.2.2) can be used to identify problems with the flare that could result in additional particulate matter emissions. If this occurs, the Director can require stack testing to demonstrate compliance with the hourly particulate matter emission limit.

A comment was also received that only requiring visible emissions monitoring once per month and any other time plant personnel happen to check for and witness visible emissions is not adequate. The commenter further stated that monthly observations of only one minute long are not adequate and allowing the source to go up to 45 days before performing observations is not adequate. The commenter also mentioned that the source should not be allowed up to 72 hours before conducting a Method 9 evaluation once they detect visible emissions. The commenter suggested that DAQ require UCC to conduct video surveillance of the flares with infrared (or some other means) to detect visible emissions after dark and in adverse weather conditions.

Since 45CSR6 did not specify any monitoring frequency for opacity, condition 4.2.2 was added under the Title V permit. The monthly opacity monitoring prescribed for the flares is similar to monitoring prescribed for other flares within West Virginia. The commenter stated that the permittee may go up to 45 days between performing observations, but this is not what is meant by that part of the condition. With monthly opacity monitoring but without the maximum 45 days between consecutive readings, the permittee could, for example, conduct opacity monitoring on April 1st and then not conduct opacity monitoring again until May 31st. The permittee would be meeting the monthly monitoring requirements, but could go 60 days between opacity monitoring. The “maximum of 45 days between consecutive readings” is meant to space the timing of the opacity readings more uniformly.

The commenter pointed out that if opacity is observed, the permittee has up to three days to follow up with a Method 9 evaluation. This allows the permittee to have violations undetected for up to three days. This is not necessarily true as the permittee would be required to report this as a deviation since the more stringent opacity limit of no visible emissions from 40 C.F.R. §63.11(b) and Title V condition 4.1.1.1.a would apply. DAQ’s Compliance and Enforcement reviews the Annual Compliance Certifications and



Semi-Annual Monitoring Reports and would see these deviations reported. Excessive deviations with the opacity limits for the flares would indicate a compliance issue that would lead to revisiting the frequency of opacity monitoring.

The commenter also mentioned that visible emissions observations are “once a month-and ‘any other time’ plant personnel happen to check for and witness visible emissions.” Title V condition 4.2.2 is not written in the manner as interpreted by the commenter. The plant personnel do not have to purposefully check for visible emissions in order to witness them. The condition is written such that at any time visible emissions are observed, the plant personnel would be required to report the visible emissions and could be required to conduct a Method 9 observation.

The commenter did not think the flare monitoring that was specified under 40 C.F.R. §63.11(b) was adequate to demonstrate compliance with the no visible emissions requirement. This monitoring comes directly from 40 C.F.R. 63 Subparts PPP and G and requires a visible emission test using the techniques specified in §63.11(b)(4). Title V condition 4.2.2 currently has more stringent monitoring because the permittee is required to perform monthly visible emission checks in addition to the one time visible emissions test required under 40 C.F.R. §63.1437(c)(1).

No changes were made to the Title V permit as a result of this comment.

#### Condition 3.3.1(a) Should be Removed from the Title V Permit

A comment was received that DAQ should either remove Title V condition 3.3.1(a) from the Title V permit or revise the permit section to clarify that EPA must approve any major alternatives to NESHAP monitoring and testing requirements. The DAQ does not agree that the current Title V boilerplate language could allow the DAQ to approve major changes to NESHAP monitoring and testing requirements, because as the commenter pointed out, DAQ has no delegated authority to approve major alternatives to NESHAP monitoring and testing and the current language of Title V boilerplate condition 3.3.1.a says the DAQ can approve alternative monitoring and testing only “in accordance with the Secretary’s delegated authority.”

No changes were made to the Title V permit as a result of this comment.

#### Condition 3.3.1.(b) Should be Removed from the Title V Permit

A comment was received that DAQ should remove Title V boilerplate condition 3.3.1.(b) from the Title V permit. The commenter stated that the provision could be read to unlawfully allow DAQ to weaken SIP monitoring and testing requirements and could also approve monitoring and testing changes without following the required procedures for revising the Title V Permit. The DAQ does not agree that the language in Title V boilerplate condition 3.3.1.(b) as currently written gives the DAQ authority to weaken test methods specified in the permit. Any approval of additional testing or alternative testing must be approved by the Secretary on a source-specific basis as part of the testing protocol submitted to DAQ for approval. DAQ does not have the authority to use testing which is not allowed by or equivalent to the state rule or conditions of the Title V permit.

No changes were made to the Title V permit as a result of this comment.

### *Comments on the Draft Title V Fact Sheet*

The DAQ received comments on the contents of the Draft Title V Fact Sheet. Those comments and the changes to the Fact Sheet are discussed in more detail below.

#### Changes to the Institute Facility's Potential Emissions

EtO potential emissions were reduced as a result of the Collaborative Agreement. Also, UCC recently reported their 2022 actual emissions for the Institute Facility. The new facility-wide emissions for the UCC Institute Facility are provided in the table below. The table does not include emissions from any other facilities at Institute (e.g. Altivia and Specialty Products) as these facilities are not under common control.

UCC Institute Facility's Emissions [Tons per Year]			
Regulated Pollutants	Potential Emissions from Public Meeting Handout January 9, 2023	Potential Emissions Revised Per Collaborative Agreement	2022 Actual Emissions
Carbon Monoxide (CO)	10.66	10.66	5.79
Nitrogen Oxides (NO <sub>x</sub> )	40.10	40.10	5.37
Particulate Matter (PM <sub>2.5</sub> , PM <sub>10</sub> , TSP)	6.27	6.27	0.64
Sulfur Dioxide (SO <sub>2</sub> )	1.21	1.21	< 0.01
Volatile Organic Compounds (VOC)	24.38	22.33	7.01
Ethylene Oxide	3.00	0.95	0.35
Ethylene Glycol	<1	<1	0.12
Total HAPs	5.00	2.95	0.47

### Changes to the Title V Program Applicability Basis Section

Since UCC Institute is still subject to the requirements of 40 C.F.R. 63, Subparts PPP and DDDDD, they are required to have a Title V operating permit. The language in the Title V Program Applicability Basis section of the Title V Fact Sheet simplified the process of removing a source from the Title V Program. The WV DAQ has revised the Title V Program Applicability Basis section of the Title V Fact Sheet. The section now states:

“UCC is subject to the requirements of 40 C.F.R. 63, Subpart PPP (Polyether Polyols MACT) and 40 C.F.R. 63, Subpart DDDDD (Boiler MACT), therefore, UCC is required to have a Title V permit for their Institute Facility.”

### *Comments on the Title V Permit Application*

#### EtO Emissions Basis is Not in the Title V Permit Application

Commenters stated that the 3.0 tons of EtO emissions per year are the same as reported in previous applications, the Title V application does not provide any basis for this estimate, and that DAQ must not renew the permit based on an incomplete application. The EtO potential emissions have been revised in the Title V application. It should be noted that the omission of the basis for the EtO potential emissions in the Title V application had no effect on the facility’s applicable requirements included in the Draft Title V Permit that went out for public comment on October 15, 2022. UCC was and is still considered a Title V major source subject to the requirements of a major source MACT, 40 C.F.R. 63, Subpart PPP (Polyether Polyols MACT), and these requirements were included in the Draft Title V Permit.

