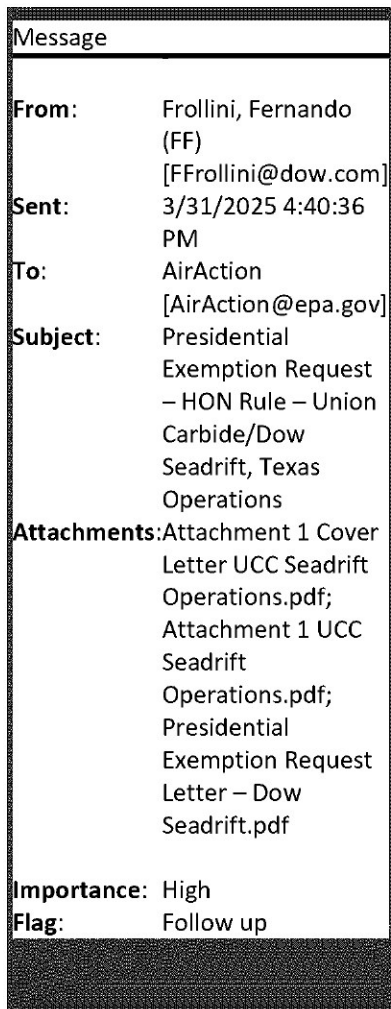




Caution: This email originated from outside EPA, please exercise additional caution when deciding whether to open attachments or click on provided links.

Please find attached a letter and Attachment #1 (2 files) in support of a Presidential Exemption Request for the HON rule for our Seadrift, Texas Operations site.

We appreciate EPA's review of this request and are happy to answer any questions as you review the attached information.

Best Regards

Fernando Frollini
Dow Seadrift Responsible Care Leader

General Business



February 26, 2025

Ms. Mary Greene
Director, Air Enforcement Division
Office of Civil Enforcement
United States Environmental Protection Agency
Mail Code 2242-A
1200 Pennsylvania Ave, N.W.
William Jefferson Clinton Building/Room 1119
Washington, DC 20460-0001

Submittal of Additional Information Requested
Request for Extension of Compliance Time – Two Projects
Compliance with the Ethylene Oxide Provisions
40 CFR 63 Subpart G — *National Emission Standards for Hazardous Air Pollutants*
for the Synthetic Organic Chemical Manufacturing Industry (HON Rule)
Union Carbide Corporation Seadrift, Texas Operations
Title V Operating Permit No. O2031 – Glycol Ethers Plant and & Oxide Derivatives
Plant
TCEQ Regulated Entity Number RN102181526
TCEQ Customer Reference Number CN601688781

Dear Ms. Greene,

This letter and the attached information provides additional information requested by USEPA in a letter December 20, 2024, regarding our request for an extension to the current July 15, 2026, due date for compliance with all ethylene oxide requirements in EPA's amendments to the HON air pollution rule (40 CFR 63 Subparts F, G, and H).

Our request for a compliance extension and these projects involve:

- Installation of two new vent scrubber projects to control any process vents that may contain low emissions of ethylene oxide, but that are "In Ethylene Oxide Service" from the Glycol Ethers Plant and the Ethanolamines Plant. The liquid from these scrubbers will be further processed in two Purge Glycol Reactors to convert any residual ethylene oxide to other organic compounds.
- Process wastewater streams from the Glycol Ethers Plant and the Ethanolamines Plant will also flow to the same Purge Glycol Reactors that are installed by the vent scrubber project. The Purge Glycol Reactors will react small concentrations of ethylene oxide to other chemical compounds.

Request for Extension of Compliance

SECTION I GENERAL INFORMATION

A. Print or type the following information for each facility for which you are requesting an extension of compliance (§63.9(b)(2)(i)-(ii))

Operating Permit Number (OPTIONAL)		Facility I.D. Number (OPTIONAL)	
Permit O2031 and O2030			
Responsible Official's Name/Title			
Fernando Frollini/Site Responsible Care Leader			
Street Address			
7501 Highway 185 North			
City	State	ZIP Code	
Seadrift	Texas	77983	
Facility Name (if different from Responsible Official's Name)			
Seadrift Operations			
Facility Street Address (If different than Responsible Official's Street Address)			
Facility Local Contact Name		Title	Phone (OPTIONAL)
Kyle Lofland		EH&S Delivery Leader	361-553-3399
City	State	ZIP Code	
Seadrift	Texas	77983	

B. Indicate the relevant standard or other requirement that is the basis for this request for this compliance extension request:

Pursuant to 40 CFR 63.6(i)(4)(i) and (ii) of the MACT rule General Provisions our Seadrift Operations site is requesting a one-year extension from the compliance date of July 15, 2026, to July 15, 2027 for physical installation or December 12, 2027 for other requirements, for the following projects and associated regulatory citations:

The scope of these projects has changed from a Thermal Oxidizer Project and Purge Glycol Reactor to two different projects that will involve a vent gas scrubber and a Purge Glycol Reactor system for each CMPU. The Purge Glycol Reactor systems will also treat any process wastewater streams to meet the HON requirements.

