

March 31, 2025

U.S. Environmental Protection Agency
1200 Pennsylvania Ave. NW
Washington, DC 20460

RE: Presidential Exemption: New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants (NESHAP) for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) and Group I & II Polymers and Resins Industry: Huntsman Petrochemical LLC

To Whom It May Concern,

Huntsman Petrochemical LLC ("Huntsman"), a wholly owned subsidiary of Huntsman Corporation, respectfully requests an exemption from the compliance obligations of the *New Source Performance Standards for the Synthetic Organic Chemical Manufacturing Industry and National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry* (collectively referred to as the "HON Rule").¹ For the reasons highlighted in this letter, Huntsman believes 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 granted collectively, we request that EPA include Huntsman's regulated facilities under that collective action. Specifically, Huntsman requests an extension for the emissions standards and limitations listed below for Huntsman's facility in Conroe, Texas ("Huntsman Conroe").

We urge the Administration to swiftly consider and issue such an action based on an understanding that: 1) "availability" for the purposes of this section encompasses both the existence of technology capable of achieving compliance with the rule and the practical impossibility of planning, procuring, and installing required technologies within the current compliance timeframe, as precedent has recognized;² and 2) national security encompasses not only military defense applications and infrastructure, but also economic security, as 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."³ As additional support on this point, we reference the 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 ("EO") as a building block to several supply chains throughout domestic

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

² See 90 Fed. Reg. 6773, 6774 (Jan. 17, 2025) (requesting information for a Presidential Exemption that would show that technology was "unavailable in time for installation and operation").

³ <https://www.whitehouse.gov/presidential-actions/2025/02/america-first-investment-policy/>.

manufacturing, and the potential risks to our nation's national security interests if continued production is jeopardized.

While the Administration already has extensive information (including prior comments and the underlying petition for reconsideration on the HON Rule) supporting issuance of this exemption, this letter provides additional details regarding the time-critical nature of this request for relief and related responses to EPA's information requests.

I. Individual Facility Information

Per EPA's guidance, Huntsman submits the following requested information identifying the "[e]missions standards or limitations subject to the request, [f]acility(ies) and/or affected source(s), and [l]ength of compliance period being requested:"⁴

A. Facility and affected sources

Huntsman Conroe
5451 Jefferson Chemical Road
Conroe, Texas
RN100219740

Huntsman Conroe is subject to Federal Operating Permit number O1384 and New Source Review Permits numbers 4788, 20123, 42682, and 50227 issued by the Texas Commission on Environmental Quality ("TCEQ").

B. Emissions standards or limitations subject to the request:

Huntsman requests extension of the national emission standards for hazardous air pollutants promulgated on May 16, 2024 and commonly referred to as the HON Rule. Given the complex interweaving of requirements in the HON, it is more appropriate to extend the HON standards collectively. However, to the extent EPA seeks to list individual emission standards or limitations within the HON, the following primary requirements should be extended, along with their associated monitoring, reporting, and recordkeeping requirements:

Requirements that Process Vents and Tank Vents in Ethylene Oxide Service be Controlled

- 40 CFR 63.101
- 40 CFR 63.108(a)
- 40 CFR 63.113(a)(1) and (2)
- 40 CFR 63.113(j)
- 40 CFR 63.113(k)
- 40 CFR 63.119(a)(5)
- 40 CFR 63.124
- 40 CFR 63.114(d)(3)
- 40 CFR 63.148(f)(4)

⁴ See <https://www.epa.gov/stationary-sources-air-pollution/clean-air-act-section-112-presidential-exemption-information> (last visited March 24, 2025).

Pressure Relief Devices

- 40 CFR 165(e)(3)(v)(D)
- 40 CFR 60.612a(b)(2)
- 40 CFR 60.662a(b)(2)
- 40 CFR 60.702a(b)(2)

Requirements for Wastewater in Ethylene Oxide Service

- 40 CFR 63.101 (definition of "in ethylene oxide service")
- 40 CFR 63.104(k)

Requirements for Flares

- 40 CFR 63.108

Monitoring of Equipment in Ethylene Oxide Service

- 40 CFR 63.119(a)(7)
- 40 CFR 63.168(b)(2)(iv) and (d)(5)
- 40 CFR 63.174

Fenceline Monitoring

- 40 CFR 63.184

Elimination of Delay of Repair

- 40 CFR 63.104(g)(6) and (h)(6)
- 40 CFR 63.174(a)(3), (b)(3)(vi), and (g)(3)
- 40 CFR 63.171(f)
- 40 CFR 63.168(b)(2)(iv) and (d)(5)
- 40 CFR 63.163(a)(1)(iii), (b)(2)(iv), (c)(4), and (e)(7)

C. Length of compliance period being requested.

Huntsman requests a two-year extension of the applicable standards and limitations, subject to renewal by the President, as provided by 42 U.S.C. § 7412(i)(4).