#### Flare Destruction Efficiency is Not Consistent with the Limits in the Permit

Commenters pointed out that the flare destruction efficiency in the Title V Permit Application is specified as 98 percent while the emission limits in the Title V Draft Permit provided for a flare destruction efficiency of 99 percent. This discrepancy has been corrected in the Title V Permit Application and the control efficiency for EtO for the primary and secondary flares has been changed to at least 99 percent.

### *Common Control*

#### Are Facilities at the Institute Site Under Common Control?

There were several comments about DAQ’s issuance of Title V permits to separate business entities (e.g. UCC, Altivia Services, LLC (Altivia), and Specialty Products US, LLC (Specialty Products)) at the Institute Facility and within each business entity into separate Title V Permits by process group. The commenters claimed that DAQ should not accept different ownership as a deciding factor and claimed that each of these business entities is still within the fenceline of the Institute Facility, and several of them have connected purposes, functions, and products, so DAQ should fully analyze the various factors that EPA has historically said are relevant to common control. Furthermore, commenters claimed that issuance of separate permits circumvent Title V permitting requirements and the more stringent MACT requirements for major sources of hazardous air pollutants (HAPs).

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 Specialty Products are contiguous and adjacent and belong to the same industrial grouping, they are not under common control of the same person as explained below.

When making the source determination for UCC, Altivia, and Specialty Products, WV DAQ referred to EPA's source determination for *Meadowbrook* in which the Pennsylvania DEP requested that EPA review a document submitted on behalf of Meadowbrook Energy LLC concerning whether emissions from a biogas processing facility under development by Meadowbrook Energy LLC should be aggregated with an existing landfill owned by Keystone Sanitary Landfill, Inc. for Clean Air Act permitting purposes. Keystone Sanitary Landfill, Inc. would control its own landfill gas collection activities and deliver the untreated landfill gas to the demarcation point after which Meadowbrook Energy LLC would conduct all processing of the gas necessary to create renewable natural gas products for market sale. In *Meadowbrook*, 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,"<sup>1</sup> 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."<sup>1</sup> 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."<sup>1</sup> 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 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."<sup>1</sup>

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<sup>1</sup> *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) [https://www.epa.gov/sites/default/files/2018-05/documents/meadowbrook\\_2018.pdf](https://www.epa.gov/sites/default/files/2018-05/documents/meadowbrook_2018.pdf)

UCC and Specialty Products are on a site owned by Altivia and send wastewater to Altivia's wastewater treatment system and receive steam from Altivia's boilers. Also, UCC sells EtO to Specialty Products. Beyond these functions, the facilities do not have connected purposes, functions, or products. Because of the relationship between the facilities regarding the wastewater treatment system, the boilers, and supply of EtO, 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 Altivia's relationship with UCC and Specialty Products because Altivia is the sole owner and operator of the wastewater treatment system and boilers and just supplies these services to UCC and Specialty Products, 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."<sup>2</sup> This is also the case for Specialty Products purchasing EtO from UCC Institute in that because one entity purchases a material from another entity, they do not have control over that entity's permitting requirements and compliance with those requirements.

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

Furthermore, by issuing separate Title V permits to UCC, Altivia, and Specialty Products, there was no improper avoidance of the legal requirements to obtain a Title V operating permit because these facilities are considered Title V major sources and 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 how many permits Altivia, UCC, or Specialty Products have, 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 West Virginia 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. In fact, by issuing separate Title V permits for process groups, the facility is subject to more public comment periods, and the public can focus on the specifics as relates to each process, not the entire complex facility as a whole. For each Title V permit, a Class I legal notice is published which begins the comment period; 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.

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<sup>2</sup> *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) [https://www.epa.gov/sites/default/files/2018-10/documents/ameresco\\_jcl\\_letter.pdf](https://www.epa.gov/sites/default/files/2018-10/documents/ameresco_jcl_letter.pdf)

The DAQ does not agree that issuing separate Title V permits to UCC, Altivia, and Specialty Products 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 UCC, Altivia, and Specialty Products. Also, there is no circumvention of Title V permitting requirements or MACT standards. All three 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.

#### Does UCC Own Specialty Products?

There was a comment that Specialty Products was owned by UCC and both facilities should therefore be considered a single source for Title V permitting. The commenter contends that in the Fact Sheet (last paragraph of Page 1) for the minor modification for Specialty Products' Water Soluble Polymers, R30-03900682-2017 (2 of 2) (MM01), issued on April 16, 2019, it stated that "Specialty Products is owned by UCC and although this Permit has a new facility ID, it remains one Title V Facility for applicability purposes." This was true at the time the minor modification was approved, but is no longer the case. Specialty Products is currently a subsidiary of International Flavors & Fragrances Inc. and is not owned by UCC.

#### ***Environmental Justice***

##### Environmental Justice and Public Participation in the Title V Renewal Process

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 October 15, 2022, beginning the 30 day public comment period. In addition to publication in the newspaper, notice was sent out via WVDEP's email distribution list. This mailing list is free to join on WVDEP's website (<https://apps.dep.wv.gov/ListServ/>) and provides a copy of the notice. A copy of the Draft Permit, Fact Sheet and application were posted on DAQ's website with the beginning and ending dates for submitting public comments. During the comment period, requests for a public hearing were received and those requests were granted by the Director. Notice of the in-person public meeting and virtual public hearing was published in *The Charleston Gazette-Mail* on December 9, 2022. In addition to publication in the newspaper, this notice was also sent out via WVDEP's free mailing list. The in-person public meeting was held at 6 pm on Monday, January 9, 2023. The virtual public hearing was held at 6 pm on Tuesday, January 10, 2023.

The public comment period was open from October 15, 2022 to January 20, 2023. This provided commenters more than three months to provide comments. Although DAQ did receive some requests to extend the comment period, this request was not granted as commenters were given plenty of opportunity to provide comments.

As detailed above, DAQ has provided ample opportunity for the public to comment on the Draft Title V permit renewal. Also, as discussed in the next section, the DAQ has been actively engaged with the public on the issue of EtO.

## Environmental Justice and Public Participation for Ethylene Oxide

DAQ has been proactive in public outreach events and informing the public of the revised risk factor of EtO, the modeled impacts to the affected community, the short term EtO monitoring project that was performed in 2022, the WV DHHR study of the actual EtO related cancer rates and locations which show that there are no EtO related cancer clusters around the EtO emitting facilities in the Kanawha Valley and that Kanawha County is not in the top 10 of the 55 counties in WV for any EtO related cancer.

The public outreach events include:

- 8/10/2021 - An in-person meeting with DEP, BPH, and elected officials at DEP in Kanawha City
- 9/23/2021 - A virtual community meeting with EPA and DAQ
- 3/26/2022 - An in-person meeting with WV DHHR, EPA, and DAQ at the Dunbar Recreation Center
- 8/18/2022 - An in-person meeting by WV DHHR, EPA, and DAQ in North Charleston at the Schoenbaum Center
- 12/10/2022 - An in-person meeting that included DAQ in Dunbar by request from the Institute/West Dunbar/Pinewood/Sub Area Planning Committee
- 1/9/2023 - An in-person meeting by DAQ to address questions from the public regarding the Union Carbide Corporation Institute's Title V renewal at West Virginia State University in Institute WV
- 1/10/2023 - A virtual public hearing to take comments from the public regarding the Union Carbide Corporation Institute's Title V renewal
- 3/2/2023 - An in-person meeting by DAQ on the results of the EtO monitoring project at West Virginia State University in Institute WV

For the past couple of years, DAQ has been regularly attending the monthly Community Advisory Panel (CAP) meetings for the South Charleston and Western Kanawha Valley groups. WV DAQ also accepted an invitation to join the Union Carbide West Virginia Operations CAP and attended its first meeting on March 15, 2023.

