EARTHJUSTICE

October 13, 2020

Andrew Wheeler
Office of the Administrator
U.S. Environmental Protection Agency
Room 3000
WJC South Building
1200 Pennsylvania Ave., NW
Washington, DC 20460
wheeler.andrew@epa.gov

BY EMAIL & FIRST-CLASS MAIL

Re: Petition for Reconsideration of the National Emission Standards for Hazardous Air Pollutants (NESHAP): Miscellaneous Organic Chemical Manufacturing (MON) Risk and Technology Review; Final Rule, 85 Fed. Reg. 49,084 (Aug. 12, 2020), Docket No. EPA-HQ-OAR-2018-0746

Dear Administrator Wheeler:

The following listed parties request that EPA reconsider certain aspects of the Final Rule for the Risk and Technology Review of the Miscellaneous Organic Chemical Manufacturing ("MON") source category, Final Rule, 85 Fed. Reg. 49,084 (Aug. 12, 2020), and hold a reconsideration rulemaking to strengthen these standards:

RISE St. James (8581 Hwy 18, St. James, Louisiana 70086), Louisiana Bucket Brigade (4226 Canal St., New Orleans, LA 70119), Louisiana Environmental Action Network (P.O. Box 66323 Baton Rouge, LA 70896), Texas Environmental Justice Advocacy Services (t.e.j.a.s.) (900 North Wayside Drive, Houston, TX 77023); Air Alliance Houston (2520 Caroline St., Houston, TX 77004), Ohio Valley Environmental Coalition (PO Box 6753, Huntington, WV 25773-6753), Blue Ridge Environmental Defense League, Inc. (P.O. Box 88, Glendale Springs, NC 28629), Environmental Justice Health Alliance for Chemical Policy Reform (EJHA, P.O. Box 29233, Washington, DC 20017), Sierra Club (2101 Webster Street, Suite 1300, Oakland, CA 94612), Environmental Integrity Project (1000 Vermont Ave. NW, Suite 1100, Washington, D.C. 20005), Union of Concerned Scientists, (1825 K St. NW, Ste. 800, Washington, DC 20006).

As discussed below, EPA must grant reconsideration because it has failed to provide the requisite opportunity to comment on information and rationales that the agency newly submits as bases for ignoring unacceptable cancer risk, failing to eliminate that unacceptable cancer risk, refusing to require fenceline monitoring as necessary, and for finalizing harmful and unlawful exemptions for emissions from flares and pressure relief devices (not in ethylene oxide service). EPA's new rationales

require reconsideration and do not justify EPA's unlawful and arbitrary decision and action not to further strengthen the Final Rule under section 112 of the Clean Air Act. Having strong MON standards is incredibly important due to the proposed growth of this dangerous industry sector,[1] which emits many hazardous air pollutants, including the potent carcinogen, ethylene oxide. Information that has become available since the comment period closed further confirms how dangerous this pollutant is and how necessary it is for EPA to strengthen the Final Rule on reconsideration.

FACTUAL AND LEGAL BACKGROUND

MON facilities spew over 7,400 tons of toxic air pollution and nearly 20,000 tons of volatile organic compounds, including the potent carcinogen ethylene oxide, as well as 1,3-butadiene, formaldehyde, acetaldehyde, and other toxic metals.[2] These facilities are located across the country, with facilities and impacts concentrated, *e.g.*, in Texas (39 facilities), Louisiana (17 facilities), South Carolina (13 facilities), Illinois (7 facilities), and West Virginia (6 facilities).[3] The pollution from MON facilities causes and contributes to cancer risk hotspots and chronic respiratory harm, as well as acute health threats from short-term exposure and emission spikes.[4]

The Clean Air Act directs EPA to protect public health by regulating hazardous air pollution from MON sources. 42 U.S.C. §§ 112(d)(2)-(3), (f)(2). After EPA promulgates emission standards for a source category, the Act directs EPA to assess remaining, or residual, health and environmental risk within eight years. Based on this residual risk assessment, EPA must set emission standards that eliminate all

---

[1] EIP, Plastics Pollution on the Rise (Sept. 5, 2019) (attached). For example, industry has proposed the massive Formosa petrochemical plant in St. James Parish, Louisiana, where there is already unacceptable cancer risk according to EPA's National Air Toxics Assessment. See LDEQ online database showing final Title V permits issued for these plants at https://edms.deq.louisiana.gov/app/doc/queryresults.aspx. Louisiana groups and Earthjustice have appealed the issuance of these permits, https://earthjustice.org/news/press/2020/appealchallenges-louisianas-air-permits-for-formosas-massive-petrochemical-complex-in-cancer-alley.

[2] Proposed MON Rule, Docket *available at* https://www.regulations.gov/docket?D=EPA-HQ-OAR-2018-0746; Proposed Rule Fact Sheet and Webinar slides, *available at* https://www.epa.gov/stationary-sources-air-pollution/miscellaneous-organic-chemical-manufacturing-national-emission.

[3] MON Final Residual Risk Assessment Appendix 10, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0189 [hereinafter "Final RRA'].

[4] *Id.* at 44-47 & tbl. 3.2-1; *see also* Sharon Lerner, *A Tale of Two Toxic Cites*, The Intercept (Feb. 24, 2019), https://theintercept.com/2019/02/24/epa-response-air-pollution-crisis-toxic-racial-divide/ (citing 2014 National Air Toxics Assessment, https://www.epa.gov/national-air-toxics-assessment/2014-nata-assessment-results).

unacceptable risk and provide an "ample margin of safety to protect public health." 42 U.S.C. § 7412(f)(2). Emission standards that provide an "ample margin of safety" are standards that provide a protective buffer, or protection beyond what is needed to eliminate unacceptable risk. *See Sierra Club v. EPA*, 895 F. 3d 1, 13 (D.C. Cir. 2018). In addition, the Act requires EPA to "review, and revise as necessary" the emission standards for a source category at least every eight years. 42 U.S.C. § 7412(d)(6). This includes making any changes that are "necessary" to bring standards into full compliance with the Clean Air Act, such as setting limits on uncontrolled emissions. *See Louisiana Envtl. Action Network v. EPA*, 955 F.3d 1088, 1096 (D.C. Cir. 2020) ("*LEAN*"). It also includes "taking into account" and strengthening existing standards to reflect "developments" in pollution controls, practices, and technologies. 42 U.S.C. § 7412(d)(6). Such developments indicate that the standards no longer require the "maximum" degree of reduction in emissions that is "achievable." *Id.* § 7412(d)(2).

Proposed MON Rule

EPA action on MON facilities is six years' overdue. The last emission standards for the MON source category were promulgated in 2006.[5] EPA was obligated to assess remaining health risk and revise the standards as required to protect public health under § 112(f)(2) and to review and revise the standards as "necessary" under § 112(d)(6) by 2014. 42 U.S.C. §§ 7412(d)(6) ("no less often than every 8 years"), (f)(2) ("within 8 years"). In 2015, environmental and community organizations brought suit to compel EPA to complete this long overdue statutory duty, and the courts set a deadline for a final MON rule by 2020. *California Communities Against Toxics v. Pruitt,* 241 F. Supp. 3d 199, 200 (D.D.C. 2017).

After the court set a new deadline for action on MON sources, 241 F. Supp. 3d at 207, in December 2019, EPA assessed residual health risk from these sources' emissions and found that the risks to neighboring communities are "unacceptable." MON NESHAP Proposed Rule, 84 Fed. Reg. 69,182, 69,213/1 (Dec. 17, 2019). However, EPA proposed a rule that failed to eliminate all unacceptable risk or provide an ample margin of safety to protect public health, as required by section 7412(f)(2). 84 Fed. Reg. 69,217/1.

EPA did propose some necessary revisions under § 7412(d)(6), such as removing the unlawful general exemption for emissions during startup, shutdown, and malfunctions, but also proposed new unlawful malfunction exemptions for pressure relief devices and flares. 84 Fed. Reg. 69,198, 201, 208.

---

[5] National Emission Standards for Hazardous Air Pollutants ("NESHAP"): Misc. Organic Chem. Mfg., Final Rule, 68 Fed. Reg. 63,852 (Nov. 10, 2003), *revised by* Final Rule, 71 Fed. Reg. 40,316 (July 14, 2006).