II. Justification for Extension Request**A. The Technology to Implement the Above Standards Is Not Available**

Huntsman has submitted a request for extension under CAA §112(i)(3) for Huntsman Conroe, on which EPA was copied. That extension request, which is attached as Attachment A and incorporated by reference, explains why the technology to implement the HON Rule's applicable requirements is not available. Indeed, to meet the HON's aggressive deadlines, Huntsman would have had to initiate the control projects (feasibility assessment and initial design) well before the final rule was published. None of these projects have a realistic prospect of completion in time to comply with the HON's current compliance deadlines.⁵

⁵ This is true even without regard to EPA's recently proposed rule *Review of National Emission Standards for Hazardous Air Pollutants for Polyether Polyols Production Industry*, 89 Fed. Reg. 105,986 (Dec. 27, 2024), which would impose many of the same requirements as the HON. Expanding these demands to another category of regulated sources would further increase demand for the specialized engineering,

The technology to implement the HON Rule standards applicable to Huntsman Conroe is not available, as described further below:

Process Vents

- Huntsman Conroe must modify the venting system for surge control vessels in ethylene oxide service to reroute the associated vents to the flare header. This will require the installation of piping, re-routing of overhead lines, and potentially also the reconfiguration of process set-ups. Most of this work must be done overhead, which increases complexity and thus time needed. The sourcing, scoping, engineering, implementation, and testing of this project will require significantly more time than provided in the HON.
- Projects to control multiple process vents are extremely complex. For major capital expenditures like those required to meet the requirements of the HON Rule, front-end engineering alone is expected to take 10 to 11 months. Funding approval, project execution and construction, and commissioning are expected to take at least an additional 17 months, meaning implementation will take a minimum 27-28 months from now – even assuming everything else runs perfectly. Completing the requisite Process Hazard Analyses for these projects within that timeframe will also be difficult or impossible.
- The timeframes above do not account for the lengthy permitting process also likely to be required. Many of the emissions reductions will require combustion of vent gases in a fired control device. This will increase the emissions of CO and NOx, which could trigger PSD permitting and extend the permitting schedule even further. For ozone nonattainment areas, NOx increases above specified thresholds would require project reductions or purchase of emissions credits, either of which pose additional timing challenges (and which may make a permit unattainable if credits are not available). Huntsman also expects that Title V permit amendments will be required. The schedule for permit amendments is outside of Huntsman's control, but the permitting alone for these projects could take a minimum of two years to complete.

Wastewater in Ethylene Oxide Service

- To comply with the Final Rule, Huntsman Conroe must install a completely closed wastewater collection system along with vapor control technologies. This project will require extensive scoping, engineering, and physical and process changes that will require significantly more time than provided in the HON. In addition, the Group 1 wastewater is disposed at third-party vendors. These vendors are required to manage Huntsman wastewater following the HON control requirements. A recent review of the vendor emission controls identified operating conditions at their facility that would require the time-consuming design, construction and operation of suitable equipment to treat the wastewater onsite.
- These requirements are oddly unproductive with potentially immense costs. For example, the rule designates a Group 1 threshold for wastewater streams that include

design, and construction contractors whose resources are already sharply limited due to companies implementing the HON.

EO with total annual average concentration of EO greater than or equal to 1 part per million by weight.

- Huntsman's engineering team has provided an order of magnitude cost estimate to comply with the revised Group 1 threshold and associated emission control requirements. While the controls would cost approximately \$3,000,000, they would only reduce EO emissions by 0.0113 tons annually. That translates to a staggering cost of \$265,486,726 per ton of EO controlled. That is an exorbitant cost for little to no benefit.

Pressure Relief Devices

- Huntsman Conroe must install new release detection systems for at least 40 pressure relief devices ("PRDs"). For each release detection system, Huntsman must source all necessary components, including transmitters, conduits and electrical connection equipment. Demand for these specialized components is high because of the HON Rule, increasing the time needed to get the equipment on-site as a preliminary step. Installing the new equipment will need to be: 1) evaluated and approved following the process safety requirements and 2) approved to be constructed and operated through an air permit. In part due to these unique procurement demands, this project will require significantly more time than provided in the HON.
- The HON Rule requires facilities to implement a program for certain PRDs that mandates at least three prevention measures and performance of a root cause analysis and corrective action in the event of a PRD release to the atmosphere. Requiring triple redundancy is unduly burdensome and unnecessary since there are already existing Process Safety Management ("PSM") requirements under the Occupational Safety and Health Administration ("OSHA") regulations that determine the layers of protection needed to prevent accidental releases.
- Huntsman has implemented internal process safety standards for PRDs at facilities it owns and operates. At Huntsman, overpressure events are viewed as a consequence of a process deviation and such events are systemically reviewed in Process Hazard Analyses to assess the severity of the event and the existing levels of protection. Huntsman's internal process safety standards appropriately recognize that the level of risk dictates the number and type of layers of protection.
- In preparing for the rule proposal, Huntsman Conroe reviewed five years of malfunction data. This data showed that the layers of protection were successfully activated and Huntsman automatically initiated venting the equipment to the flare when temperature or pressure setpoints were triggered. Despite this successful activation, the final HON Rule will require Huntsman to add further preventative measures to 40 PRDs at Huntsman Conroe for a total estimated cost of \$1,600,000 – all when existing regulations are more than sufficient.