In addition, DAQ has a dedicated EtO web page containing information related to outreach events, short term EtO monitoring results, a final report from the monitoring, a video explaining the risks and actual cancer rates found in the area, the collaborative agreement with UCC Institute, and written statements for the EtO emitting facilities in the Kanawha Valley that commit to going above and beyond what is required by state rules and federal regulations. DAQ also has set up a dedicated EtO mailing list for people to stay informed of EtO events in the Kanawha Valley. The EtO webpage contains a link to sign-up for the EtO mailing list.

### ***Cumulative Impacts***

DAQ's statewide air program requires that facilities obtain permits with emission limits for air pollutants that ensure compliance with state and federal emissions standards. Permitted emission limits are established so that no single facility is allowed to cause or contribute to a violation of the National Ambient Air Quality Standards (NAAQS). This approach also establishes a framework in which aggregate emissions from multiple facilities should not exceed NAAQS.

The NAAQS are set for pollutants considered harmful to public health and the environment. The Clean Air Act identifies two types of NAAQS. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary

standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation, and buildings.

Cumulative impacts are the totality of exposures to combinations of chemical and non-chemical stressors and their effects on health, well-being, and the quality of life outcomes.

The Title V permit is an operating permit which includes all applicable air requirements that apply to the source at the time of permit issuance. The Title V operating permit does not establish new emission or operating limitations. Emission and operating limitations are established through new source review permits, state rules, and federal regulations. The DAQ did not review cumulative impacts as part of the review for this renewal.

Even though the DAQ did not review cumulative impacts for the Title V permit renewal, DAQ's Fenceline Monitoring Project did look for the presence of EtO in the Institute area, which would include emissions from UCC Institute, other business entities within the Institute Facility (including Altivia and Specialty Products), and background concentrations of EtO. Additionally, EPA's Air Toxics Screening Assessment (AirToxScreen) gives a snapshot of outdoor air quality with respect to emissions of all air toxics, not just EtO. AirToxScreen is discussed in more detail below.

### ***Ethylene Oxide (EtO) Risk***

The U.S. Environmental Protection Agency (EPA) conducted a study of air toxic emissions across the United States using data from 2014. While the assessment was being conducted, the EPA made a finding related to EtO and reclassified it from a probable human carcinogen to a known human carcinogen and increased the inhalation cancer risk. The screening modeling assessment was completed and released by the EPA in 2018 in a report called the National Air Toxics Assessment (NATA). The NATA was a broad overview of air emissions across the country – commonly referred to as a screening tool – and was designed to identify areas that may need further investigation. The NATA identified four census tracts in West Virginia, all of which are nearby EtO-emitting facilities in Institute and South Charleston that warranted further review.

“EPA considers risk to be the chance of harmful effects to human health or to ecological systems resulting from exposure to an environmental stressor. A stressor is any physical, chemical, or biological entity that can induce an adverse effect in humans or ecosystems. Stressors may adversely affect specific natural resources or entire ecosystems, including plants and animals, as well as the environment with which they interact.” (<https://www.epa.gov/risk/about-risk-assessment#whatisrisk>)

The EPA has established a generally acceptable threshold of 100 in one million lifetime cancer risk ([https://19january2017snapshot.epa.gov/national-air-toxics-assessment/nata-frequent-questions\\_.html](https://19january2017snapshot.epa.gov/national-air-toxics-assessment/nata-frequent-questions_.html)).

The 100 in one million benchmark can be adjusted for smaller populations. For example, if there were a population of 10,000 residents, the benchmark would be 1 in 10,000. Meaning the risk would predict that over the course of 70 years, one individual would get cancer from that stressor. EPA's approach to estimating cancer risk is intended to be health-protective and, therefore, uses conservative assumptions. For example, EPA assumes that a person is exposed continuously over a lifetime (i.e., 24 hours per day, 7 days per week, 52 weeks per year, 70 years). This approach to risk assessment is extremely conservative as people travel into and out of these areas for a variety of reasons including going to work, school, their homes, etc.



The potentially elevated risk from the 2018 NATA is not due to new emission sources or increased emissions from permit holders, but rather to the EPA's finding that long-term exposure to EtO may be more harmful than previously thought. Reducing potential and actual emissions from the known sources of EtO will decrease exposure and therefore possible risk. The South Charleston and Institute locations are in Kanawha County, WV. A report updated June 9, 2022 by the WV Division Health and Human Resources (WVDHHR) found no elevated levels of EtO related cancers (breast, lymphoma, or leukemia) in Kanawha County. Kanawha County does not rank in the top 10 counties in WV for any of the related cancers. Mapping the locations of people with EtO related cancers has not shown any clusters around the Institute or South Charleston areas. This report can be found at: [https://oepls.wv.gov/cancer/Documents/Data/Ethylene\\_Oxide\\_in\\_Kanawha\\_County.pdf](https://oepls.wv.gov/cancer/Documents/Data/Ethylene_Oxide_in_Kanawha_County.pdf).

The DAQ received comments that since the cancer risk for the UCC facility and other facilities in Institute and South Charleston are above 100 in one million, the DAQ should, through this Title V permitting process, set emission limits that are below the 100 in one million cancer risk. Since the Title V permit only includes the facility's current applicable requirements and does not establish emission limitations, reductions of EtO emissions cannot be accomplished through the Title V permitting process. However, after the Draft Title V Permit was issued on October 15, 2022, UCC entered a collaborative agreement with DAQ and agreed to reduce EtO emission limits through their 45CSR27 consent order. The consent order established the reduced EtO emissions which were then incorporated into the Title V Permit.

DAQ sent a letter to Cristina Fernandez, Director of the Air & Radiation Division for EPA Region III, on January 6, 2020 requesting that EPA expedite the technology review (required every eight years) for the federal regulations that pertain to EtO (40 C.F.R. 63, Subpart PPP) to reevaluate and update this regulation as well as to perform an additional health-based risk review using EPA's revised toxicity value of EtO. While the health-based risk review is not required after the initial review that is performed within eight years of the promulgation of the federal regulations, it is not specifically prohibited. EPA has not indicated they will be performing another health-based risk review. The technology review with associated federal regulation revisions is still on schedule to be issued around the end of 2024. To date, EPA has not proposed an updated 40 C.F.R. 63, Subpart PPP.

