



March 31, 2025

United States Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: Request for Presidential Exemption – Clean Air Act Section 112(i)(4)
National Emission Standards for Hazardous Air Pollutants (NESHAP) for the
Synthetic Organic Chemical Manufacturing Industry (SOCMI) – HON Regulation –
40 CFR 63 Subparts F, G, and H
Union Carbide Corporation - Seadrift, Texas site
Title V Operating Permit No. O2031 – Glycol Ethers and Oxide Derivatives Plants
TCEQ RN102181526; CN601688781
Submitted via e-mail to: airaction@epa.gov

To Whom It May Concern,

Union Carbide Corporation ("UCC"), a wholly owned subsidiary of The Dow Chemical Company (Dow) requests a Presidential exemption from compliance obligations of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) also referred to as the HON Rule.¹ For the reasons highlighted in this letter and attachment, we believe it is necessary and appropriate for the President to grant an exemption under Clean Air Act (CAA) Section 112(i)(4) for sources regulated by the final rule either on an individual basis or collectively. If done collectively, we request that EPA include this regulated facility under that collective action.

We urge the Administration to swiftly consider and issue such an action based on an understanding that both: 1) "availability" for the purposes of this section refers not only to the existence of technology capable of achieving compliance with the rule, but encompasses practical challenges with the timeframes necessary to plan, procure, and install required technologies and such activity cannot occur within the current compliance timeframe; and 2) national security encompasses not only military defense applications and infrastructure, but also economic security, a perspective that has been acknowledged by the President in Executive Orders and key security agencies like the Department of Defense. Indeed, as the White House has stated regarding domestic priorities, "economic security is national security".² As additional support on this point, we reference the separate joint coalition submission sent to EPA from the American Chemistry Council (ACC) and the American Fuel & Petrochemicals Manufacturers (AFPM) detailing the critical nature of ethylene oxide as a building block to several supply chains throughout domestic manufacturing, and the potential risks to our nation's national security interests if continued production is jeopardized.

¹ National Emissions Standards for Hazardous Air Pollutants (NESHAP), Powering the Great American Comeback https://www.epa.gov/system/files/documents/2025-03/neshap_powering-the-great-american-comeback_fact-sheet_2.pdf 89 Fed. Reg. 42932 (May 16, 2024).

² <https://www.whitehouse.gov/presidential-actions/2025/02/america-first-investment-policy/>.

We believe that the Administration has already been provided with sufficient information (including prior comments and the underlying petition for reconsideration on the HON rule) to support an exemption covering all regulated facilities or on a facility-specific basis. This letter and the attachments provide additional detail and support on the time-critical nature of the request for relief and to address EPA's request for information. We submit both in support of a category-wide grant, as well as to provide company-specific information if the President pursues a facility-specific exemption action.

A two-year compliance exemption is especially needed for the following HON implementation projects at our Seadrift, Texas site.

Seadrift, TX Site

- Installation of two new vent scrubber projects to control any process vents that may contain low concentrations and low emissions of ethylene oxide, but that are "In Ethylene Oxide Service" from the Glycol Ethers Plant and the Ethanolamines Plant. The water from these scrubbers will be further processed in a process wastewater reactor system, called a Purge Glycol Reactor, to react 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 will be installed by the vent scrubber project. The Purge Glycol Reactors will react small concentrations of ethylene oxide to other chemical compounds.

The following information associated with this request for our Seadrift, Texas site is included in a February 26, 2025, letter to EPA, which is included as Attachment #1 to this letter.

- Emissions standards or limitations subject to the request,
- Facility(ies) and/or affected source(s), and
- Length of compliance period being requested. The original Attachment #1 requested a one-year compliance date extension, which was the maximum allowed, but Dow is seeking a two-year compliance exemption with this letter to account for any potential delays in the projects.

Information in support of the compliance exemption requests for this site is provided below:

Explanation why the technology to implement the standard is not available.

Vent Scrubber Projects – Seadrift, Texas:

Technology to implement the standard is not available prior to July 15, 2026, for the following reasons:

- Both scrubber projects will involve water scrubbers to remove low levels of ethylene oxide from process vents in the Glycol Ethers Plant and the Ethanolamines Plant. For water scrubbers, the HON rule requires the owner or operator using a control device other than a flare, scrubber with a reactant tank, or thermal oxidizer, to notify the

Administrator of the operating parameters that are planned to be monitored during the performance test prior to establishing operating parameter limits for the control device (40 CFR 63.124(a)(2)(viii)). Thus, there is a requirement to conduct performance testing and then to work with regulatory agencies to establish adequate monitoring parameters. This process is expected to take an unknown period of time for both UCC/Dow and regulatory agencies to reach agreement on these requirements.

- Both scrubber projects will drain the scrubber water from the scrubbers to the Purge Glycol Reactors for conversion of any ethylene oxide removed by the scrubber to other organic compounds. Concerns with the Purge Glycol Reactor projects are explained below.