In March 2020, Petitioners filed detailed comments explaining why EPA must (1) strengthen the proposed rule to eliminate all unacceptable risk and provide an ample margin of safety; (2) make all "necessary" revisions, including taking into account developments such as fenceline monitoring; and (3) not finalize the proposed unlawful free passes to pollute for pressure relief devices and flares.[6]

2020 Final MON Rule

In the Final Rule, EPA largely rejected Petitioners' 2020 comments.[7] EPA refused to (1) require further emission reductions to eliminate all unacceptable risk and provide an ample margin of safety to protect public health; (2) make necessary revisions including accounting for developments such as fenceline monitoring; or (3) remove the unlawful malfunction exemptions.

In particular: (1) EPA relies on new industry data that the public has not had the opportunity to review and comment; and, EPA raises new rationales to try to justify its decisions to (2) ignore cancer risk above 100-in-1 million and otherwise underestimate the health risks from MON sources; (3) leave uncontrolled emissions of hazardous air pollutants; (4) refuse to require fenceline monitoring and corrective action, (5) set illegal malfunction exemptions for smoking flares and pressure relief devices not in ethylene oxide service; and (6) unlawfully subcategorize pressure relief devices.

Because EPA has suddenly provided this new information and these new rationales in the 2020 Final Rule, after the close of the public comment period, it was "impracticable" within the meaning of Clean Air Act § 307(d)(7)(B) to object to EPA's rationales during the public comment period, and reconsideration is required. 42 U.S.C. § 7607(d)(7)(B).

New Information of Central Relevance to the MON Rule

In addition, EPA has not taken into account a number of important actions taken and new information released since the close of the comment period for the MON Rule.

First, in April 2020, the D.C. Circuit held that it is necessary for EPA to revise its standards under section 7412(d)(6) to assure compliance with the Act, including by setting limits on all uncontrolled HAP emissions. *LEAN*, 955 F.3d at 1096.

---

[6] Comments of Louisiana Environmental Action Network, Louisiana Bucket Brigade, California Communities Against Toxics, Texas Environmental Justice Advocacy Services, Ohio Valley Environmental Coalition, Environmental Integrity Project, Environmental Justice Health Alliance for Chemical Policy Reform, People Concerned About Chemical Safety, Air Alliance Houston, Union of Concerned Scientists, and Sierra Club (Mar. 19, 2020), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0154.

[7] *See* EPA, MON Response to Comments [hereinafter "RtC"], https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0200.

Second, pollution from MON sources is now known to be more harmful than EPA considered in the risk assessment:

- On March 31, 2020, and then again in August 2020, after the close of the comment period, EPA's own Office of Inspector General ("OIG") issued a management alert, and then an update criticizing EPA's inaction on ethylene oxide. The OIG advised the agency to communicate with local communities affected by certain MON sources about the health threats posed by ethylene oxide without further delay.[8]

- In August 2020, the OEHHA finalized an updated chronic and acute REL for toluene.[9]

- In September 2020, the Agency for Toxic Substances & Disease Registry ("ATSDR") released a new draft toxicological profile for ethylene oxide that provides additional evidence of its highly toxic impact—including acute, chronic cancer and non-cancer risks.[10] The ATSDR also reaffirms the 2016 EPA cancer risk value issued by the Integrated Risk and Information System ("IRIS") as the best available science.[11]

- In September 2020, scientists released a study showing that exposure to cumulative toxic air pollution or hazardous air pollution increases a person's vulnerability to and likelihood of death from COVID-19.[12]

Third, new information demonstrates that EPA's determination not to further strengthen the standards is illegal, inadequate and unsupported:

---

[8] EPA OIG, Management Alert: Prompt Action Needed to Inform Residents Living Near Ethylene Oxide-Emitting Facilities About Health Concerns and Actions to Address Those Concerns (Mar. 31, 2020) (attached); EPA OIG, Response to Planned Corrective Actions for Office of Inspector General Report No. 20-N-0128, Prompt Action Needed to Inform Residents Living Near Ethylene Oxide-Emitting Facilities About Health Concerns and Actions to Address Those Concerns, issued March 31, 2020 (Aug. 19, 2020) (attached).

[9] Cal. EPA OEHHA, *Toluene RELs* (Aug. 20, 2020), https://oehha.ca.gov/media/downloads/crnr/toluenerel082020.pdf (attached).

[10] ATSDR, Draft Toxicological Profile for Ethylene Oxide (Sept. 2020), https://www.atsdr.cdc.gov/toxprofiles/tp137.pdf (attached).

[11] *Id.* at 67-68.

[12] M. Petroni *et al.*, Hazardous air pollutant exposure as a contributing factor to COVID-19 mortality in the United States, 2020 Environ. Res. Lett. 15 0940a9 (Sept. 2020), https://iopscience.iop.org/article/10.1088/1748-9326/abaf86/pdf (attached).

- In March 2020, EPA signed final rules for similar source categories that considered or contained *stronger* protections from air toxics than the Final MON Rule. Specifically:

    - In the Final Rule for ethylene production, EPA acknowledged it had "evaluated fenceline monitoring as a development," under § 112(d)(6).[13] Although EPA still refused to require fenceline monitoring in that rule (which certain Petitioners have separately challenged in a reconsideration petition and petition for review), EPA's acknowledgment that fenceline monitoring is a development there shows it must also reconsider the MON rule to recognize fenceline monitoring as a development.

    - In the Final Rule for organic liquids distribution ("OLD"), EPA "remove[d] the allowance for [pressure relief] devices," stating that "[t]he final rule requires that opening of pressure relief devices in OLD transfer operations is a deviation," because "[i]t is our intent that owner/operator would report a deviation upon opening of a safety device and releasing unregulated emissions or emissions in excess of a limit."[14] In addition, although EPA again unlawfully and arbitrarily refused to finalize requirements for fenceline monitoring in the organic liquids distribution rule, in finalizing action there EPA did not deny that fenceline monitoring is a "development" under § 112(d)(6). 85 Fed. Reg. at 40,749-50.

- In September 2020, EPA announced that is in the process of strengthening the approved test method, TO-15A, which uses summa canisters to monitor for ethylene oxide and similar pollutants at even lower detection limits.[15] And, additional significant new information on real-time monitoring technology for ethylene oxide has been released, as discussed later in these comments.

EPA neither considered nor addressed any of this relevant information before finalizing the Final Rule.

---

[13] *See* Ethylene Production Response to Comments at 192 ("evaluated fenceline monitoring as a development"), https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0357-0074.
[14] EPA, Organic Liquids Distribution Response to Comments at 83, 85, 88, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0074-0075; 85 Fed. Reg. 40,740, 40,763 (July 7, 2020) (removing prior malfunction allowance for opening a PRD or "safety device").
[15] EPA, EPA's Work to Understand Background Levels of Ethylene Oxide (Sept. 2020), https://www.epa.gov/sites/production/files/2020-09/documents/background_eto_monitoring.september_2020.pdf.

Standard for Reconsideration

EPA must grant reconsideration where a petitioner demonstrates that (1) it was "impracticable" to raise their objection during the public comment period, including where the grounds for objection arose after the period for public comment; and (2) their objection is "of central relevance to the outcome of the rule." 42 U.S.C. § 7607(d)(7)(B). Objections are "of central relevance" where they speak to the "legality" of the final rule, providing "substantial support for the argument that the regulation should be revised." *Chesapeake Climate Action Network, et al. v. EPA*, 952 F.3d 310, 322 (D.C. Cir. 2020) ("*CCAN*"). EPA must also grant reconsideration where EPA fails to disclose in the proposed rule information on the agency's "process" for applying § 7412, and the "critical reasoning behind its . . . analysis." *Id.* at 321.

Table of Contents

GROUNDS FOR RECONSIDERATION

I. EPA must grant reconsideration because it did not make data on which the Final Rule relies available for public review and comment as the Act requires.

A. Petitioners were unable to raise their objections during the public comment period.

Petitioners commented at proposal that EPA's use of the 2014 National Emissions Inventory, a § 114 Information Collection Request sent to only one source, and assumption that actual emissions equaled allowable emissions resulted in an underestimate of emissions.[16] In the Final Rule, EPA relies on discretionary information industry provided that EPA did not make available for public comment. RtC at 24. It was therefore "impracticable" under § 7607(d)(7)(B) to raise the following objection. There was no reasonable way Petitioners could have attempted to comment because EPA did not discuss or share the relevant data "in the [Notice of Proposed Rulemaking]." *CCAN*, 952 F.3d at 320.