### ***Fenceline Monitoring***

#### **Title V Permit Should Include Continuous Monitoring of EtO**

Comments were received suggesting that there should be continual monitoring (24 hours a day for 7 days per week) for EtO at the fence line and that the monitors should be equipped with generators to supply power when there is a power outage. The commenters further recommend that the communities have access to the data in real time. The Title V renewal is an operating permit that contains the facility's current applicable requirements. There are currently no applicable requirements for continual fenceline monitoring and access by the public to real time monitoring data. The recently issued collaborative agreement between the DAQ and UCC does require the development of fenceline EtO monitoring protocols. So, while not in this Title V renewal, UCC and the DAQ are working toward development of fenceline monitoring. Furthermore, the technology does not currently exist to continuously monitor EtO emissions at the extremely low concentrations expected.

## EtO Limits and Title V Compliance Should Be Based on DAQ's Fenceline Monitoring Project

The DAQ received comments that the recent Fenceline Monitoring Project should be used to verify the estimated potential and actual EtO emissions from UCC; verify whether UCC is in compliance with their hourly and annual emission limits for EtO; and determine whether the Title V permit renewal should include fenceline monitoring to ensure compliance with the EtO emission limits and standards.

The purpose of DAQ's Fenceline Monitoring Project was to determine the presence of EtO in and near the facility. The project also monitored areas where no known sources of EtO exist. From DAQ's Final Monitoring Report:

“As a result of monitoring, the DAQ determined that EtO was present in the atmosphere at all locations sampled. In some cases, the levels obtained at locations far removed from facilities that use EtO were higher than levels at the sites monitored in Institute, North Charleston, and South Charleston.

It is important to note that the monitoring events performed for this study are not meant to be used to establish long term risk. Four snapshots in time cannot capture a representative 70-year lifetime cancer risk. The purpose of this study was to determine the presence of EtO in the atmosphere.”

DAQ does not believe that four 24-hour sampling events show a complete representation of the area. Also, the monitoring cannot distinguish the contribution between the two EtO-emitting facilities within the same fenceline.

### ***Medical Monitoring***

Commenters suggested that the Title V permit should include requirements for medical monitoring for community residents. Title V Permits include a facility's applicable requirements. There are currently no air regulations which require medical monitoring, therefore no requirements for medical monitoring were included in this Title V operating permit renewal.

### ***AirToxScreen***

The Air Toxics Screening Assessment (AirToxScreen) is EPA's screening tool to provide communities with information about cumulative health risks from known sources of air toxics. AirToxScreen is part of EPA's new approach to air toxics that provides updated data and risk analyses on an annual basis, helping state, local and tribal air agencies, EPA, and the public more easily identify existing and emerging air toxics issues. During the comment period, DAQ received a comment that AirToxScreen only has emissions data from 2017 and 2018 and does not have data from 2019 through mid 2022. As AirToxScreen is EPA's program, DAQ consulted the AirToxScreen website for information. A recent check of EPA's AirToxScreen website shows data is now available for 2019. According to EPA's AirToxScreen website, EPA plans to release data as follows:

*Starting with the 2017 update that was released in March 2022, EPA plans to release a new AirToxScreen assessment for every data year. In the year 2022, we released three updates to AirToxScreen, one each for data-years 2017, 2018, and 2019, as we “caught up to the calendar.” Starting in 2023 with the data-year 2020 release, we intend to have one update per year that includes the latest available data.*

### ***UCC's Comments***

UCC submitted written comments to DAQ in response to comments regarding DAQ's decision to renew their Title V Permit. In these comments, UCC responds to the comments received during the public comment period starting on October 15, 2022, the public meeting on January 9, 2023, and the public hearing on January 10, 2023. UCC's Response to Comments has been provided in its entirety as Attachment A.

### ***General Response Conclusion***

In conclusion, the Title V operating permit includes all applicable requirements that apply to the source at the time of permit issuance. The DAQ has included all UCC's applicable requirements in the Title V Permit. Additionally, DAQ has worked with West Virginia facilities and communities to reduce the potential health risks associated with EtO and will continue to do so in the future. The EtO reductions from the collaborative agreement is just one example of the ongoing efforts of DAQ.

**ATTACHMENT A - UCC'S COMMENTS**

**UCC COMMENTS RE TITLE V PERMIT RENEWAL  
FOR LOGISTICS UNIT, INSTITUTE FACILITY, INSTITUTE, WEST VIRGINIA**

January 20, 2023

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

***Via email (Jonathan.W.Carney@wv.gov)***

**Re: Comments on Proposed Renewal of Operating Permit for Union Carbide Corporation  
Institute Facility, Logistics (Group 2 of 2), Permit No. R30-03900005-2022 (2 of 2)**

Dear Mr. Carney:

Union Carbide Corporation (“UCC”) appreciates the opportunity to comment on its Title V permit renewal (“draft Permit”). UCC submits the following written comments to the West Virginia Department of Environmental Protection (“WVDEP”) Division of Air Quality (“DAQ”) in response to comments regarding DAQ’s determination to renew the Title V operating permit for UCC operation of its Logistics unit (Group 2 of 2), located within the Institute Facility, Plant ID No. 039-00005, Rt. 25, Institute WV 25112. UCC supports WVDEP’s environmental objectives and remains dedicated to reducing ethylene oxide (“EtO”) emissions to a level that meets or out-performs the United States Environmental Protection Agency (“EPA”) regulations and UCC’s own proactive sustainability goals.

**I. BACKGROUND**

UCC, a subsidiary of The Dow Chemical Company (“Dow”), received its permit for the Logistics unit [formerly Group 3 of 8], located within the Institute Facility, Plant ID No. 039-00005, on August 1, 2017 (“2017 Permit”) and is in compliance with all terms of this permit, including all general conditions and facility-wide applicable requirements. Because the permit must be renewed every five years, UCC applied for its permit renewal on November 19, 2021, well ahead of its current expiration date of August 1, 2022. UCC applied for renewal through WVDEP DAQ’s General Application Form. On December 7, 2021, UCC received confirmation of WVDEP’s receipt of its “administratively complete” permit application. *Letter from Carney to Marino and Fedczak, UCC re: Completeness Determination, Union Carbide Corporation – Institute Facility – Logistics (Group 2 of 2)*, (December 7, 2021) (hereinafter “Carney Letter”).

There are no new applicable requirements that must be included in the draft Permit renewal. The only proposed revisions for the draft Permit renewal are to remove four (4) tanks

listed on the emissions table (Tanks #1407, #1409, #1410 and #1412 in Permit Renewal Attachment D), as these tanks are no longer owned or operated by UCC.<sup>1</sup>

## II. RESPONSE TO COMMENTS

In these comments, UCC responds to comments submitted during the public comment period ending November 14, 2022 (and thereafter) and at the public meeting on January 9, 2023 and the public hearing on January 10, 2023.

### A. The Title V Permit Renewal Process May Not be Used to Add Terms to a Permit That Do Not Reflect Applicable Requirements

First and foremost, none of the commenters' claims can be lawfully addressed in this renewal draft Permit. Title V permits must contain "applicable requirements" from underlying preconstruction permits and state and federal regulations. 42 U.S.C § 7661(c)(a); 40 C.F.R. § 70.2; *U.S. Sugar Corp. v. EPA*, 830 F.3d 579, 597 (D.C. Cir. 2016) ("Title V does no more than consolidate existing ... requirements into a single document ... without imposing any new substantive requirements."); W. VA. 45 CSR §30-6.1. UCC's 2017 Permit contained all such applicable requirements, and the draft Permit similarly contains all such applicable requirements. Commenters raise a number of issues, but those cannot be lawfully addressed in this Title V permit renewal because they do not address any new applicable requirements.<sup>2</sup>

In preliminary comments on the draft Permit to WVDEP, EPA confirmed this interpretation, stating that the Agency "recognize[s] that the Title V renewal process generally does not authorize the direct imposition of substantive emission control requirements..." *Letter from Cristina Fernandez, Division Director, Air and Radiation Division, EPA Region III to Laura Crowder, Director, WVDEP* (Dec. 15, 2022).