Requirements for Flares

- Huntsman Conroe must install BTU analyzers or equivalent instrumentation for its HON-regulated flare, which will require sourcing of specialized equipment in high demand by HON facilities. The HON will require 35% minimum heat content in the waste gas. Huntsman enriches the waste gas sent to the flare using natural gas. The products of combustion associated with the additional natural gas consumption will need to be

authorized by obtaining a permit amendment. This project will require more time than provided in the HON.

Fenceline Monitoring

- The HON Rule contains an unprecedented fenceline monitoring requirement, which compels facilities subject to the HON Rule to conduct air sampling, investigate, and take corrective action when recorded EO levels exceed 0.2 µg/m³ on an annual average basis as defined in the rule.
- To even attempt to reach this infeasibly low detection level, the HON Rule will require the use of a new canister sampling method that has not been widely used in field monitoring.
- Huntsman Conroe must source and install 24 monitoring devices, identify and contract with competent laboratories for sample analysis, and contract with vendors for sample collection and transport. Demand for fenceline monitoring devices is high and supply chain delays are anticipated. Further, Huntsman is facing significant challenges finding a competent laboratory given the extremely low action levels for ethylene oxide. As a consequence, this project will require significantly more time than provided in the HON Rule.
- Huntsman conducted fenceline monitoring in response to an EPA information collection request prior to the proposed version of the HON Rule. At the time, Huntsman could identify only two labs capable of providing the requisite canisters and analyzing samples to the EO action level. The limited number of labs that can perform this analysis raises questions over the feasibility of this requirement, especially when many other companies will need to access the same, limited resources.
- To demonstrate the scale of this problem, Huntsman Conroe collected 49 samples as required by EPA. Under the HON Rule's fenceline monitoring requirements, Huntsman would be required to collect a minimum of 730 canister samples annually (for Conroe alone). When combined with the samples from other companies, the total number of samples to be analyzed likely totals tens of thousands. This demand will almost certainly overwhelm the current lab capacity and impede Huntsman's (and the entire industry's) ability to timely comply.
- After receiving results from the EPA-required sampling that exceeded 0.2 µg/m³, Huntsman conducted a voluntary review of production, maintenance, transfer events, equipment washouts, and any potentially abnormal operations that occurred on the sampling dates. Huntsman could not find any abnormal events or activities that would raise concern, demonstrating that the required root cause investigation triggered by the unworkably low EO action level is unlikely to result in emissions reductions. Instead, the new action level will place companies in an endless cycle of investigations and testing without any meaningful health or environmental benefits.
- At the same time, companies will be forced to incur significant costs to conduct these futile investigations. For instance, Huntsman Conroe estimates the cost to retain a contractor for sample collection and data management; to obtain competent laboratory services; to compile required reports; and to conduct anticipated root cause analyses will be \$1,355,900 annually.

Elimination of Delay of Repair

- The HON Rule eliminates the delay of repair provisions for certain equipment in EO service. Delay of repair provisions have been in force for decades and allow companies flexibility to determine when it is safe to shutdown equipment and make the necessary repairs. The delay of repair provisions recognize that shutting down and restarting a unit is a significant operational event and not something to be taken lightly.
- The revised HON Rule eliminates this common-sense approach. Most valves and connectors are not configured with in-line spares. Thus, if a repair requires replacement of a leaking component (which is more likely given the reduced definition of a leak at 100 ppm under the HON Rule), the equipment must be isolated, which will often require the entire process unit to be shut down. The constant shutting down and restarting of a process unit will increase emissions and cause additional stress on the equipment since pressure and temperature changes are inherent in shutdown and startup, making components prone to more leaks and triggering further shutdown/startup cycles that compound these problems.
- Eliminating delay of repair will also cause safety risks. Facilities need time to plan and prepare for a shutdown, which comes with inherent safety risks, particularly for units that use a volatile substance such as EO. Adequate preparation and personnel are needed to completely purge all lines of EO. If not purged, stagnant EO can polymerize and create heat that can cause catastrophic explosions. Requiring more frequent shutdowns on shorter timelines unnecessarily magnifies the safety risks inherent in completing a shutdown/startup turnaround.