B. Objection: The public has not had the opportunity to review and comment on the new industry-provided emissions data on which EPA relies.

The public has not had the opportunity to review and comment on the industry-provided emissions data, which EPA received after the comment period closed. RtC at 24. The Act requires at least a 30-day comment period for meaningful public participation. 42 U.S.C. §§ 7607(d)(3)-(6), (h). EPA cannot accurately assess risk from MON sources or the need for further emissions reductions and fenceline monitoring without accurate data. If given a chance to comment, Petitioners would show that these data are insufficiently reliable for this rulemaking and demonstrate that EPA should collect additional information using its § 114 authority. In particular, EPA should grant reconsideration and require monitoring and stack tests to verify the data, rather than relying on data that industry has hand-selected and provided, without accurate check or verification, to attempt to justify industry's preferences regarding the stringency of the rule.

C. Petitioners' objection is "of central relevance" to the outcome of the rule.

Petitioners' objection pertains to excess cancer risk and fundamentally challenges EPA's rationale for finding the cancer risk, based on its emissions inventory, acceptable. Consequently, Petitioners' objection fatally undercut EPA's decision not to set stronger standards as required by § 7412(f)(2), including Control Option 2 and other more stringent leak requirements, including fenceline monitoring. Petitioners' objection is "of

[16] Petitioners' Comments at 17-22, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0154; EIP, Comment on Proposed MON Rule (Mar. 19, 2020), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0168.

central relevance" to the outcome of the rule, 42 U.S.C. § 7607(d)(7)(B), because underestimating the emissions underestimates the risk, and a proper accounting would compel EPA to set stronger standards under § 7412(f)(2) that eliminate that risk. Reconsideration is required because EPA failed to satisfy notice-and-comment requirements regarding the data on which it relies. *CCAN*, 952 F.3d at 320.

II. EPA must grant reconsideration on its new rationale for allowing unacceptable cancer risk of 200-in-1 million and not requiring further emission reductions to assure an ample margin of safety under § 112(f)(2).

A. Petitioners were unable to raise their objections during the public comment period.

In the Final Rule, EPA advances a new rationale: that it can base the acceptability of cancer risk in part on the "population exposed," or the number of people bearing that cancer risk. RtC at 76. Specifically, EPA newly contends that risk above 100-in-1 million is acceptable when it affects only 107-115 people. 85 Fed. Reg. at 49,096, tbl. 4; *id.* at 49,102 ("we note that few people are exposed to cancer risks greater than 100-in-1 million, one of the components of health risk information considered when estimated cancer risks exceed the presumptive benchmark of 100-in-1 million."); RtC at 76.

EPA also declines to require further emission reductions, such as Control Option 2 or controls discussed by Petitioners' Comments, by unlawfully considering cost, RtC at 75,[17] and by advancing a new rationale that no other safe controls were identified. 85 Fed. Reg. at 49,102/2.

Further, EPA's new risk assessment is based on new emissions data from two emitters of ethylene oxide (Lanxess and Huntsman) that the public has not had the opportunity to review, analyze, or comment on. RtC at 24 ("data received during the comment period"). And, EPA raises a new rationale for underestimating risk by ignoring emissions during malfunctions:

> The main purpose of the risk review for this source category is to evaluate whether the emission limits—the "standards promulgated pursuant to subsection (d)", not the non-compliance with those standards –should be made more stringent to reduce the risk posed after compliance with the underlying MACT standards. To the extent that a source is violating an underlying MACT standard, it is unlikely that tightening of the emission standard as a result of the residual risk review will avoid or mitigate such violations. In other words, a source that is violating a MACT emissions standard promulgated under section 112(d) would not be any more likely to be able to avoid such violations and

[17] EPA states that additional emission reductions are "not warranted, given that such additional controls . . . are not considered cost-effective and would not reduce facility-wide emissions or risks significantly enough to warrant the additional costs." RtC at 75.

comply with a different presumably more stringent standard promulgated under section 112(f).

RtC at 26-27.

Because EPA did not provide these new rationales or new information with the proposed rule, it was "impracticable" under § 7607(d)(7)(B) to raise the following objections. There was no reasonable way Petitioners could have attempted to comment without seeing EPA's rationale "in the [Notice of Proposed Rulemaking]." *CCAN*, 952 F.3d at 320. Because some information arose after the comment period, it was "impracticable" for Petitioners to raise the objections based on that new information. *Id.*

B. Objections:

1. EPA's rationale for ignoring risk to some is unlawful and arbitrary.

EPA's new rationale for finding cancer risk above 100-in-1 million "acceptable" is unsupported and contrary to the record. RtC at 76. Under the Act, EPA must assess and address cancer risk "to the individual most exposed." 42 U.S.C. § 7412(f)(2). EPA's decision to find that the number of people exposed to high risk can justify finding high risk "acceptable" cannot stand and requires reconsideration.

Such a rationale is contrary to the Act, to EPA's longstanding interpretation of it, and conflicts with D.C. Circuit precedent. EPA cannot downplay unacceptable cancer risk to even one person. 42 U.S.C. § 7412(f)(2) ("risks to the individual most exposed"). As the D.C. Circuit has held, the Act requires EPA to assure that "'no person face[s] a risk greater than 100-in-one million (one-in-ten thousand), . . . establish[ing] a maximum excess risk of 100-in-one million, while adopting the one-in-one million standard as an aspirational goal." *NRDC v. EPA*, 529 F.3d 1077, 1082 (D.C. Cir. 2008) (emphasis added) (citing Benzene Rule, 54 Fed. Reg. 38,044, 38,044-45 (Sept. 14, 1989)). Therefore, if any person faces a risk of 100-in-1 million, the risks from the category are not acceptable.[18] EPA cannot lawfully decide that risk is acceptable based on the number of people exposed, and instead must find cancer risk "to the individual most exposed" above 100-in-1 million is unacceptable.

Further, EPA's decision to find cancer risk acceptable because EPA believes this only affects 107-115 people, primarily people of color and low-income people, is also arbitrary and capricious. EPA's acceptability finding relies on a factor which Congress did not intend EPA to consider—the number of people exposed to the risk above 100-in-1 million. *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S.

[18] That benchmark is also far too high as Commenters explained (Comments at 12-17), in view of the Act's "aspirational goal" to reduce risk to 1-in-1 million, and in view of new scientific information and changed circumstances since EPA found 100-in-1 million to be acceptable decades ago (in 1989).

29, 43 (1983). The Act makes clear that every exposed person matters, including the "individual" who is the "most exposed." 42 U.S.C. § 7412(f)(2). EPA's choice to downplay risk to what it deems a smaller number of people runs contrary to that plain language and the clear congressional intent to focus on and protect each individual from toxic air pollution and the cancer and other illness it can cause.

Additionally, EPA admits that the pollution from MON sources and the impacts of its Final Rule fall disproportionately on people of color and low-income people.[19] The people whom EPA leaves to face cancer risk above 100-in-1 million are community members living near the Lanxess facility, outside of Charleston, South Carolina. *Id.* at 49,100; *see* Final RRA at Table 3b (Lanxess – 3965211, 200 MIR). The people who live within 3 miles of this facility are disproportionately Black or African-American, and more than half of the people within 3 miles of this facility live below the poverty level.[20]

EPA's finding that cancer risks above 100-in-1 million are "acceptable" because it only affects some people surrounding the Lanxess facility—the majority of whom are people of color and/or low income—is inconsistent with EPA's environmental justice policy[21] and also violates Executive Order 12898, 59 Fed. Reg. 7629 (Feb. 16, 1994), which requires EPA to address disproportionate effects of its action in the MON Final Rule on minority and low income populations. EPA admits that these are important policies that it must follow, but tries to contend that it can lawfully and rationally allow unacceptable cancer risks that fall disproportionately on communities of color and low income communities by stating that "the emissions reductions from the final revisions will benefit these groups the most." RtC at 249. Pointing to the Final Rule's benefits is a

---

[19] 85 Fed. Reg. at 49,129; EPA, Analysis of Demographic Factors For Populations Living Near Miscellaneous Organic Chemical Manufacturing Source Category Operations (May 21, 2020), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0188. "The specific demographic results indicate that the percentage of the population potentially impacted by Miscellaneous Organic Chemical Manufacturing emissions is greater than its corresponding nationwide percentage for the following demographics: Minority (56% for the source category compared to 38% nationwide); Hispanic or Latino (34% for the source category compared to 18% nationwide); African American (18% for the source category compared to 12% nationwide); over 25 without a high school diploma (20% for the source category compared to 14% nationwide); aged 0 to 17 years old (26% for the source category compared to 23% nationwide); below the poverty level (17% for the source category compared to 14% nationwide); and the linguistically isolated (9% for the source category compared to 6% nationwide)." *Id.*

[20] EPA ECHO, Detailed Facility Report for Facility ID 3965211, https://echo.epa.gov/detailed-facility-report?fid=110017326963 (last visited Oct. 9, 2020).