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<sup>1</sup> As indicated in the WVDEP Draft Permit Fact Sheet, WVDEP made two "Determinations and Justifications" for the draft Permit. First, WVDEP noted that UCC has transferred ownership and control of several facilities. Previously, the Logistics Business Unit was named Group (3 of 8) and contained barge operations and EtO distribution. The barge operations processes were removed from the Group (3 of 8) permit and moved to a new permit named Group (3A of 8) and ownership was transferred to Altiva Services, LLC in 2019 as part of the divestiture. The permit number for EtO distribution was changed from Group (3 of 8) to Group (2 of 2) in this Title V renewal to reflect UCC's updated ownership of two business units at its Institute Facility. Second, WVDEP noted that flare requirements of 40 C.F.R. § 63.11(b) have been listed in Section 4.1.1.1.a. of the draft Permit. These requirements were included only by reference in the previous permit.

<sup>2</sup> By contrast, there are circumstances – none of which are present here – where a permittee requests changes to a Title V permit (*e.g.*, a request by the regulated industry due to a substantive change or administrative amendment, reopening for cause, a material mistake or non-compliance. 40 C.F.R. § 70.7(f); W. VA. 45 CSR §30-6.4; and 6.6; *see also* 2017 Permit Condition 2.5 at 6). UCC has not requested any such substantive changes. Nor has UCC requested an administrative amendment. There has been no action to reopen for cause or non-compliance. In fact, none of the commenters claim that there are additional applicable requirements that must be added to the draft Permit or that UCC has violated any 2017 Permit terms.

Therefore, any effort by WVDEP to add new permit terms in this renewal action requested by commenters would be *ultra vires* and WVDEP should issue the draft Permit renewal promptly.

That said, we also address and rebut each of the individual points made by both Earthjustice and other commenters below.

**B. UCC is not Improperly “Piecemealing” the Institute Facility and its Permitting.**

Earthjustice’s first claim that WVDEP and UCC have engaged in improper “piecemealing” of the Institute Facility’s permitting is meritless.

Earthjustice claims that WVDEP’s approval of UCC’s transfer of ownership of several facilities at the site prevents WVDEP from issuing a permit that takes into account the Institute facility’s total footprint and full emissions impact on neighboring communities’ health. Earthjustice also claims that this “piecemealing” may also result in UCC circumventing major source thresholds and avoiding a Title V permit.

This argument is not only inappropriate in a Title V renewal (as set forth in Section II.A above), but baseless. Under W. VA. 45 CSR §30-6.4.a.4, a “change in ownership or operational control of a source” is lawful. A challenge to UCC’s corporate decisions on divestiture of assets and facilities is not a proper subject of a Title V permit renewal. Moreover, Earthjustice’s concern that UCC will seek to avoid Title V permitting is obviously false at this point – UCC seeks to *renew* its Title V permit here, not avoid it. Furthermore, Earthjustice has not pointed to and cannot point to any provisions of the Clean Air Act (“CAA”) or WVA’s clean air statutes or regulations that support its claims regarding change in ownership of UCC’s assets.

**C. The Draft Permit Properly Includes an Affirmative Defense for Emergencies.**

Earthjustice’s second claim should be rejected because the Permit properly includes an affirmative defense for emergencies. Earthjustice asserts that WVDEP’s Division of Air Quality (“DAQ”) must remove the affirmative defense for emergencies from the draft Permit, because inclusion of the defense is contrary to Section 304(a) of the Clean Air Act, 42 U.S.C. § 7604(a), relevant case law, and EPA rules. This is wrong because, consistent with federal case law, the DAQ has the authority to include affirmative defenses in permits issued under the West Virginia SIP, and because proposed federal and state regulations that are in draft form do not compel DAQ to remove the affirmative defense from Title V permits.



## 1. DAQ Has the Authority to Include Affirmative Defenses in Title V Air Permits

States have broad authority to develop their SIPs under Section 110 of the Clean Air Act. The Supreme Court, in upholding a state SIP, has noted that states have “wide discretion” to create their own SIPs as long as they are consistent with the Clean Air Act. *Union Electric Co v. EPA*, 427 U.S. 246, 266 (1976). EPA has also specifically upheld a state SIP that provides affirmative defenses.<sup>3</sup>

Earthjustice conflates limitations on federal authority with the scope of state agency authority under Section 110 of the Clean Air Act. Earthjustice relies on a D.C. Circuit holding in *Natural Resources Defense Council v. EPA*, 749 F.3d 1055 (April 18, 2014) (“*NRDC*”) for its broad assertion that all affirmative defenses are unlawful under the Clean Air Act. Earthjustice bases its conclusion on the *NRDC* court’s holding that an affirmative defense for emissions during startup, shutdown, and malfunction (“SSM”) resulted in EPA impermissibly limiting a plaintiff’s available remedies under a private right of action provided for in the Clean Air Act. *NRDC*, 749 F.3d at 1063.

UCC does not dispute that *NRDC* limited EPA’s authority to include affirmative defenses related to emissions released during startup, shutdown, and malfunction (“SSM”) operations in federally issued Title V operating permits. However, the *NRDC* court specifically stated that it was *not* confronting the issue of “whether an affirmative defense may be appropriate in a State Implementation Plan” and acknowledged that the Fifth Circuit had recently upheld EPA’s partial approval of an affirmative defense provision for unplanned startup, shutdown, and maintenance/malfunctions in a SIP plan. *NRDC*, 749 F.3d at 1064 n. 2 (citing *Luminant Generation Co. v. EPA*, 714 F.3d 841 (5th Cir. 2013), *cert. denied*, 134 S. Ct. 387 (2013)). Therefore, the holding of the *NRDC* case does not apply to UCC’s renewal draft Permit, as that Permit is issued under West Virginia’s SIP, and West Virginia SIP regulations allow for the inclusion of an emergency affirmative defense in Title V permits. W. VA. 45 CSR §30-5.7.<sup>4</sup>

Earthjustice’s (and EPA’s, as described below) position that all affirmative defenses are inconsistent with the Clean Air Act is based on an overbroad interpretation of *NRDC*. The court in *NRDC* found that executive agencies may not limit available remedies under a private right of

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<sup>3</sup> *Proposed Withdrawal of Finding of Substantial Inadequacy of Implementation Plan and Call for Texas State Implementation Plan Revision – Affirmative Defense Provisions*, 84 Fed. Reg. 19786-01 (April 29, 2019) (approving affirmative defenses in a SIP as consistent with the Clean Air Act). EPA subsequently issued a “Frequently Asked Questions” guidance memorandum limiting this approval to the Texas SIP. Env. Protection Agency, *Frequently Asked Questions: Final Withdrawal of Finding of Substantial Inadequacy of Implementation Plan and of Call for Texas State Implementation Plan (SIP) Revision: Affirmative Defense Provisions for Malfunctions* (Jan. 6, 2020) available at: [https://www.epa.gov/sites/default/files/2020-01/documents/tx\\_ssm\\_frn\\_faqs.pdf](https://www.epa.gov/sites/default/files/2020-01/documents/tx_ssm_frn_faqs.pdf).