Leak Detection and Repair ("LDAR")

- The HON Rule requires increased monitoring for certain equipment in EO service and applies a lower leak definition of 100 ppm. As part of its efforts to assess the impacts of the proposed rule, Huntsman reviewed the 2021-2023 Leak Detection and Repair ("LDAR") data collected within the HON units at Huntsman Conroe. The data was refined to include only equipment containing greater than or equal to 0.1% ethylene oxide. This data was analyzed to determine the impact to EO emissions from the proposed lower leak definition of 100 ppm and the increased monitoring frequency. The following table summarizes the data:

Table 1:

Equipment	Number monitoring events	Average of concentration measured (ppm)	Maximum concentration measured (ppm)	Number of Leaks > 500 ppm	Number of Leaks > 100 ppm	EO Emission reduction from leaks (pounds)
Valves	3,527	1.47	130	0	1	0.0117
PRVs	90	1.16	12	0	0	-
Connectors	8,504	1.42	115	0	1	0.0095
Pumps	258	0.22	5	0	0	-
Totals	12,379	-	-	0	0	0.0212

- As shown, the leak rate from equipment in EO service at the HON unit at Huntsman Conroe is 0.0000016%. Yet, the HON Rule would impose estimated costs of \$175,000 per year for additional monitoring.

- Beyond cost, the new monitoring requirements of the HON Rule increase safety concerns by requiring removal of insulation covering certain connectors in EO service. These lines are intentionally insulated to aid in the maintenance of proper temperature and pressure conditions to prevent decomposition or polymerization of EO. Removing insulation will increase the impact of ambient weather conditions on EO piping, creating additional openings that are potential pathways for moisture to collect. This increases the potential for difficult-to-detect corrosion, which increases the likelihood of piping failure and uncontrolled releases.

B. An Extension is in the National Security Interests of the United States

As with other exemptions aimed at protecting “the President’s effectiveness in carrying out his assigned responsibilities,”⁶ the national security element in 42 U.S.C. § 7412(i)(4) should be given a broad construction. 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 earlier today on this topic. We also supplement that submittal with the following additional information:

- Huntsman is a publicly traded company whose chemical products number in the thousands and are sold to manufacturers serving a broad and diverse range of consumer and industrial end markets.
- Huntsman Conroe employs approximately 250 associates.
- Huntsman’s products are essential to numerous supply chains that are critical to maintaining economic and national security, including:
 - Energy: Huntsman Conroe is the only domestic producer of ethylene carbonate, which is a primary ingredient used in the manufacture of lithium-ion batteries. In a February 2025 briefing, the Department of Defense (“DoD”) identified several critical sectors to national security, citing both energy storage and batteries as “essential” to DoD’s administration of national security interests.⁷ DoD’s briefing referenced that lithium batteries “are becoming increasingly critical for a wide range of operational capabilities, including unmanned systems, missiles, and munitions, directed energy, silent mobility, and platform electrification. DoD acknowledged that supply chains issues would impact the ability of the military to continue to produce and maintain these essential national security components. Huntsman also produces a range of battery materials that help increase capacity, lengthen life cycle, and improve charging times for batteries, as well as material solutions for addressing battery protection and battery box and body-in-white lightweighting.
 - Automotive and Transportation: Huntsman produces epoxies for composites, polyurethanes and specialty foams, thermoplastic polyurethanes, adhesives, catalysts, lubricants, and fuel additives that support original equipment

⁶ *Colon v. Carter*, 633 F.3d 964, 967 (1st Cir. 1980).

⁷ “Substances Critical to National Security.” Department of Defense Briefing for the Committee on Armed Services of the U.S. House of Representatives. Pursuant to House Report 118-529, accompanying H.R. 8070, National Defense Authorization Act for Fiscal Year 2025. February 2025.

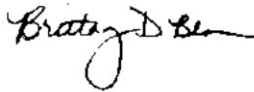
manufacturers serving a broad range of transportation customers, from high-performance automobiles to mass transit.

- Critical Supply Chains: Huntsman facilities produce catalysts used to support critical supply chains, for example, certain catalysts are used by the foam industry to insulate refrigeration equipment. Huntsman products are widely used in the electronics industry to protect devices against chemical, mechanical and electrical loads, and in cleaning, stripping, and etching throughout the semiconductor manufacturing process. Huntsman also manufactures the catalyst used to produce wind turbine blades and support energy-efficient options.

The stringent requirements of the HON Rule and associated deadlines are contrary to the President's Executive Order: Ensuring Lawful Governance and Implementing the President's "Department of Government Efficiency" (February 19, 2025), which directs agency heads to review all regulations for consistency with law and Administration policy, including rules that implicate matters of economic significance, impose significant costs on private parties not outweighed by public benefits, or harm national interest by significantly and unjustifiably impeding economic development/energy production, among others.

Because the technology to implement the HON is not available and it is in the national security interests of the United States to do so, Huntsman requests that the President grant a two-year extension of the HON under CAA § 112(i)(4) (42 U.S.C. §7412(i)(4)). We thank you for your attention to this request and look forward to discussing any questions you may have.