[21] EPA, About EJ 2020, https://www.epa.gov/environmentaljustice/about-ej-2020#goals (last updated Aug. 2, 2019); EPA, Plan EJ 2014: Incorporating Environmental Justice into Rulemaking (Dec. 10, 2019), https://www.epa.gov/environmentaljustice/plan-ej-2014-incorporating-environmental-justice-rulemaking.

distraction. The problem is that EPA still has failed to justify allowing such high cancer risks when those risks fall so disproportionately on communities of color. In its discussion of the number of people most affected and consideration of whether risk is acceptable, EPA did not even acknowledge much less address the racial and socioeconomic disparity that EPA's action was causing—in that the people EPA is deciding to ignore are people it knows are disproportionately people of color and low-income. 85 Fed. Reg. at 49,096, 49,102. Thus, EPA's decision to allow extremely high cancer risk, and to refuse to reduce this below 100-in-1 million, when this falls disproportionately on people of color and low-income people is arbitrary and capricious.

The dire combined impact of air pollution and COVID-19, which can increase the severity of an individual's case, is another factor EPA did not consider in the rulemaking and must grant reconsideration to address.[22] This factor also tips the balance toward unacceptable risk—particularly when there is no end in sight to this pandemic and many people who become ill from COVID-19 face prolonged impacts.

Lastly, as Plaintiffs explained in their comments, the record supports that the cancer and other risk numbers EPA found are likely underestimates,[23] and that the 100-in-1 million benchmark is out of step with the best available science.[24]

In addition, new scientific information from agencies EPA considers authoritative, and that meet its scientific integrity principles, now provides further evidence showing that EPA underestimates the risk from some pollutants like toluene[25] and ethylene oxide.[26] In particular, in September 2020, the ATSDR's newly released toxicological profile for ethylene oxide shows it is likely *more toxic* than EPA initially found—adding a new acute minimum risk level that EPA did not consider in this risk assessment.[27] This value is three orders of magnitude more protective than the value

---

[22] M. Petroni *et al.*, Hazardous air pollutant exposure as a contributing factor to COVID-19 mortality in the United States, 2020 Environ. Res. Lett. 15 0940a9 (Sept. 2020), https://iopscience.iop.org/article/10.1088/1748-9326/abaf86/pdf (attached).
[23] Petitioners' Comments at 17-30, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0154; *see also* EIP's comments, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0168.
[24] Petitioners' Comment at 12-17.
[25] *See* Cal. EPA OEHHA, *Toluene RELs* (Aug. 20, 2020), https://oehha.ca.gov/media/downloads/crnr/toluenerel082020.pdf (attached).
[26] *See* ATSDR, Draft Toxicological Profile for Ethylene Oxide (Sept. 2020), https://www.atsdr.cdc.gov/toxprofiles/tp137.pdf (attached).
[27] *Id.* at 8.

EPA considered.[28] And, in August 2020, OEHHA finalized an updated chronic and acute REL for toluene.[29] This value is one order of magnitude more protective than the value EPA considered.[30] EPA found a chronic risk of 1 and high acute risk (HQ of 6), and each risk would likely be even higher if EPA considered the new, peer-reviewed health reference values that EPA's own guidelines consider priority science. Thus, this new information further confirms that EPA's risk assessment underestimates risk and EPA should grant reconsideration to find health risks unacceptable and set standards that assure the requisite "ample margin of safety to protect public health" under § 112(f)(2).

For all of these reasons, EPA's acceptability finding runs counter to the evidence before the agency and EPA's new rationale has failed to justify it. As it is highly likely that the most-exposed person and community members are exposed to cancer and other health risks even *higher* than the amount EPA found, EPA's decision not to further reduce this risk is particularly harmful to the exposed communities.

2. EPA intertwines consideration of cost with its decision to find cancer risk above 100-in-1 million acceptable and this rationale is unlawful and arbitrary.

In the Final Rule, EPA unlawfully considered cost in deciding not to reduce the cancer risk below EPA's 100-in-1 million benchmark. *See e.g.*, RtC at 75, 103. EPA cannot consider the cost of emission reductions in determining whether cancer risk is unacceptable. 42 U.S.C. § 7412(f)(2); *NRDC v.* EPA, 824 F.2d 1146, 1165 (D.C. Cir. 1987) (*en banc*); *NRDC v. EPA*, 529 F.3d at 1084. However, EPA attempts to sidestep this prohibition by finding risk above 100-in-1 million "acceptable." By finding what its own benchmark in its own policy directs to be unacceptable cancer risk "acceptable," EPA takes the position that it can then consider cost to avoid reducing emissions as would otherwise be required by section 7412(f)(2). EPA admits there are additional measures that would reduce the excess cancer risk (200-in-1 million). However, EPA states those additional emissions reductions are "not warranted, given that such additional controls . . . are not considered cost-effective and would not reduce facility-wide emissions of risks significantly enough to warrant the additional costs." RtC at 75, 103.

The Response to Comments therefore shows that EPA collapses the two risk considerations into one, and plainly relies on *costs* as its justification for not further reducing the cancer risk (even though it is presumptively unacceptable under its own

---

[28] *Compare* Final RRA at 37, tbl. 3.1-1 (81 mg/m3, or 81,000 µg/m3) *with* ATSDR, Draft Toxicological Profile for Ethylene Oxide (Sept. 2020) (0.4 ppm, or 720 µg/m3).
[29] Cal. EPA OEHHA, *Toluene RELs* (Aug. 20, 2020), https://oehha.ca.gov/media/downloads/crnr/toluenerel082020.pdf (attached).
[30] *Compare* Final RRA at 27, tbl. 3.1-1 (37 mg/m3, or 37,000 µg/m3 and 5 mg/m3, or 5,000 µg/m3) *with* Cal. EPA OEHHA, *Toluene RELs* (Aug. 20, 2020) (37,000 µg/m3 to 5,000 µg/m3 and 5,000 µg/m3 to 420 µg/m3).

benchmark). Consequently, EPA also fails to provide an "ample margin of safety to protect public health," that takes into account any factors other than costs—as there is no buffer or margin of any kind in the Final Rule. This runaround of the statute is unlawful and EPA must reconsider.

3. EPA's statement that no other safe controls were identified is unsupported.

To avoid eliminating the unacceptable risk or ensuring an ample margin of safety as the Act requires, EPA claims that no other safe controls were identified. 85 Fed. Reg. 49,102. Specifically, EPA contends that the leakless technology that would have been required as part of Control Option 2 could not be implemented for equipment in ethylene oxide due to concerns about explosions. 85 Fed. Reg. at 49,102, 104/2; RtC at 111 (leakless connectors).

This conclusion appears to be based entirely on industry comments, for which EPA provides no support and is belied by facts in the record. Industry argued that leakless valves are more likely to trap ethylene oxide in valve cavities, and stagnant ethylene oxide polymerizes, creating heat that can cause explosions. 85 Fed. Reg. at 49,104. EPA considered industry's concerns and rejected them because "valve designs can be selected to minimize trapping of ethylene oxide and additional polishing and cleaning can be undertaken" to address this concern.[31] EPA further stated that "[t]hese factors considered, [EPA is] not aware of a reason that the technology could not be transferred and used on ethylene oxide processes."[32] EPA additionally identified another type of pump, magnetic drive pumps that could address any safety concerns with handling ethylene oxide.[33] Even the American Chemistry Council's own Ethylene Oxide Production Stewardship Manual identifies other valve designs that can avoid safety concerns, such as gate valves, globe valves, high-performance butterfly valves and similar designs—stating that these "have all performed well *in [ethylene oxide] service*," and that "[b]all valves and plug valve designs have also been *successfully used in EO service*."[34] Thus, the record belies EPA's statement that leakless technology cannot be used.