Project #1 – One vent scrubber will be installed in our Glycol Ethers Plant to treat process vents In Ethylene Oxide Service from this plant. The liquid from this vent scrubber will be combined with a process wastewater stream from this plant and then treated in a Purge Glycol Reactor.

Project #2 - One vent scrubber will be installed in our Ethanolamines Plant to treat process vents In Ethylene Oxide Service from this plant. The liquid from this vent scrubber will be combined with a process wastewater stream from this plant and then treated in a Purge Glycol Reactor.

Regulatory Citations that apply to both projects are:

40 CFR 63 Subpart G – 40 CFR 63.124 – Process Vents and Storage Vessels that are in ethylene oxide service – procedures to determine compliance.

40 CFR 63.138 – Process wastewater provisions – performance standards for treatment processes managing Group 1 wastewater streams and/or residuals removed from Group 1 wastewater streams; and

40 CFR 63.138(b)(3) – Control options: Group 1 wastewater streams for Table 9 compounds – Reduce, by removal or destruction, the concentration of ethylene oxide to a level less than 1 parts per million by weight as determined in the procedures in §63.145(b) of this subpart; and the following general control provisions for Group 1 process wastewater streams:

40 CFR 63.132 – Process wastewater provisions – general

40 CFR 63.133 – Process wastewater provisions – wastewater tanks

40 CFR 63.134 – Process wastewater provisions – surface impoundments

40 CFR 63.135 – Process wastewater provisions – containers

40 CFR 63.136 – Process wastewater provisions – individual drain systems

40 CFR 63.137 – Process wastewater provisions – oil-water separators

C.

Reasons why additional time is needed

A one-year extension is needed in order to properly engineer and construct the projects. Typically, it takes 36 months to complete projects similar to these. Key steps in the engineering, procurement, and construction process are:

Major Steps in Process	Estimated Time to Complete (Months)
Testing to determine "In EO Service" and Pre-FEED Project Scoping	6
Front End Engineering Design (FEED)	12
Detailed Design Engineering	9
Procurement (Obtaining Vendor Bids, Vendor Questions & Selection, Equipment Fabrication & Delivery to site)	19 (overlaps with engineering)
Construction of Required Equipment, Piping and Instrumentation	10 (overlaps with detailed engineering)
Develop Operating Procedures, Commissioning Equipment, and Placing Into Service	1 – 1.5 months
Total Estimated Time for Project including testing to determine "In EO Service":	36

Note: Some steps like Procurement overlap with Front End Engineering Design, Detailed Design Engineering, and Construction. Construction also overlaps with Detailed Design Engineering.

SECTION II

CERTIFICATION *(Note: you may edit the text in this section as deemed appropriate)*

Based upon information and belief formed after a reasonable inquiry, I, as a responsible official of the above-mentioned facility, certify the information contained in this request is accurate and true to the best of my knowledge.

Name of Responsible Official (Print or Type)	Title	Date (mm/dd/yy)
Fernando Frollini	Responsible Care Leader	02/26/2025
Signature of Responsible Official		

Note: Responsible official is defined under §63.2 as any of the following: the president, vice-president, secretary, or treasurer of the company that owns the plant; the owner of the plant; the plant engineer or supervisor; a government official if the plant is owned by the Federal, State, city, or county government; or a ranking military officer if the plant is located on a military installation.

SECTION III COMPLIANCE SCHEDULE INFORMATION

A. Describe the controls that will be installed at your facility to ensure compliance with the relevant standard. (§63.6(i)(6)(i)(A)) – See the descriptions for each project below:

Project #1 – One new Water Scrubber will be installed in our Glycol Ethers Plant to treat process vents in Ethylene Oxide Service from this plant. The liquid from this vent scrubber will be treated in a Purge Glycol Reactor to remove trace amounts of ethylene oxide that may be present. In addition, a process wastewater stream in Ethylene Oxide Service from this plant will also be treated in this same Purge Glycol Reactor.