Sincerely,



Brittany Benko
Huntsman Corporation
*Senior Vice President, Environmental Health and Safety
and Manufacturing Excellence*

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
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Peter Tsirigotis, 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

Extension Request
Huntsman Corporation

Huntsman Corporation (“Huntsman”) submits this request for an extension of certain compliance periods set forth in the final rule issued by the United States Environmental Protection Agency (“EPA”) entitled “National Emission Standards for Hazardous Air Pollutants for the Synthetic Organic Chemical Manufacturing Industry and Group I & II Polymers and Resins Industry” published in the Federal Register on May 16, 2024 (89 Fed. Reg. 42,932) (the “Final Rule”). The Final Rule affects the Synthetic Organic Chemical Manufacturing Industry (“SOCMI”) and amends the National Emission Standards for Hazardous Air Pollutants (“NESHAP”) that apply to the SOCMI (more commonly referred to as the “HON”). Huntsman is specifically requesting an extension of the compliance periods to allow for compliance by July 15, 2028, which is four years from the effective date of the Final Rule. This extension applies to certain requirements applicable to Huntsman’s facility located at 5451 Jefferson Chemical Road, Conroe, Texas (“Huntsman Conroe Facility”). Huntsman is submitting this request in a timely manner—on October 13, 2024, which is within 90 calendar days of the effective date of the relevant standard.¹

The Final Rule mandates a suite of new emission controls (“Emission Control Projects”) aimed at addressing unacceptable risks, primarily attributed to ethylene oxide emissions, but also requiring control of any HAP. These Emission Control Projects necessitate significant time for design, installation, and safety testing. Although EPA references to Section 112(f) as the basis for its statutory authority regarding the risk requirements in the Final Rule, it has already completed the residual risk review mandated by Section 112(f)(2)(A) for the HON source category. Consequently, the risk review in the Final Rule constitutes a secondary risk review that is beyond EPA’s statutory authority. Therefore, the compliance extension provision of 42 U.S.C. § 7412(f)(4)(B) does not limit the authority of either EPA or the delegated authority of the Texas Commission on Environmental Quality (“TCEQ”) to grant an extension beyond the two-year compliance date set by the Final Rule.² As explained below, meeting the compliance deadlines for the Emission Control Projects set by the Final Rule is not possible, and, as a result, could be deemed arbitrary and capricious. However, EPA, along with the TCEQ by delegation, has the ability to adjust these deadlines, which as currently established, are unachievable. Huntsman therefore requests a compliance extension to July 15, 2028, for the Emission Control Projects.

As described below, it is both necessary and appropriate to grant Huntsman this extension because (1) more time is essential for the installation of controls and (2) measures will be

¹ The effective date of the Final Rule was July 15, 2024. 89 Fed. Reg. at 42,932. As discussed below, the extension limitations contained in 42 U.S.C. §7412(i)(4) do not apply. As a result, the timing requirements of 40 CFR 63.6(i)(4)(ii) do not strictly apply. Huntsman, however, submits this request within the regulatory timeframe of 40 CFR 63.6(i)(4)(ii) out of an abundance of caution as the earliest regulatory deadline contemplated for extension requests under the NESHAP and to ensure prompt relief on this critical matter.

² The TCEQ is authorized to grant compliance requests pursuant to its delegated authority under 40 CFR Part 63 and the Part 70 operating permits program. See 40 CFR 63.99(a)(44); Appendix A to 40 CFR Part 70.

implemented during the waiver period to ensure that public health is protected from imminent endangerment. The safe and effective installation of the Emission Control Projects will require additional time beyond the current deadlines and, furthermore, an extension of the compliance period will not lead to imminent endangerment to human health, as EPA has determined that the Huntsman Conroe Facility does not pose unacceptable risk in the absence of the Emission Control Projects.

I. Although not directly applicable to the Emission Control Projects, Huntsman satisfies the compliance extension requirements under 42 U.S.C. § 7412(f)(4)(B) because additional time is needed to install controls and an extension will not result in imminent endangerment.

EPA's residual risk authority is set forth under 42 U.S.C. § 7412(f)(2). Unlike the recurring technology review prescribed by 42 U.S.C. § 7412(d)(6), Congress authorized EPA to conduct a single residual risk review. EPA itself has consistently interpreted the statute as directing it to conduct a single residual risk review, a position which has been affirmed by the D.C. Circuit Court of Appeals. *See* 77 Fed. Reg. 55,698, 55,699 (Sept. 11, 2012) (the residual risk review "is a one-time review that must occur within 8 years of issuance of the MACT standard"); 81 Fed. Reg. 97,046, 97,048 (Dec. 30, 2016) (same); 88 Fed. Reg. 13,956, 13,962 n.22 (Mar. 6, 2023) ("CAA section 112(f)(2) requires the EPA to conduct a one-time review of the risks remaining after imposition of MACT standards under CAA section 112(d)(2) within 8 years of the effective date of those standards (risk review)"); *Louisiana Env't Action Network v. EPA*, 955 F.3d 1088, 1093 (D.C. Cir. 2020) ("EPA under section 112(f)(2) must conduct a one-time review within 8 years promulgating an emission standard to, among other things, evaluate residual risk"); *see also Nat'l Ass'n for Surface Finishing v. EPA*, 795 F.3d 1, 5 (D.C. Cir. 2015) (contrasting the risk and technology reviews, which are "two distinct, parallel analyses: a recurring 'technology review' under section 112(d)(6) and a one-time 'risk review' under section 112(f)(2)").