---

[31] EPA Memo, Analysis of Control Options for Equipment Leaks at 8 (Mar. 2019), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0004.
[32] EPA Memo, Analysis of Control Options for Equipment Leaks at 8 (Mar. 2019), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0004.
[33] *Id.* at 14.
[34] *Id.* ACC EtO Production Stewardship Manual Ch. 6 at 59, https://www.americanchemistry.com/EO-Product-Stewardship-Manual-3rd-edition/ (attached).

Further, even if the record supported EPA's newly alleged safety concern regarding leakless valves (which it does not), EPA has refused to require other controls or limits that would be alternative methods to reduce ethylene oxide and other toxics from equipment leaks. For example, stronger leak limits, stronger leak detection and repair (LDAR), and other requirements, such as collecting or routing leaks to a control device, are alternatives that EPA should consider in addition to leakless valves to further reduce the serious health impacts caused by these leaks. Final RRA at 8, 50 ("ethylene oxide from equipment leaks driving the risk"); *see, e.g.*, Petitioners' Comments at 159-67. Lowering the leak definition for gas and light liquid connectors would reduce emissions from Lanxess.[35] Leakless connectors would also reduce emissions. *See* RtC at 110-11. Thus, EPA has failed to justify refusing to find risk unacceptable and has not shown that it cannot reduce the cancer risk further.

EPA has repeatedly required leakless PRDs without finding any safety concerns, including for at least one ethylene oxide-emitting source category. *See, e.g.*, NESHAP for Polyether Polyols Production, Final Rule, 79 Fed. Reg. 17,340, 17,345 (Mar. 27, 2014) ("We have added requirements in 40 CFR 63.1434(c) to require monitoring of PRDs in organic HAP service that release to the atmosphere, and clarify that pressure releases from such PRDs are prohibited.") (40 C.F.R. § 63.1434(c)(3)); *see also* NESHAP for Manufacture of Amino/Phenolic Resins, 79 Fed. Reg. 60,898, 60,930 (Oct. 8, 2014) (40 C.F.R. § 63.1411(c)); NESHAP for Pesticide Active Ingredient Production, (40 C.F.R. § 63.1363(c)). At least once so far, the D.C. Circuit has upheld such a leak prohibition and monitoring requirement for PRDs. *Mexichem v. Spec. Resins, Inc. v. EPA*, 787 F.3d 544, 560-61 (D.C. Cir. 2015) (upholding requirements against industry challenge to NESHAP for Polyvinyl Chloride Production, 77 Fed. Reg. 22,848, 22,881 (Apr. 17, 2012) ("we are not exempting emergency PRD releases in the final rule. *See Sierra Club v. EPA*, 551 F.3d 1019 (D.C. Cir. 2008). Therefore, the final rule provides that a PRD release, unless ducted to a control device meeting the process vent limits, is a violation of the emission standard."). Some of the other rules are still pending reconsideration and litigation. If there were such a concern, there should have been actual evidence of such problems—the prohibition on leaks from PRDs at the Polyether Polyols Production source category, an ethylene oxide-emitting source, has been in place for over six years. 79 Fed. Reg. at 17,344.

Thus, there is no record support for EPA's refusal to set the limit the Act requires based on an alleged, unsupported concern presented by industry comments. EPA must grant reconsideration on its rationale because it has not, and cannot justify refusing to control such leaks here—through leakless valves or a simple prohibition on PRD releases as it has required for other similar source categories. Thus, EPA has failed to

---

[35] EPA Memo, Analysis of Control Options for Equipment Leaks at Processes that use Ethylene Oxide Located in the Miscellaneous Organic Chemical Manufacturing Source Category For the Final Rule (May 2020), https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0172.

justify refusing to find risk unacceptable based on an alleged lack of additional control options—and has not shown that it cannot reduce the cancer risk further.

4. EPA relies on emissions data that it did not provide to the public during the comment period.

EPA's underestimation of risk and decision not to require further risk and emission reductions under § 112(f)(2) are also unlawful and irrational because EPA has relied on emissions data provided by industry after the comment period closed, RtC at 24, and the public has not had the opportunity to review this data or comment, as required by the Act. 42 U.S.C. § 7607(d)(3)-(6), (h). Further, EPA's argument for relying on industry-chosen data rather than using its statutory authority to collect data—as it did for Refineries (before the 2015 Rule) and for Ethylene Production (before the 2020 Rule)—is irrational and unsupported. 42 U.S.C. § 7607(d)(7)(B). This is especially true given that some MON sources emit ethylene oxide, a pollutant so highly carcinogenic that even a relatively small increase in emissions can significantly increase risk levels. EPA cannot accurately assess risk from MON sources or the need for further emissions reductions and fenceline monitoring without accurate data. If given a chance to comment, Petitioners would show that these data are insufficiently reliable for this rulemaking and demonstrate that EPA should collect additional information using its § 114 authority. In particular, EPA should grant reconsideration and require monitoring and stack tests to verify the data, rather than relying on data that industry has hand-selected and provided, without accurate check or verification, to attempt to justify industry's preferences regarding the stringency of the rule.

5. EPA's rationale for ignoring risk from emissions during malfunctions is unsupported.

EPA's decision not to require further risk and emission reductions under § 112(f)(2) is also unlawful and irrational because of a new rationale in which EPA attempts to justify ignoring risk from uncontrolled emissions during malfunctions. EPA states it may do this because "[t]he main purpose of the risk review for this source category is to evaluate whether the emission limits—the 'standards promulgated pursuant to subsection (d)'–should be made more stringent to reduce the risk posed after compliance with the underlying MACT standards." RtC at 26-27.

EPA's argument does not appear in the statute. Instead, section 7412(f)(2) requires EPA to measure the "lifetime excess cancer risks to the individual most exposed *to emissions from a source in the category*." 42 U.S.C. § 7412(f)(2). Therefore, EPA must consider all emissions from a MON source in calculating the risk, including uncontrolled emissions during malfunctions. *Id.*

Additionally, the prior MON standards (the subject of this § 112(f)(2) review) *did* allow uncontrolled emissions during malfunctions, and the newly promulgated MON standards *continue to allow* uncontrolled emissions whenever there is a "force majeure event" and once or twice every three years from PRDs and flares. Contrary to EPA's

argument, those sources that release emissions during these malfunctions were not previously, and will not now be violating the standards, but complying with them (due to EPA's unlawful exemptions). And, EPA itself argues (in an attempt to justify its malfunction exemptions) that the promulgated standards *do* include preventative and mitigation measures. If that is the case, then stricter prevention or mitigation measures *would* enable facilities to avoid or mitigate such violations. Either way, EPA must consider emissions from malfunctions in assessing risk, and promulgate standards that eliminate unacceptable risk and provide an ample margin of safety. 42 U.S.C. § 7412(f)(2).

C. Petitioners' objections are "of central relevance" to the outcome of the rule.

Petitioners' objections pertain to excess cancer risk and fundamentally challenge EPA's rationale for finding cancer risk from MON sources acceptable and, consequently, EPA's decision not to set stronger standards as required by § 7412(f)(2), including Control Option 2 or other more stringent alternatives. Petitioners' objections are of "central relevance" to the outcome of the rule, 42 U.S.C. § 7607(d)(7)(B), because recognizing that cancer risk of 200-in-1 million is unacceptable to the individual most exposed would compel EPA to set stronger standards under § 7412(f)(2) that eliminate that unacceptable risk and the objections also show why EPA should require further reductions to provide the directed "ample margin of safety" beyond the requirements it has included here.

III. EPA must grant reconsideration on its new rationale that it does not have to regulate uncontrolled HAP emissions, such as from Group 2 process vents and storage tanks.

A. Petitioners were unable to raise their objection during the public comment period.

Petitioners commented at proposal that EPA cannot leave Group 2 process vents and storage tanks outside of ethylene oxide service uncontrolled. The 2003 MON standards only controlled Group 1 process vents and storage tanks; Group 2 process vents and storage tanks "are not currently required to control emissions." 84 Fed. Reg. at 69,213. However, in the Final Rule, EPA advances a new rationale contending that EPA does not have to control these and other uncontrolled emission points because EPA finalized standards for process vents and storage tanks in the original rulemaking (which left some process vents and storage tanks uncontrolled), and has no obligation to recalculate the MACT floors. RtC at 116-117, 122-123.