<sup>4</sup> See Clean Air Act Full Approval of Operating Permit Program; West Virginia, 66 Fed. Reg. 50325, (Oct. 3, 2001) Clean Air Act Title V Operating Permit Program Revision; West Virginia, 80 Fed. Reg. 60110 (Oct. 5, 2015) (approving amendments to West Virginia Title V rules in Series 30). See also Env. Protection Agency, EPA Approved Regulations West Virginia (Feb. 3, 2022), available at: <https://www.epa.gov/sips-wv/epa-approved-regulations-west-virginia-sip>.



action. However, this decision was expressly limited to standards promulgated under Section 112 federal regulations and federally issued permits (40 C.F.R. Parts 70 and 71), not defenses included in permits issued by a state agency under an approved SIP program. This more narrow reading is confirmed by the D.C. Circuit's acknowledgment of the Fifth Circuit's decision in *Luminant*, 714 F.3d 841, as addressing the entirely different question of "whether an affirmative defense may be appropriate in a State Implementation Plan." *NRDC*, 749 F.3d 1064 at n.2.

Both EPA and Earthjustice's reliance on *Sierra Club v. EPA* to support the theory that affirmative defenses are inconsistent with the Clean Air Act is similarly misplaced. The *Sierra Club* court struck down SSM exemptions under 40 C.F.R. Part 63 as violating the CAA's requirement that emissions standards be imposed continuously. *Sierra Club v. EPA*, 551 F.3d 1019, 1028 (D.C. Cir. 2008). However, the *Sierra Club* court only struck down limits relating to SSM – not emergencies – and did not opine about the lawfulness of affirmative defenses generally. As such, *Sierra Club* should not have any bearing on the inclusion of an entirely separate affirmative defense for emergencies in UCC's Permit.

## **2. EPA's Proposed Rule to Remove Affirmative Defenses from Title V Permit is Inapplicable to UCC's Permit**

Current EPA regulations for both state and federal Title V operating permits allow for affirmative defenses for emergency situations provided that the affected facility can prove that the excess of emissions was a true emergency, as defined by several comprehensive statutory criteria.<sup>5</sup> On April 1, 2022, EPA proposed a rule that would revise EPA regulations to prohibit the inclusion of affirmative defenses in Title V permits. 87 Fed. Reg. 19042 (April 1, 2022). Earthjustice incorrectly relies on EPA's proposed rule as support for the removal of the affirmative defense for emergencies from UCC's draft Permit. This reliance is misplaced for two reasons: (1) the proposed rule is still in draft form and is therefore not law; and (2) the proposed rule seeks to limit EPA's authority to include affirmative defenses in Title V permits, and this limitation does not automatically extend to DAQ's authority until DAQ has acted under its SIP.

First, EPA's proposal to remove regulatory provisions in 40 C.F.R. Parts 70 and 71 which allow for an emergency affirmative defense to be included in state and federal Title V operating permits, has no bearing on UCC's Permit because the proposal has not been finalized. *Public Citizen Health Research Group v. Commissioner, Food & Drug Administration*, 740 F.2d 21, 32 (D.C. Cir. 1984) (holding that an agency head's call to propose a rulemaking does not amount to an agency position that is definitive, binding, and ripe for judicial review); *Public Citizen Inc. v. Shalala*, 932 F. Supp. 13 (D.D.C. 1998) ("[a] tentative conclusion articulated in nonfinal, proposed rule does not command deference from the court and is not binding on the agency").

In a 2015 SIP call that gave rise to the current West Virginia SIP, EPA expressly stated that it was "not revisiting" its regulations that allow for affirmative defenses for Title V operating permits in an emergency situation. 80 Fed. Reg. 33840, 33924 (June 12, 2015). EPA

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<sup>5</sup> 40 C.F.R. § 70.6(g)(3); 40 C.F.R. § 71.6(g)(3).

further explained that until final rules are promulgated to remove the affirmative defense for emergencies contained in 40 C.F.R. Parts 70 and 71, permitting authorities should “consider the discretionary nature of the emergency provisions when determining whether to continue to include permit terms modeled on those provisions in operating permits that the permitting authorities are issuing in the first instance or renewing.” *Id.* EPA made it clear that states continue to maintain discretion to include affirmative defenses until a final rule is promulgated stating otherwise. Because the currently proposed rule is still in draft form, and only seeks to revise federal regulations, it is inapplicable to UCC’s renewal Permit.<sup>6</sup>

Second, EPA’s proposed rule, if finalized, will only limit DAQ when and if West Virginia incorporates the federal change into its own SIP. As this process of finalizing the proposed rule and then subsequently revising the SIP will not be complete for some time, the proposed rule cannot govern the UCC draft Permit. In response to EPA’s proposed rule, West Virginia DAQ proposed a similar rule to strike the affirmative defense for emergencies from the state’s Title V regulations at W. Va. 45 CSR §30-5.7.<sup>7</sup> But, this proposal is in draft form, and therefore not binding for this permit renewal until finalized.

### **3. EPA’s Proposed Disapproval of West Virginia SIP Has No Impact on the Draft Permit**

EPA recently proposed its disapproval of West Virginia’s SIP. 87 Fed. Reg. 78617 (Dec. 22, 2022). However, this proposal also has no bearing on the UCC draft Permit. In the past, EPA has clarified that it does not intend the issuance of a SIP call to have automatic impacts on the terms of any existing permit. In its 2015 SIP call, EPA stated that it does not intend issuance of a SIP call as a result of a policy change to immediately apply to existing permits, and that the updated policy will only apply in the event that a state’s SIP is rejected, and the state makes the necessary revisions. 80 Fed. Reg. 33925 EPA stated that “The EPA’s finding of substantial inadequacy and a SIP call for a given state provides the state time to revise its SIP in response to the SIP call through the necessary state and federal administrative process. Thereafter, any needed revisions to existing permits will be accomplished in the ordinary course as the state issues new permits or reviews and revises existing permits.” *Id.*

In approving a SIP that includes affirmative defenses for startup, shutdown, and malfunction, EPA itself has stated that it has no discretion to disapprove a proposed SIP if that SIP meets the requirements of the Clean Air Act.<sup>8</sup> EPA explained that a state’s inclusion of an

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<sup>6</sup> Earthjustice also states in its comments that EPA should remove its affirmative defense because of a court-ordered deadline issued by the D.C. Circuit in 2022 compelling EPA to promulgate emissions standards for synthetic organic chemical manufacturing plants. This has no bearing on whether an affirmative defense for emergencies can be lawfully included in a permit issued under West Virginia’s SIP, and is therefore irrelevant to the renewal permit process here.

<sup>7</sup> XXXIX W. Va. Reg. at 21 (June 3, 2022), available at: <https://apps.sos.wv.gov/adlaw/registers/readpdf.aspx?did=40009>.