The goal of the Water Scrubber is to reduce the ethylene oxide concentration to a level of < 1 ppmv prior to discharge to the atmosphere. The goal of the Purge Glycol Reactor is to reduce the ethylene oxide concentration to a level of < 1 ppmw.

Project #2 - One new Water Scrubber will be installed in our Ethanolamines Plant to treat process vents in Ethylene Oxide Service from this plant. The liquid from this vent scrubber will be treated in a Purge Glycol Reactor to remove trace amounts of ethylene oxide that may be present. In addition, a process wastewater stream in Ethylene Oxide Service from this plant will also be treated in this same Purge Glycol Reactor.

The goal of the Water Scrubber is to reduce the ethylene oxide concentration to a level of < 1 ppmv prior to discharge to the atmosphere. The goal of the Purge Glycol Reactor is to reduce the ethylene oxide concentration to a level of < 1 ppmw.

Due to small levels of emissions associated with these sources, the health of persons will be protected from imminent endangerment, as required by 40 CFR §63.6(i)(4)(ii).

B. Describe your compliance schedule by specifying the date by which you will complete each of the following steps toward achieving compliance: (§63.6(i)(6)(i)(B)(1)-(4)):

A compliance schedule, including the date by which each step toward compliance will be reached. At a minimum, the list of dates shall include:

(1) The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated.

On-site construction for both projects is planned to be initiated by August 1, 2026. Dow may initiate some work related to tie points prior to this date to facilitate this project.

(2) The date by which final compliance is to be achieved.

Compliance for both projects is expected to be achieved by July 15, 2027.

(3) The date by which on-site construction, installation of emission control equipment, or a process change is to be completed; and

On-site construction is planned to be completed by June 1, 2027, for both projects.

(4) The date by which final compliance is to be achieved;

Start-up of both systems and compliance is expected to be achieved by July 15, 2027.

**Additional Information Requested by EPA
in December 20, 2024 Letter & 40 CFR 63.6(i)(10)**

Each of the requested items is provided for Projects #1 and #2.

**Process Vent Streams In Ethylene Oxide Service - Information
for Projects #1 and #2 – Installation of water scrubbers and
Purge Glycol Reactors.**

- **Identify each affected source covered by the extension:**

Process Vent Stream	Plant
Alcohol Recovery Column Vent Scrubber Vent – EPN 583	Glycol Ethers
Condensate Pot C-1219 Vent – EPN 781	Glycol Ethers
TEA Column Jet Vent – EPN 294	Ethanolamines
South Jet Condensate Tank Vent	Ethanolamines

- **Specify the termination date of the extension.**

The termination date of the extension will be July 15, 2027, for the installation of the vent scrubbers and their Purge Glycol Reactor systems. The termination date of the extension will be December 12, 2027, for the Notification of Compliance Status Report and other associated requirements as detailed below.

- **Specify the dates by which steps toward compliance are to be taken, if appropriate**

As noted above, construction is expected to commence on this project by August 1, 2026, with the goal of completing construction by June 1, 2027. A performance test on each scrubber along with establishment of operating parameters for each scrubber for continuous monitoring will be conducted after the start-up date.

- **Specify other applicable requirements to which the compliance extension applies (e.g., performance tests).**

We also propose extensions to the following items related to the start-up of the water scrubbers and the testing, monitoring, recordkeeping, and reporting requirements:

#1 – Scrubbers – Performance Testing and Establishment of Operating Parameters – §63.124(a)(2)(viii)

Dow proposes an extension for the scrubber monitoring requirements until December 12, 2027. This will allow time for the scrubbers to be placed into the service by July 15, 2027, and for the site to conduct performance testing and to work with the regulatory agencies to establish operating parameters.

#2 – Scrubbers – Continuous Monitoring of Operating Parameters – §63.124(b)(6)

Dow proposes an extension of these requirements until December 12, 2027, since the requirements in this section require the scrubbers to be in operation. Then, a performance test is required to establish the parameters that will be monitored on a continuous basis. This timing also aligns with the submittal of the Notification of Compliance Status report.

#3 – Scrubber Recordkeeping Requirements for Periods During Which Operating Values Are Outside of the Operating Limits Specified in §63.124(b)(6) - §63.118(f)(5)

Dow proposes an extension for these scrubber recordkeeping requirements in this section until December 12, 2027, to allow time for the scrubber to be placed into service, tested, and for operating parameters to be established.