B. Objection: EPA must revise the standards "as necessary," including to set limits on all HAP emissions and ensure the standards come into compliance with the law.

This new rationale, and EPA's decision not to set limits on uncontrolled HAP emissions, is plainly unlawful under applicable D.C. Circuit precedent in *LEAN*, 955 F.3d at 1096—decided after the public comment period for the MON rule closed.[36] This recent Circuit decision holds that where there are uncontrolled HAP emissions (or where a standard is otherwise unlawful), EPA's obligation under section 7412(d)(6) to review and revise "as necessary" includes setting limits for these emissions for the first time, and thus correcting the standard to be legally compliant.[37]

EPA has failed to satisfy this core requirement of § 7412(d)(6). EPA has neither identified and assessed all currently uncontrolled HAP emissions and provided that for public comment, nor has EPA issued limits to control all such emissions. EPA must grant reconsideration to satisfy § 7412(d)(6) and the binding precedent established in *LEAN*.

Contrary to EPA's RtC contention in the Response to Comments, Petitioners do not contend that EPA must recalculate any floor. There is no floor applicable to uncontrolled emissions, including from uncontrolled emission points such as certain vents and tanks, and EPA does not deny that. Therefore, EPA must set a limit under § 112(d)(2)-(3) for the first time to regulate currently unregulated HAP emissions, including from Group 2 vents and storage tanks, and for all other uncontrolled emissions, for the first time.

The record also shows there are other uncontrolled HAP emissions from MON sources for which EPA must set limits. *See e.g.*, RtC at 123, 228. For example, the standards and EPA in this record acknowledge "uncontrolled organic HAP emissions" and "uncontrolled hydrogen halide and halogen HAP emissions." RtC at 227; 40 CFR 63.2465(b). EPA did not deny this in the Response to Comments, nor could it. RtC at 123, 228. Instead, EPA attempted to contend that it need not set limits on these emissions—providing a rationale rejected by *LEAN*, contending that § 7412(d)(6) does not require this. *Id.* EPA may not leave these, or any other HAP emissions uncontrolled. It is "necessary" under § 112(d)(6) for EPA to review the standards for any *LEAN* issue and to set a limit on these and all other uncontrolled emissions.

C. Petitioners' objection is "of central relevance" to the outcome of the rule.

Petitioners' objection is of "central relevance" because it goes to the "legality" of EPA's failure to perform the requisite review and revision under section 7412(d)(6) to control all HAP emissions, such as group 2 process vents and storage tanks, and thus

---

[36] *See also* Mot. for Voluntary Partial Vacatur and Remand, NRDC v. EPA, Docket No. 04-1323 (Apr. 2, 2007) (requesting vacatur and remand of EPA's "no emission reduction" MACT floor determinations) (attached).

[37] *LEAN*, 955 F.3d at 1095-96 (holding EPA must add missing limits for uncontrolled HAP emissions).

provides "substantial support for the argument that the regulation should be revised." *CCAN*, 952 F.3d at 322. Therefore, reconsideration is required under 42 U.S.C. § 7607(d)(7)(B).

IV. EPA must grant reconsideration on its new rationale for refusing to require fenceline monitoring.

A. Petitioners were unable to raise their objections during the public comment period.

In the Final Rule, EPA advances new rationales to try to justify its decision not to require fenceline monitoring—none of which it provided with the proposed rule. EPA gives each rationale in response to Petitioners' comments that EPA must require fenceline monitoring as a development under section 7412(d)(6) (and set a corrective action level as stringent as that required for benzene)—as EPA did for petroleum refineries—and to protect public health under section 7412(f)(2). Specifically, EPA argues that (1) nothing in the Act requires fenceline monitoring, RtC at 116, (2), emissions from MON facilities are less uncertain than petroleum refineries, RtC at 76, 116; (3) the Act allows for additional monitoring in individual cases if needed, RtC at 116; (4) MON facilities are so varied in their emissions as to make fenceline monitoring impossible, RtC at 116; (5) EPA is unaware of technology for monitoring ethylene oxide, RtC at 76, 102; and (6) requiring fenceline monitoring would violate notice-and-comment provisions, RtC at 116. In contrast to this rulemaking, after the public comment period for the MON rule closed, EPA admitted that it had considered fenceline monitoring as a "development" under section 7412(d)(6) for the Ethylene Production Rule (even though there, EPA unlawfully and arbitrarily refused to require it).[38] Similarly, in the final OLD Rule, EPA admitted that fenceline monitoring was a development (even though, there, EPA also unlawfully and arbitrarily refused to require it).[39]

B. Objections: EPA's new rationales require reconsideration and are unlawful and arbitrary under the Act.

1. EPA contends the Act does not require fenceline monitoring; but that is wrong.

EPA states that "nothing in the CAA requires the EPA to mandate that MON facilities perform fenceline monitoring, particularly with respect to CAA sections 112(d)(6) and CAA section 112 (f)(2)." RtC at 116. To the contrary, it is required for MON sources both under section 112(d)(6) and to reduce unacceptable risk and provide an ample margin of safety under 112(f)(2).

---

[38] EP RtC at 192.

[39] 84 Fed. Reg. at 56,313.

First, contrary to EPA's argument, fenceline monitoring is a "development," that EPA must assess and "take[] into account" for MON sources which makes it "necessary" for EPA to revise the MON emission standards under section 7412(d)(6). As EPA recognized in the petroleum refinery rulemaking, the organic liquids distribution rulemaking, and most recently, in the ethylene production rulemaking, fenceline monitoring is a "development" in pollution control, technologies, and methods under section 7412(d)(6) for chemical and petrochemical sources that have significant fugitive emissions that can be hard to measure and control, like MON sources.[40] And, in response to Petitioners' comments, EPA does not deny fenceline monitoring is a development. That EPA has tried to refuse even to admit and consider it as a "development" –when it did just that for similar source categories (organic liquids distribution facilities,[41] and ethylene production facilities[42]) makes its action here particularly arbitrary and irrational.

Second, the record shows that fenceline monitoring is a development that shows revisions are "necessary," because the availability of this method to monitor and use a corrective action level to control fugitive emissions illustrates additional emission reductions are "achievable," such that EPA can and should strengthen the standards to ensure they satisfy § 112(d)(2).[43] According to the Act, EPA must "review, and revise as necessary" emission standards promulgated for a source category under § 112 every eight years. 42 U.S.C. § 7412(d)(6). This includes assessing and ensuring the standards "tak[e] into account," i.e., reflect and follow, "developments" in pollution controls, practices, and technologies. 42 U.S.C. §7412(d)(6). Where "developments" have occurred, it is "necessary" for EPA to set standards accounting for those developments under §112(d)(6). *Id.* § 7412(d)(6). Where, as here, a development demonstrates the achievability of further emission reductions or control improvements, EPA must revise

---

[40] NESHAP for Petroleum Refineries, Proposed Rule, 79 Fed. Reg. 36,880, 36,920 (June 30, 2014); EPA, Clean Air Act Section 112(d)(6) Technology Review for Equipment Leaks Located in the Organic Liquids Distribution Source Category, 5 (Apr. 28, 2019) (EPA-HQ-OAR-2018-0074-0015) ("Technology Review for Equipment Leaks"); Ethylene Production Response to Comments at 192 ("evaluated fenceline monitoring as a development"), https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0357-0074.

[41] Clean Air Act Section 112(d)(6) Technology Review for Equipment Leaks Located in the Organic Liquids Distribution Source Category, 5 (Apr. 28, 2019) (EPA-HQ-OAR-2018-0074-0015) ("Technology Review for Equipment Leaks").

[42] Ethylene Production Response to Comments at 192 ("evaluated fenceline monitoring as a development"), https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0357-0074.

[43] See Petitioners' Comments at 142; EIP, Kunstman & Schaeffer, Monitoring for Benzene at Refinery Fencelines: 10 Oil Refineries Across U.S. Emitted Cancer-Causing Benzene Above EPA Action Level (Feb. 2020), https://environmentalintegrity.org/wpcontent/uploads/2020/02/Benzene-Report-Final-2.7.20.pdf.

the standards to reflect that development and ensure the "maximum" degree of emission reductions that is "achievable." *Id.* § 7412(d)(2). If EPA declines to revise the standards based on those developments, EPA must demonstrate that implementation of the developments is not "achievable," or would not result in any further source category emissions reductions. *Id.* § 7412(d)(6).