<sup>8</sup> *Final Withdrawal of Finding of Substantial Inadequacy of Implementation Plan and Call for Texas State Implementation Plan Revision – Affirmative Defense Provisions*, 85 Fed. Reg. 7232, 7236 (Feb. 7, 2020) (“EPA’s role, with respect to a SIP revision, is focused on reviewing the submission to determine whether it meets the

affirmative defense provision in a SIP is “appropriate due to the latitude that states have to define their SIPs and what constitutes an enforceable emission limitation, so long as the SIP meets all applicable CAA requirements.”<sup>9</sup>

EPA has only recently proposed its disapproval of West Virginia’s SIP. 87 Fed. Reg. 78617 (Dec. 22, 2022). Therefore, any revision to the draft Permit that would strike affirmative defenses as a result of EPA’s policy change is premature, and inconsistent with EPA’s stated policy of revising existing permits in the “ordinary course” of the permitting process. Accordingly, because the inclusion of an affirmative defense for emergencies in UCC’s renewal Permit is allowable under both existing federal law and the current West Virginia SIP, its inclusion is lawful.

**D. EtO Emissions from the Logistics Unit are Within Legal Limits and Protective of the Health and Safety of Nearby Communities.**

Earthjustice’s third claim — concerns with the Logistics unit’s EtO emissions — is unfounded and, in any event, cannot lawfully be addressed in a Title V permit renewal context.

Earthjustice claims an alleged “long history of problems” with EtO emissions at the Logistics unit affecting nearby communities. Earthjustice acknowledges that WVDEP has taken certain steps to address these emissions, such as the recently implemented monitoring, but questions whether WVDEP has reflected these steps in the permit renewal in any way.<sup>10</sup>

Earthjustice mischaracterizes the nature of EtO emissions and the Logistics unit’s operations. UCC is meeting all of its permit terms for emissions of EtO, which Earthjustice concedes. UCC’s average total emissions over the past three years was 0.45 tons per year (“tpy”) EtO, which is well within the Potential to Emit (“PTE”) of three (3) tpy. UCC is also in compliance with its hourly point source limit of 0.29 lb/hr and its yearly point source limit of 2,539 lb/yr. Unless there are statutory or regulatory changes to these existing requirements, UCC cannot be compelled to meet any more stringent requirements in a Title V permit or renewal of same. In addition, WVDEP cannot require more stringent terms for EtO than those required by federal statutes because W. Va. 45 CSR §27-4 (“Fugitive Emissions of Toxic Air Pollutants”) (“TAP rule”) provides that “any source . . . subject to a federal regulation or standard shall not be required to comply with provisions more stringent than such federal regulation and standard.”

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applicable criteria of the CAA, and where it does, section 110(k)(3) of the Act requires EPA to approve the submission. In the context of a SIP, the EPA is not, as a matter of law or policy, exercising discretion to establish its own requirements for the state to implement beyond the requirements contained in the CAA”).

<sup>9</sup> *Id.*

<sup>10</sup> Earthjustice also claims that the permit application is incomplete, but WVDEP has found to the contrary. On December 7, 2021, UCC received confirmation of its administratively complete application from WVDEP. *Carney Letter*; 40 C.F.R. § 70.5(a)(2) (“Unless the permitting authority determines that an application is not complete within 60 days of receipt of the application, such application shall be deemed to be complete.”); W. Va. 45 CSR §30-6.1.d.



Earthjustice also mischaracterizes sampling data taken by WVDEP and, as Earthjustice concedes, WVDEP states that “these single data points, on their own, cannot be used to draw conclusions regarding the lifetime health risks associated with EtO.” WVDEP, *Ethylene Oxide (EtO), WVDEP Monitoring Project*, <https://dep.wv.gov/key-issues/Pages/EtO.aspx> (last visited January 18, 2023). By way of example, not all of the samples exceed background levels of EtO. At location #15, the measurement for April 2022 EtO level (0.183 ppbv) is *below* the April 2022 EtO background level of 0.271 ppbv. *See* Sample #15, Table 1, WVDEP EtO Initial Monitoring Results, shown below.<sup>11</sup>

**TABLE 1: WVDEP EtO INITIAL MONITORING RESULTS**

<b>Ethylene Oxide Initial Monitoring Results</b>				
<b>Sample Location</b>	<b>Jan. 25-26, 2022</b>	<b>Feb. 15-16, 2022</b>	<b>March 23-24, 2022</b>	<b>April 25-26, 2022***</b>
	<b>Results (ppbv)*</b>	<b>Results (ppbv)*</b>	<b>Results (ppbv)*</b>	<b>Results (ppbv)*</b>
Guthrie Background **	0.0361	0.0884	0.0321	0.271
#0 South Charleston, WV	Nondetect	Not exposed	0.08	0.146
#3 North Charleston, WV	0.0165	0.0227	0.155	0.221
#4 North Charleston, WV	0.0121	0.088	0.0794	0.277
#10 Institute, WV	0.0821	0.0996	0.182	0.674
#13 Institute, WV	0.0375	0.204	0.0714 (co-located)	0.124
#14 Institute, WV	0.0376	0.0958	0.119	0.514
#15 Institute, WV	0.0505	1.3	0.447	0.183
#16 Buffalo, WV Background**	N/A	N/A	N/A	0.365

\* Concentrations measured in parts per billion by volume (ppbv)

\*\* Background site: This is an area with no known emitters of Ethylene Oxide

Additionally, Earthjustice mistakenly attributes to UCC the sampling data WVDEP collected at Institute sample location #15 (over a seven-week period from May 24-July 6, 2022). To be clear, the data Earthjustice points to is data collected by WVDEP. Further, Earthjustice mistakenly states that the data represent an increase in EtO emissions over the earlier sample taken. In fact, the UCC data do not represent a consistent increase over time, and instead are consistent with WVDEP’s findings from the January to April 2022 time period. The results of these weekly samples that UCC gathered at sample location #15, which were required by the Section 114 request, ranged from 0.080 – 1.15 ppbv during this seven-week period.<sup>12</sup> These sample results fall within the same range as WVDEP’s sample results for Institute location #15 taken during the January to April 2022 time period. *See WVDEP Table referenced above.*

<sup>11</sup> Egnor, *WVDEP Ethylene Oxide in the Institute and South Charleston Areas* (Sept. 30, 2022).

<sup>12</sup> UCC provided its results to EPA’s Office of Air Quality Planning and Standards, EPA Region 3; *see also* WVDEP, *Ethylene Oxide (EtO), WVDEP Monitoring Project*, <https://dep.wv.gov/key-issues/Pages/EtO.aspx> (last visited January 18, 2023).

**E. The Draft Permit's Requirements for Operation and Monitoring of the Logistics Unit's Flares are Adequate to Ensure Compliance with Emissions Limits and Standards.**

Earthjustice's fourth claim — concerns with the draft Permit's requirements for the Logistics unit's flares — should be rejected.

**1. The Draft Permit Terms for Flare Efficiency and Monitoring are Consistent with UCC's Prior Permit Terms.**

The draft Permit and UCC's permit application appropriately incorporate all the applicable requirements for operating and monitoring of the Logistics unit's flares. There are three sets of such requirements, and these are not inconsistent with each other. First, as per draft Permit Section 4.1.1.1.a, the "Primary Flare (B410) shall be designed and operated to reduce inlet emissions of total organic HAP by 95 percent or greater and shall meet the specifications described in the general control device requirements of 40 C.F.R. § 63.11(b)." This value is identical to the underlying permit, issued in 2017 and with which UCC is compliant. Furthermore, the value is "95 percent *or greater*." (emphasis added). The value is not the ceiling, but the floor for destruction efficiency.