EPA conducted the residual risk review for the HON source category in 2006. During this rulemaking, numerous commenters pointed out that EPA lacks authority to conduct a second 112(f)(2) risk review.³ In the Final Rule, EPA said it has authority to conduct an additional risk review, "particularly where new information has come to light making a prior risk review unreliable (referring the to 2016 IRIS value for ethylene oxide)." 89 Fed. Reg. at 42,969. But if Congress had wanted to authorize recurring residual risk reviews, it knew how to do so, as evidenced by the recurring technology review mandated by Section 112(d)(6). Thus, the additional risk review EPA conducted in the Final Rule exceeds EPA's statutory authority and the requirements issued to address the unacceptable risk identified in this additional risk review do not qualify as standards under Section 112(f)(2) standards. And while the constraints of the waiver authority set forth under 42 U.S.C. § 7412(f)(4)(B) are not directly applicable to the risk requirements of the Final Rule, Huntsman fulfills the criteria specified in that provision, which states that "such period is necessary for the installation of controls and that steps will be taken during the period of the waiver to assure that the health of persons will be protected from imminent endangerment." 42 U.S.C. 7412(f)(4)(B).

Because the risk requirements set by the Final Rule fall outside of the Section 112(f)(2) framework and resemble a concurring review similar to EPA's Section 112(d)(6) technology review mandate, it is reasonable to apply the allowable three-year compliance period for Section 112(d) requirements to the

³ EPA-HQ-OAR-2022-0730-0149 at 17-18 (Huntsman Comments); EPA-HQ-OAR-2022-0730-0168 at 9-11 (American Chemistry Council, et al., Comments).

Emission Control Projects. Additionally, the compliance extension provisions applicable to requirements promulgated under Section 112(d) allow for a one-year extension of that three-year compliance period, which has been expressly incorporated into the HON Rule. *See* 42 U.S.C. § 7412(i)(3)(B); 40 CFR 63.6(i)(4)(i)(A); 40 CFR 63.151(a)(6); 40 CFR 63.182(a)(6). Therefore, Huntsman is requesting a compliance period of four years from the effective date of the standard for the Emission Control Projects described herein, resulting in a revised compliance date of July 15, 2028. The Huntsman Facility will require at least this much time to achieve compliance.

As previously explained, the risk requirements issued in the Final Rule are not directly governed by the waiver provisions of Section 112(f)(4)(B); nonetheless, the statutory and related regulatory language offer relevant guidance on the appropriate grounds for granting an extension of compliance deadlines.⁴ Section 112(f)(4)(B) and 40 CFR 63.6(i)(4)(ii) provide that an extension may be granted where (1) the additional period is necessary for the installation of controls and (2) steps will be taken during the extension to ensure that public health will be protected from imminent endangerment. The regulations also stipulate that a compliance extension request should include a “description of the controls to be installed to comply with the standard” and a “compliance schedule, including the date by which each step toward compliance will be reached.” 40 CFR 63.6(i)(6)(i)(B).

A compliance extension is justified for Huntsman for two main reasons. First, additional time is essential for the safe design, planning, permitting, sourcing, and installation of the Emission Control Projects. These projects involve the installation of new, extensive control measures and the implementation of process changes for process vents, storage vessels, and wastewater emissions sources at the Huntsman Facility. Huntsman is currently working on these projects, and based on discussions with vendors and outside consultants, as well as Huntsman’s experience designing, building, commissioning, and safely operating chemical manufacturing facilities, it has become clear that each of the Emission Control Projects will require significantly more time to complete than the compliance date set in the Final Rule allows.

Second, as discussed below, a compliance extension will not pose risk of imminent endangerment to public health. The Huntsman Conroe Facility will continue to operate in compliance with the HON requirements that were in effect prior to the Final Rule’s effective date. Furthermore, EPA determined has determined that these operations do not pose unacceptable cancer risk in the Final Rule, even though it (improperly) rejected updates to the Huntsman Conroe Facility emissions showing actual emissions were lower than EPA used to model risk. *See* EPA, *Residual Risk Assessment for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Source Category in Support of the 2024 Risk and Technology Review Final Rule* (March 2024) at Appendix 10, Table 2 (EIS 4945611).

⁴ Because Section 112(f)(4)(B), and thus 40 CFR 63.6(i)(4)(ii), are not directly applicable to the requirements for which Huntsman is requesting an extension, Table 3 to Subpart F (the HON regulations), which labels the extension provisions of 40 CFR 63.6(i)(4)(ii) as not applicable, does not affect TCEQ’s authority to grant the compliance extension requested herein. But even if this request were governed by Section 112(f)(4)(B) and 40 CFR 63.6(i)(4)(ii) (and it is not), Table 3 to Subpart F would not constrain or divest TCEQ’s delegated extension authority because this Table applies exclusively to source owners and operators, not states and their agencies.