EPA has previously found further toxic emission reductions are "achievable" through the use of fenceline monitoring as this method is effective in identifying and reducing fugitive emissions from similar petrochemical sources.[44] Thus, EPA's failure to consider and "take into account" fenceline monitoring as a development in pollution control, by revising the standards to require it as "necessary" under section 7412(d)(6), and as it did for petroleum refineries,[45] is illegal and unsupported by the record.

Alternatively, even under EPA's interpretation of section 7412(d)(6), EPA must still require fenceline monitoring because, as it found in the Refinery Sector[46] and OLD rulemaking,[47] fenceline monitoring is a cost-effective development that is feasible. EPA has interpreted § 112(d)(6) to require a two-step process. At the first step, EPA identifies developments in practices, processes, and control technologies within a source category. Then, at the second step, EPA determines whether it is "necessary" to revise emission standards to incorporate these developments taking into account cost, feasibility, and other considerations. As EPA found in the Refinery and OLD Rules, fenceline monitoring is a development that is cost-effective and feasible for fugitive petrochemical emissions control. *See* 80 Fed. Reg. at 75,182-83; 84 Fed. Reg. at 56,315.

As further discussed below in response to each of EPA's other new rationales, EPA has failed to show that it is not "necessary" to revise the MON standards to require fenceline monitoring, or that fenceline monitoring would not achieve further emission reductions showing revision is required to satisfy the Act's maximum achievable degree of emission reduction requirement. 42 U.S.C. § 7412(d)(6), (d)(2).

In addition and in the alternative, EPA's new rationale has failed to show that fenceline monitoring would not reduce fugitive emissions from MON sources as needed to protect public health or provide an ample margin of safety, as required by section 7412(f)(2). And, EPA cannot make that showing where it has previously found

---

[44] See Petitioners' Comments at 142; EIP, Kunstman & Schaeffer, Monitoring for Benzene at Refinery Fencelines: 10 Oil Refineries Across U.S. Emitted Cancer-Causing Benzene Above EPA Action Level (Feb. 2020), https://environmentalintegrity.org/wp-content/uploads/2020/02/Benzene-Report-Final-2.7.20.pdf.

[45] 79 Fed. Reg. at 36,920.

[46] NESHAP for Petroleum Refinery Sector, Final Rule, 80 Fed. Reg. 75,178 (Dec. 1, 2015).

[47] NESHAP for OLD, Proposed Rule, 84 Fed. Reg. 56,288, 56,315 (Oct. 21, 2019)

fenceline monitoring to be achievable and effective in reducing fugitive emissions.[48] Fugitive emissions are a risk driver for MON sources. Final RRA at 7 ("with ethylene oxide from fugitive emissions . . . driving the risk."). Cancer risk is extremely high for the people most exposed—above EPA's own benchmark of unacceptability.[49] EPA even recognizes in this rulemaking that "fenceline monitoring is one of many tools that could be used to address fugitive emissions." RtC at 116. Thus, EPA's decision not to require fenceline monitoring runs directly counter to the Act, to its record here, and to the record in other similar rulemakings. EPA must require fenceline monitoring and set a corrective action level as a development under section 7412(d)(6), and to satisfy its obligation to reduce unacceptable risk and provide an ample margin of safety under section 7412(f)(2).

2. EPA's new claim that emissions from MON sources are less understated or uncertain than petroleum refineries is unsupported.

EPA contends that there is "no compelling reason[] to require fenceline monitoring by MON facilities," unlike petroleum refineries, because "we have no basis to conclude that the magnitude and uncertainty of fugitive emissions at MON facilities is similar to that of petroleum refineries." RtC at 116. However, EPA offers no evidence to support its novel claim that MON source emissions data are of higher quality or accuracy, or are less uncertain than fugitive emission from petroleum refineries. *See* RtC at 116.

To the contrary, the MON record indicates that there are "uncertainties in emissions." *See, e.g.*, 85 Fed. Reg. at 49,102. To create the work practice standards, EPA relied on data regarding PRDs and flares from refineries and ethylene production sources, due to its own failure to collect data from MON sources. The emissions inventory provided by EPA for the MON rule is based in part on 2008 screening level assessments that only half of sources responded to with a review of their emissions. Final RRA at 28. EPA did not perform an information collection request for any facilities except one;[50] by contrast, it did an ICR for refineries. EPA has no data at all for seven facilities. RtC at 9. EPA's reliance on industry's hand-selected data supports the need for fenceline monitoring. And, as EPA has stated, it is not considering emissions from

---

[48] 79 Fed. Reg. at 36,920; 84 Fed. Reg. at 56,315.

[49] *See* EIP, Kunstman & Schaeffer, Monitoring for Benzene at Refinery Fencelines: 10 Oil Refineries Across U.S. Emitted Cancer-Causing Benzene Above EPA Action Level (Feb. 2020), https://environmentalintegrity.org/wp-content/uploads/2020/02/Benzene-Report-Final-2.7.20.pdf.

[50] Data Received from Information Collection Request for the Misc. Organic Chemical Manufacturing Source Category (Lanxess ICR Submission) at 38, https://www.regulations.gov/document?D=EPA-HQ-OAR-2018-0746-0022.

malfunctions, even though its standards would allow these to occur without consequence, and even though they can be quite high and dangerous to neighboring communities. RtC at 26-27.

Notably, EPA has a history of underestimating fugitive emissions in the rulemaking process for petrochemical sources. A 2020 Environmental Integrity Project report assessing refineries' fugitive emissions shows higher levels of benzene at the fenceline than EPA predicted would occur in the refineries rulemaking.[51] Some refineries even exceeded the fenceline action level for benzene during 2019.[52] The report demonstrates that it is likely that EPA undercounted the benzene emissions in its 2015 Residual Risk Assessment for refineries, and is similarly likely to have undercounted fugitive emissions from MON sources here.[53]

EPA has recognized strong similarity between the refinery and MON sources source and their fugitive emission problems throughout this rule, but arbitrarily fails to do so with respect to fenceline monitoring. 42 U.S.C. § 7607(d)(9). In particular, EPA's own decision to apply the Refinery work practice standards for PRDs and flares to MON sources (albeit illegal and arbitrary in regard to the exemptions they contain), only further demonstrate EPA's admission of the similarity of these sources and their inadequate control of fugitive emissions, directly contrary to the rationale presented in the Response to Comments. EPA determined MON sources were similar enough to refineries that EPA could and did rely on refinery information to set other revisions. EPA fails to support any relevant emission contrast between refineries and MON sources' emissions that could justify its refusal to require fenceline monitoring here, as it did there.

3. EPA cannot show fenceline monitoring is not "necessary" under 112(d)(6) and not required under 112(f)(2) because it has other authority to require it in individual circumstances.

EPA contends that it does not have to require fenceline monitoring because "other CAA statutory authorities exist for requiring additional monitoring if needed in individual cases (*e.g.*, CAA section 114)," and "the Agency can reassess the need for monitoring information in future CAA section 112(d)(6) technology reviews should we find a need for fenceline monitoring information from miscellaneous organic chemical manufacturing sources in the future." RtC at 116.

That EPA has other authority to require additional monitoring in individual cases, *see, e.g.*, section 7414, does not justify EPA's failure to require fenceline

---

[51] EIP, Monitoring for Benzene at Refinery Fencelines: 10 Oil Refineries Across U.S. Emitted Cancer-Causing Benzene Above EPA Action Level, Note 25, Addendum (Feb. 6, 2020) (as updated Feb. 18, 2020) (attached).

[52] *Id.*

[53] *Id.*

monitoring for all facilities in the MON source category. The issue here is not whether EPA should use fenceline monitoring to inspect and investigate emissions from only one facility, case-by-case, but whether EPA must consider and require fenceline monitoring for all regulated MON facilities as a necessary development under section 7412(d)(6) or to protect public health and ensure an ample margin of safety under section 7412(f)(2). The point of this rulemaking is to assure that *all* sources are subject to regulations that satisfy the Act. Even if EPA were to implement or require fenceline monitoring for an individual facility for some temporary period, such monitoring would not assure the long-term protection provided by requiring continuous fenceline monitoring for each regulated facility.