Second, UCC's application for the permit renewal, Attachment G, provides for flares' destruction efficiency of "at least 98%" for each of the Logistic unit's two flares. This destruction efficiency is the applicable requirement for the flares that are subject to 40 C.F.R. Part 63, Subpart PPP; NESHAP for Polyether Polyol Manufacturing Units. This is a federally enforceable requirement and again, this value is not the ceiling, but the floor for destruction efficiency.

Lastly, the draft Permit provides in Section 4.1.4.1:

On or after the effective date of Consent Order CO-R21-97-41 (October 20, 1997), the COMPANY shall, reduce VOC emissions in accordance with the alternate emissions reduction plan (AERP). The permittee shall reduce VOC emissions as set forth in Attachment A of CO-R21-97-41; and shall continue to comply with such emissions reduction requirements and the emission limits set forth in Attachment A as Consent Order CO-R21-97-41 expressly provides. Compliance with the emission limits set forth in Attachment A of Consent Order CO-R21-97-41 shall be demonstrated by test or monitoring data, approved emission factors, material balances, and/or representative calculations in accordance with W. VA. 45 CSR §21. The Attachment A limits from Consent Order CO-R21-97-41 for EO Distribution are provided in APPENDIX A of this permit.

APPENDIX A sets out requirements that apply to the "Efficiency of Control Device" under the Consent Order for the two (2) flares at the Logistics unit. Both the Primary Flare (B410) and the Secondary Flare (A410) are listed as 99 percent (revised based on June 14, 2006 letter from J. L.

Blatt). This value is again identical to the underlying permit, issued in 2017 and with which UCC is compliant.

Therefore, as a practical matter, pursuant to the terms of the draft Permit, the two (2) flares, Primary and Backup Flare, shall have a 99 percent destruction efficiency.

## **2. EPA's Recent Flare Requirements for Refineries and Certain Petrochemical Facilities Are Not Applicable Here.**

EPA has tightened the requirements for flares for refineries and certain petrochemical source categories, but those requirements do not apply here. For instance, the flare testing that was done to establish the new flare requirements in the Refinery MACT rule were done on much larger flares (flare tips 24 inches and larger) that are combusting common hydrocarbons such as propylene and ethylene. Flare testing has not been conducted on any flares like ours combusting ethylene oxide (which is a highly flammable and reactive compound). Also, it is UCC's understanding that no recent flare testing has been conducted by EPA or its contractors on the type of flare tip that is being used on the Logistics flare -- an asterisk shaped flare tip, essentially a single burner type of flare tip, as opposed to an open-pipe flare. However, even if such more stringent flare requirements were relevant, they could not lawfully be added to the Logistics permit until they have been incorporated into NESHAP revisions relevant to the unit, making them an applicable requirement.

In addition, any kind of enhanced monitoring is inappropriate and unlawful in a Title V permit, and particularly in a renewal permit. W. VA. CODE R. § 22-5-4(a)(16) allows for enhanced monitoring in permits under some circumstances provided, however, that no program "shall be any more stringent than any federal rule or program except to the limited extent that the director first makes a specific written finding for any such departure that there exists scientifically supportable evidence for such rule or program reflecting factors unique to West Virginia or some area thereof." W. VA. CODE R. § 22-5-4(a)(4). West Virginia has not made any such determination, and UCC is meeting all monitoring requirements of federal and state law.

## **F. UCC Continues to Regard the Institute Community as a Valued Partner to Address Environmental Justice**

Earthjustice's fifth claim — environmental justice ("EJ") concerns associated with the Logistics permit renewal — is unfounded.

First and foremost, UCC, and its parent Dow, believe that no community should bear an adverse environmental or health outcome as a result of its operations. UCC has long been committed to very high operational and safety practices that consistently meet or exceed regulations and applicable laws. And UCC will continue to engage with our local community to listen to their concerns, questions and needs, just like it has done for decades through its Community Advisory Panels.

UCC has embraced its role in the community but disagrees that the Title V permit renewal is the appropriate venue to make the permit changes as requested by Earthjustice. Notwithstanding, UCC is working collaboratively with the WVDEP to address comments raised by the community as part of the Title V permit renewal and has reached agreement with WVDEP for UCC to voluntarily implement measures that will ensure the continued success of UCC's EtO emission reduction efforts beyond the regulatory requirements. These voluntary measures are a part of a unique site-specific Collaborative Agreement and include the following:

- UCC has agreed to work with the DEP to modify its EtO emissions limitations to reflect its current business plan(s).
- UCC has agreed to develop and implement a unique site-specific EtO emissions screening program for rail cars it has in EtO service. Each rail car shall be screened for EtO emissions within twelve (12) hours of arriving at the Facility. Upon a reading indicating potential rail car emissions, appropriate action will be initiated based on developed response plans.
- UCC has agreed to formalize its action threshold program for EtO fugitives, in addition to maintaining compliance with the federal LDAR program as set forth in 40 C.F.R. § 63.1434(a). For readings above the action thresholds of 10 ppm, an attempt at repair will be made, after which re-monitoring will occur.
- UCC has agreed to continue its ongoing cooperation with U.S. EPA and the DAQ by providing in-kind or other tangible resources to assist with the development of air quality related data collection, air quality modeling, development of fence line monitoring protocols concerning EtO, to include securing meteorological data related to such research.

As reflected in the Agreement with WVDEP, UCC and Dow have a longstanding commitment to listening to our communities — their concerns, their questions, and their needs.

#### **G. WVDEP Should Reject Claims From Other Commenters on Alleged Health Impacts**

In a series of emails and form letters, other commenters raised the following claims, all of which WVDEP should reject. We list the claim, and then our response.

- *WVDEP must look at all EtO emissions on site (not just UCC) and WVDEP needs to look at hazardous emissions in total (not just EtO).* UCC Response: As stated above in Section II.A, this proposed type of assessment is not appropriate in the context of a Title V permit renewal.

- *WVDEP should not allow continued release of known cancer-causing agent in a known cancer cluster.* UCC Response: Again, this is not an appropriate claim in a Title V permit renewal. Moreover, WVDEP has determined that there is no cancer cluster related to EtO in the Institute area. Egnor, *WVDEP Ethylene Oxide in the Institute and South Charleston Areas* (Sept. 30, 2022).
- *EPA has said that emissions at Institute and South Charleston are well above 100-in-a-million, causing cancer risks that are unacceptable.* UCC Response: Again, this is not an appropriate claim in a Title V permit renewal and WVDEP has determined that there is no cancer cluster related to EtO in the Institute area. Egnor, *WVDEP Ethylene Oxide in the Institute and South Charleston Areas* (Sept. 30, 2022).
- *With passage of WV HB 302, permit should be revised to protect against risk of spontaneous abortion, preterm and poor birth outcomes.* UCC Response: This is not an issue that is appropriately addressed in a Title V renewal permit, and there is no data to support it.