#4 - Notification of Compliance Status Report - §63.152(b)(8)

Dow proposes that the due date for this report in be extended to December 12, 2027, to align with a date 150 days after the requested date extension for having the scrubbers in service to conduct testing and to determine the operational parameters to monitor.

#5 – Periodic Report - §63.152(c), §63.118(f)(5) and §63.108(l)(2)

Dow proposes that the due date for this report be extended to December 12, 2027, to align with a date 150 days after the requested date extension for having the scrubber in service. Portions of these sections require some scrubber operating data, such as periods during which operating values are outside of the applicable operating limits.

- Specify any additional conditions that the Administrator (or the State) deems necessary to assure installation of the necessary controls and protection of the health of persons during the extension period.

No additional information is being provided with this update.

Process Wastewater Streams In Ethylene Oxide Service - Information for Projects #1 and #2 – Installation of water scrubbers and Purge Glycol Reactors.

- **Identify each affected source covered by the extension:**

There are two existing process wastewater streams that will be collected and piped to the new treatment system. Two new process wastewater streams from the vent gas scrubbers will also flow into the new treatment system:

Process Wastewater Stream	Plant
C-1219 Condensate Drain	Glycol Ethers
South Jet Condensate Vessel	Ethanolamines
Liquid Stream from Glycol Ethers Vent Scrubber – New	Glycol Ethers
Liquid Stream from Ethanolamines Vent Scrubber – New	Ethanolamines

- **Specify the termination date of the extension.**

The termination date of the extension will be July 15, 2027, for the installation of the Purge Glycol Reactor systems and the termination date of the extension will be December 12, 2027, for the Notification of Compliance Status Report and other associated requirements as detailed below.

- **Specify the dates by which steps toward compliance are to be taken, if appropriate**

As noted above, construction is expected to commence on these projects by August 1, 2026, with the goal of completing construction by June 1, 2027. A performance demonstration along with establishment of operating parameters for continuous monitoring will be conducted after the start-up date.

- **Specify other applicable requirements to which the compliance extension applies (e.g., performance tests).**

Dow also proposes extensions to the following items related to the installation of the Purge Glycol Reactors and the testing, monitoring, recordkeeping, and reporting requirements:

#1 – Performance Demonstration and Establishing Parameter Monitoring Ranges – §63.146(a) and §63.151(f)(1) – (f)(3)

Dow proposes that the requirement in §63.146(a) for the owner/operator to submit a request to monitor alternative parameters according to the procedures in 63.151(f)

be extended to July 15, 2027, to align with the start-up date of the Purge Glycol Reactor.

Dow proposes that all due dates to complete the requirements in §63.151(f)(1) – (3) be extended to December 12, 2027, to allow time for a performance demonstration and setting of parameters after the Purge Glycol Reactors start operation.

Table 12 of the HON rule refers to §63.151(f), which requires compliance with paragraphs (f)(1) – (3) as copied below. Dow proposes an extension to December 12, 2027 to complete the performance demonstration, establish parameter monitoring ranges, and commence monitoring. This is five months after the requested extension date of July 15, 2027 to have the Purge Glycol Reactors installed. The rule text for §63.151(f) and (1) – (3) is provided below:

The owner or operator who has been directed by any section of this subpart that expressly references this paragraph to set unique monitoring parameters or who requests approval to monitor a different parameter than those listed in § 63.114 for process vents, § 63.127 for transfer, or § 63.143 for process wastewater of this subpart shall submit the information specified in paragraphs (f)(1), (f)(2), and (f)(3) of this section with the operating permit application or as otherwise specified by the permitting authority.
40 CFR 63.151(f).

- (1) A description of the parameter(s) to be monitored to ensure the control technology or pollution prevention measure is operated in conformance with its design and achieves the specified emission limit, percent reduction, or nominal efficiency, and an explanation of the criteria used to select the parameter(s).
- (2) A description of the methods and procedures that will be used to demonstrate that the parameter indicates proper operation of the control device, the schedule for this demonstration, and a statement that the owner or operator will establish a range for the monitored parameter as part of the Notification of Compliance Status report required in § 63.152(b) of this subpart, unless this information has already been included in the operating permit application.
- (3) The frequency and content of monitoring, recording, and reporting if monitoring and recording is not continuous, or if reports of daily average values when the monitored parameter value is outside the range established in the operating permit or Notification of Compliance Status will not be included in Periodic Reports required under § 63.152(c) of this subpart. The rationale for the proposed monitoring, recording, and reporting system shall be included.