Purge Glycol Reactor Projects:

The Seadrift, Texas site have process wastewater streams "in ethylene oxide service" that will need to be controlled in accordance with the amended HON rule. EPA's new standard for process wastewater in ethylene oxide service requires that individual process wastewater streams be managed in closed systems and then treated to remove ethylene oxide to less than 1 ppmw for each stream. Technology to implement the standard is not available prior to July 15, 2026, for the following reasons:

- Technology to implement the standard is not readily available from external vendors, therefore, UCC/Dow is designing and plans to install custom reactors to react ethylene oxide with water under selected operating conditions to meet the 1 ppmw requirement. There is not a vendor guarantee that this technology will meet the standard, thus performance tests will be required to confirm compliance.
- Additional time is needed to properly engineer and construct these types of reactors and capital projects. Typically, it takes 36 months to complete projects similar to these. More information is available in Attachment #1 on the major steps in the engineering, procurement, and construction process.
- In addition, EPA's HON rule does not have specific monitoring requirements for this type of treatment device, therefore, this site will be required to conduct performance testing and to submit a request to establish unique monitoring parameters per § 63.151(f)(1) – (3) of the HON rule to EPA or to the TCEQ. The frequency and content of monitoring, recording, and reporting will be determined in accordance with the permitting authority.

Explanation why an exemption is in the national security interests of the United States.

With respect to the national security implications of ethylene oxide-related supply chain disruptions, we incorporate the information provided by ACC and AFPM in a letter submitted to EPA related to these exemption requests. In addition, we also supply the following information:

The production plants covered by this exemption request at our Seadrift, TX site use ethylene oxide as a raw material to produce Glycol Ethers and Ethanolamines. Ethylene oxide is an important chemical precursor for these production plants and is used to produce a wide range of other chemicals, including military jet fuels, pharmaceuticals, semiconductors, automotive, agricultural products (note that ethanolamine products can be used in formulations

that can also increase crop yields), antifreeze, plastics, home and personal care products, and textiles. It also performs a crucial role as a sterilizing agent for heat-sensitive medical equipment that cannot be sterilized with steam or radiation. UCC/Dow estimates that its U.S. manufactured ethylene oxide supplies the requirements of 75% of the U.S. government's jet fuel additive, 25% of the automotive brake fluid market, and nearly 10% of aircraft deicing fluids—all essential products required for national safety and the smooth functioning of the U.S. economy.

Absent a compliance exemption, it is likely UCC/Dow will have to shut down some facilities that produce or use ethylene oxide in the second half of 2026 to comply with the HON rule, which will have downstream impacts on these derivatives of ethylene oxide with consequences for all of the sectors mentioned above. If UCC/Dow were to shut down multiple facilities simultaneously, the cascading impacts of the loss of ethylene oxide production would be widespread and felt throughout the U.S., both economically and from an essential products perspective. During these outages, employees may also face loss of work, negatively impacting the local community and individual American families' households.

As explained further in Attachment #1, UCC/Dow originally requested a one-year compliance extension to July 15, 2027, to complete construction on these projects and an additional 150 days to December 12, 2027, to complete all required performance testing and establishment of operating parameters and to submit the Notification of Compliance Status Report. The Presidential Exemption under Clean Air Act Section 112(i)(4) does not require that the President provide the bare minimum of time needed to obtain and install controls. Thus, to allow for any unexpected delays in the project schedules, with this letter we are seeking a two-year compliance exemption under Section 112(i)(4) of the Clean Air Act to July 15, 2028 to complete the site's HON implementation projects and a compliance exemption to December 12, 2028, to submit the Notification of Compliance Status Report for those projects. Any exemption granted under this section should also contain an option for EPA to consider a renewal for facilities for which compliance processes may run longer than two years.

If you have any questions or require additional information, please contact Mr. Russell Wozniak of our Environmental Expertise organization at (361) 571-5420 or email: wozniara@dow.com.

Sincerely,



Fernando Frollini
Responsible Care Leader
Seadrift Operations

Attachments:

cc: Aaron Szabo, Senior Advisor to the Administrator, Office of the Administrator
Abigale Tardif, Principal Deputy Assistant Administrator, Office of Air and Radiation
Sean Donahue, Principal Deputy General Counsel, Office of General Counsel
Alex Dominguez, Deputy Assistant Administrator for Mobile Sources, Office of Air and Radiation
Peter Tsigotis, Director, Office of Air Quality Planning and Standards
Penny Lassiter, Director, Sector Policies and Programs Division, Office of Air Quality Planning and Standards
Patrick Lessard, Refining and Chemicals Group Leader, Office of Air Quality Planning and Standards
Andrew Bouchard, General Engineer, Office of Air Quality Planning and Standards

**Attachment #1 – February 26, 2025 Letter to USEPA – Submittal of Additional Information
Requested for Request for Extension of Compliance Time**

UCC/Dow Seadrift, Texas Operations

This cover letter and attachment provides additional details on these projects, the covered process vents, covered process wastewater streams, and the HON regulatory citations impacted.