II. An extension of the compliance period is necessary to install the Emission Control Projects.

Despite EPA's determination that emissions from the Huntsman Conroe Facility do not pose unacceptable cancer risk, the Final Rule mandates the Huntsman Conroe Facility to implement an extensive set of Emission Control Projects. EPA itself has acknowledged that the ethylene oxide control requirements will trigger a set of complex, time-consuming steps to complete, many of which depend on third-party entities beyond a source's control. See 89 Fed. Reg. at 42,954 ("In other words, sufficient time is needed to properly engineer the project, obtain capital authorization and funding, procure the equipment, obtain permits, and construct and start-up the equipment."). But the compliance date set by the Final Rule does not afford nearly enough time to safely complete these essential steps. Moreover, changes to the production processes at the Huntsman Facility will necessitate exhaustive process hazard studies and the involvement of properly trained and knowledgeable employees with process safety experience. Without sufficient time to safely develop, assess, and implement procedures required for the Emission Control Projects, the risk of serious safety incidents such as fires and explosions, as well as unintended environmental releases, drastically increases.

Table 1 below outlines each Emission Control Project required under the Final Rule, including estimated dates for installing and completing on-site construction, installation of emission control equipment or implementing process changes, as well as the estimated date by which final compliance could be achieved. See 40 CFR 63.6(i)(6). As noted above, Huntsman is actively engaged in the planning and implementation of these projects, which includes discussions with outside vendors and consultants. The dates provided below are preliminary estimates based on Huntsman's current knowledge of facility operations and past experience with implementing similar control measures. While these estimates represent good faith approximations of the time required, the actual implementation of these these projects could take significantly more time than presently estimated. Huntsman does not commit to meeting these preliminary minimum estimates.⁵ Further details on each project are provided below.

Table 1

Project	Description of Controls	The date by which on-site construction, installation of emission control equipment, or a process change is planned to be initiated	The date by which on-site construction, installation of emission control equipment, or a process change is planned to be completed	The date by which final compliance is to be achieved
Reroute surge control vessels to flare header	Reroute relief devices for three surge control vessels to the	August 1, 2027	January 1, 2028	March 1, 2028

⁵ While Huntsman will endeavor to meet the implementation period, Huntsman's good faith estimates indicate that, while the requested extension is justified, additional relief from the Final Rule's unachievable compliance deadlines may be needed. Huntsman therefore reserves the right to seek such additional relief from the Final Rule's compliance deadlines as may be available under the law, both concurrently and following this request.

	flare header (<i>see</i> Section II.A.)			
Wastewater collection system	Closed collection system to manage wastewater (<i>see</i> Section II.B)	March 1, 2026	December 1, 2026	February 1, 2027
Pressure relief device (“PRD”) detection measures	Equipment to monitor and identify PRD releases to atmosphere (<i>see</i> Section II.C.)	January 1, 2027	June 1, 2027	August 1, 2027
BTU analyzers for flare	BTU analyzers for R-F-60 flare (<i>see</i> Section II.D)	February 1, 2027	August 1, 2027	September 1, 2027
Permit amendment for flare	Amend permit to accommodate BTU increase (<i>see</i> Section II.E)	July 1, 2026	n/a	July 1, 2027
Fenceline monitoring	Monitoring and detection equipment for fenceline monitoring (<i>see</i> Section II.F)	July 1, 2026	July 1, 2027	December 1, 2027

A. *Reroute surge control vessel vents to flare header*

The Final Rule requires that the venting system for the surge control vessels in ethylene oxide service at the Huntsman Facility be modified to reroute the associated vents to the flare header. *See* 40 CFR 63.124(b)(1). This will necessitate the installation of piping, re-routing of overhead lines, and potential reconfiguration of process set-ups to ensure that production can continue at normal rates. Much like the installation of the PRD detection measures, much of this work must be done overhead, which adds complexity and increases the time needed.

B. *Wastewater collection system*

The Final Rule dramatically reduced the Group 1 wastewater threshold from 1000 part per million (“ppm”) to 1 ppm ethylene oxide concentration. *See* 40 CFR 63.101. The Huntsman Conroe Facility’s Carbonate 1 unit wastewater was categorized as Group 2, but will be reclassified to Group 1 under the Final Rule. The current practice is to water wash Carbonate 1 equipment and pump as much of that water as possible to a closed wastewater system. Low point valves are then opened to drain water that could not be pumped to closed system to an open concrete slab. This project will require installation of a closed collection system to comply with Group 1 wastewater requirements.

C. *PRD detection measures*

The Final Rule requires work practice standards for PRD releases that require facilities to monitor PRDs using a system that can identify and record the time and duration of each pressure release and also notify operators that a pressure release has occurred. *See* 40 CFR 63.165(e).⁶ PRDs are safety equipment that remain closed during normal operation and activate only when immediate depressurization is needed to prevent safety hazards or catastrophic equipment damage. There are 40 PRDs at the Huntsman Conroe Facility for which new release detection systems must be installed. For each release detection system, Huntsman must source all the necessary components, including transmitters, conduits and electrical connection equipment. As the compliance deadline approaches, demand for these specialized transmitters among HON regulated facilities will swell, potentially increasing the lead time needed to get the equipment on-site. Additionally, installation for these detection systems will be complex, as much of the wiring must be done overhead.

D. *BTU analyzers for flare*

Huntsman will need to install BTU analyzers for the R-F-60 flare to comply with the Final Rule. *See* 40 CFR 63.108. Demand for this specialized equipment is high and is expected to keep rising. Huntsman expects significant lead time to obtain these analyzers, which will delay its ability to install and test them, along with the associated systems according to standard procedures.

E. *Permit amendment for flare*

The Final Rule requires flares to comply with the Refinery flare requirements. *See* 40 CFR 63.108. Consequently, the R-F-60 flare will need to comply with a higher minimum heating value of the waste gas. The Huntsman Conroe Facility currently adds natural gas to the waste gas to ensure the minimum heating value is met. Additional natural gas will need to be added, requiring a permit amendment to accommodate this change.

F. *Fenceline monitoring*

The Final Rule imposes fenceline monitoring requirements that include sampling, root cause analysis, and corrective action.⁷ *See* 40 CFR 63.184. The Huntsman Conroe Facility must source and install 24 monitoring devices, contract with competent laboratories for sample analysis, and contract with vendors for sample collection and transport. Demand for fenceline monitoring devices is high and supply chain delays are anticipated. Also, Huntsman previously faced significant challenges in finding a competent laboratory when it conducted the fenceline monitoring required by information requests for this rulemaking. Logistically, siting and installing the devices will require extensive planning, as the

⁶ In the Final Rule, EPA imposed the control requirements described in Section II.C, II.D, and II.E under 112(d). Given the fact that there is sufficient information to satisfy a request under 42 U.S.C. § 7412(i)(4)(B) (*see* 40 CFR 63.6(i)(4)(i)(A)) and the need for prompt relief on this critical matter, Huntsman is submitting this request now, while reserving the right to seek such additional relief from the Final Rule's compliance deadlines as may be available under the law, both concurrently and following this request.

⁷ EPA imposed fenceline monitoring for Huntsman under 112(d)(6). Given EPA's assertion of authority to impose additional action levels for some sources under 112(f)(2), however, and the fact that there is sufficient information now to support an extension under either provision, Huntsman is including fenceline monitoring measures in this request, without conceding that EPA has authority to impose, or has properly promulgated, such requirements under either statutory provision.

Huntsman Conroe Facility footprint is approximately 450 acres, much of which is undeveloped land. Huntsman will need to alter the site to allow vehicle access to remote locations, which will require surveying and construction. Huntsman must also install new fencing and security measures for the monitoring devices.

III. Extending the compliance period will not risk imminent endangerment at or near the Huntsman Facility.

In the residual risk assessment conducted as part of the Final Rule, EPA evaluated each regulated facility to determine whether it posed unacceptable risk. *See generally* 89 Fed. Reg. at 42,955-56. EPA determined that only 8 of 195 facilities posed unacceptable residual risk due to their emissions of ethylene oxide, a calculation driven by the unrealistically low risk value for ethylene oxide: the 2016 IRIS value.⁸ However, EPA found that the Huntsman Conroe Facility did *not* pose unacceptable risk. *See* EPA, *Residual Risk Assessment for the Synthetic Organic Chemical Manufacturing Industry (SOCMI) Source Category in Support of the 2024 Risk and Technology Review Final Rule* (March 2024) at Appendix 10, Table 2 (EIS 4945611). And in fact, the risk associated with the Huntsman Conroe Facility is even lower than EPA's finding because Huntsman submitted corrections to the 2017 National Emissions Inventory ("NEI") emissions data EPA proposed to use for assessing risk from the Huntsman Facility in the proposed rule, demonstrating that actual emissions were lower than those contained in the 2017 NEI. However, EPA improperly rejected those updates when calculating risk in the Final Rule. *See* 89 Fed. Reg. at 42,965. In other words, the risk assessment for the Huntsman Facility in the Final Rule - a finding that no unacceptable risk exists - is erroneously high, while the actual risk associated with the Huntsman Facility is even lower. Therefore, if the Huntsman Facility is granted a compliance extension to July 15, 2028, and continues to operate in compliance with the HON regulations that were in effect prior to the effective date of the requirements in the Final Rule, there will be no imminent endangerment to anyone at or near the facility.

IV. Conclusion

As set forth herein, an extension of the compliance period set by the Final Rule is necessary for the installation of controls and will not risk imminent endangerment to any persons. Huntsman respectfully requests an extension of the compliance period for the Emission Control Projects until July 15, 2028.

⁸ EPA, *Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide (CASRN 75-21-8) In Support of Summary Information on the Integrated Risk Information System (IRIS)* (December 2016)