Moreover, EPA has taken little or no case-by-case action to require fenceline monitoring, even of ethylene oxide. EPA cites to no examples where it has recently required or implemented this *for any MON* source. Even if EPA had implemented or were to implement this on a case-by-case basis, people exposed to pollution from MON sources need this protection in the rule so that it is lasting, and enforceable, and not a one-time-only exercise of EPA's discretionary authority that EPA ends abruptly (as has happened at some facilities, like the neoprene rubber plant, Denka in LaPlace, La., for chloroprene).[54] As Petitioners explained in their comments and in this petition, EPA must require fenceline monitoring. *See, e.g.*, Petitioners Comments at Section XI.

4. EPA's new rationale that MON processes are too diverse to implement fenceline monitoring is unsupported.

EPA's claim that the MON source category "contains a diversity of processes and chemicals reacted, produced, and emitted that would make selecting compounds and setting action levels for fenceline monitoring difficult and in some cases impossible," RtC at 76, 116, is arbitrary and capricious. EPA does not need to monitor all pollutants to effectively monitor fugitive emissions at the fenceline. Instead, there are nearly ubiquitous pollutants EPA could use as a target analyte as it did with benzene for refineries. For example, the Residual Risk Assessment shows that 143 of 194 MON sources emit methanol, and 112 emit toluene. Final RRA at Table 3.1-1. And, many fenceline monitoring methods (including Method 325A –B and TO-15A, as well as real-time fenceline monitoring techniques) do allow the collection of *multiple* types of pollutants *at the same time*, as EPA is well aware.[55]

---

[54] EPA, LaPlace, St. John the Baptist Parish, Louisiana, https://www.epa.gov/la/laplace-st-john-baptist-parish-louisiana (last visited Oct. 12, 2020).

[55] EPA, Method TO-15A (Sept. 2019), https://www.epa.gov/sites/production/files/2019-12/documents/to-15a_vocs.pdf (attached); EPA, Method 325A (Jan. 2019), https://www.epa.gov/sites/production/files/2019-08/documents/method_325a.pdf (attached); EPA, Method 325B (Jan. 2019), https://www.epa.gov/emcsites/production/files/2019-08/documents/method-_325b-volatile-organic-compounds-fugitive-and-area-sources-sampler-preparation-and.pdf (attached).

Furthermore, this is no excuse for not, at minimum, requiring fenceline monitoring for ethylene oxide at the 9 facilities that emit ethylene oxide due to the public health risks that these emissions are driving. Final RRA at Table 3.1-1. EPA's refusal to consider setting fenceline monitoring requirements even for ethylene oxide, and for the most-emitted, and most relevant pollutants for subcategories of sources, is irrational and unsupported. It is not impossible for EPA to set a fenceline monitoring requirement here that uses a different target pollutant or pollutants tailored to the relevant sources. This would simply require time and effort by EPA to design and tailor the requirements to this source category—just as it did for refineries in the 2015 Rule. EPA should grant reconsideration and perform a rulemaking to do exactly this.

5. EPA's new rationale that it is unaware of any methodology or technology to monitor ethylene oxide at the fenceline is false.

Contrary to EPA's assertion that it "is not aware of any methodology or technology with the necessary accuracy, precision, and detection sensitivity to require fenceline monitoring for [ethylene oxide]," RtC at 76, 102, EPA has an approved test method for precisely this: TO-15A.[56] TO-15A uses summa canisters to collect this pollution, and has a well-established and well-supported protocol to monitor for ethylene oxide.[57] EPA is thus not only aware, but the agency itself has *approved* an ethylene oxide test method—and has already been using the TO-15A method to monitor ethylene oxide in the air and has been performing such monitoring for at least two years.[58]

---

[56] EPA, EPA's Work to Understand Background Levels of Ethylene Oxide (Sept. 2020), https://www.epa.gov/sites/production/files/2020-09/documents/background_eto_monitoring.september_2020.pdf.

[57] *Id.*

[58] EPA, Ethylene Oxide – Updates (last updated Sept. 30, 2020), https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/ethylene-oxide-updates; EPA, EPA Moves Forward on Suite of Actions to Address Ethylene Oxide (Nov. 6, 2019), 626, 2019), https://www.epa.gov/newsreleases/epa-moves-forward-suite-actions-address-ethylene-oxide; EPA, Questions and Answers: About the Current Monitoring Data (last updated Mar. 26, 2019), https://www.epa.gov/il/questions-and-answers-about-current-monitoring-data; EPA, Outdoor Air Monitoring in the Willowbrook Community (last updated Aug. 14, 2019), https://www.epa.gov/il/outdoor-air-monitoring-willowbrook-community; EPA, Questions and Answers: Previous Monitoring (last updated Mar. 26, 2019), https://www.epa.gov/il/questions-and-answers-previous-monitoring (starting mid-May 2018); *see also* Lake County, Illinois, EtO Monitoring Results (last updated June 16, 2020), https://www.lakecountyil.gov/4188/EtO-Monitoring-Results.

EPA's current test method, TO-15A, "is commonly used to measure air toxics, including ethylene oxide."[59] And, according to EPA, "EPA has high confidence in the results of ethylene oxide monitoring results immediately downwind of facilities."[60] Additionally, the Illinois Lake County Health Department monitors ethylene oxide in the air using EPA's approved test method TO-15, and the Vantage facility in Illinois has also committed to monitoring ethylene oxide in the air.[61]

In addition, EPA's Method 325A-B, using passive sorbent tubes, is an EPA-approved fenceline monitoring method for benzene and similar pollutants that EPA could, and should, simply update to allow for the measurement of ethylene oxide in a MON reconsideration rulemaking.[62] EPA's Method 325A-B (fenceline monitoring method for benzene and other HAPs) is not yet approved for ethylene oxide. But EPA gives no reason why the methods can and should not be updated to include ethylene oxide promptly. In fact, EPA first created that method and finalized it in concert with the proposed and final 2015 Rule for the refinery sector. 80 Fed. Reg. 75,178, 75,191 (Dec. 1, 2015). That method has now been in use for years and its efficacy and inexpensive cost are well-established and EPA called this "inexpensive" in the Ethylene Production rulemaking docket.[63] EIP's 2020 Report analyzing the fenceline monitoring data at refineries has shown how valuable and effective the requirement has been to reduce pollution and identify problems where facilities and EPA need to act to address fugitive

---

[59] EPA, EPA's Work to Understand Background Levels of Ethylene Oxide (Sept. 2020), https://www.epa.gov/sites/production/files/2020-09/documents/background_eto_monitoring.september_2020.pdf.

[60] EPA, EPA's Work to Understand Background Levels of Ethylene Oxide (Sept. 2020), https://www.epa.gov/sites/production/files/2020-09/documents/background_eto_monitoring.september_2020.pdf. ("EPA is working to improve this method and to develop new technologies and test methods that would allow us to measure ethylene oxide at lower levels than is currently possible, and in near-real time.").

[61] EPA, Ethylene Oxide Emissions: Frequent Questions (last updated Dec. 17, 2019), https://www.epa.gov/il/ethylene-oxide-emissions-frequent-questions; EPA, Ethylene Oxide Commercial Sterilization Section 114 Survey (Dec. 2019), https://www.epa.gov/sites/production/files/2019-12/documents/eosurveyid_final_v4.4_clean.pdf (requesting fenceline monitoring data on ethylene oxide from sterilizers).

[62] Method 325A—Volatile Organic Compounds from Fugitive and Area Sources: Sampler Deployment and VOC Sample Collection (2015), https://www.epa.gov/sites/production/files/2016-07/documents/m-325a.pdf; Method 325B—Volatile Organic Compounds from Fugitive and Area Sources: Sampler Preparation and Analysis (2015), https://www.epa.gov/sites/production/files/2016-07/documents/m-325b.pdf.

[63] EP Equipment Leaks Memo, EPA-HQ-OAR-2017-0357-0010 (attached).

emissions and health threats.[64] EPA should similarly evaluate and update that method for use in a reconsideration rulemaking here to either require application of TO-15 at MON sources or update Method 325A-B (or both if needed), and require use of that method at such sources.

Notably, although EPA ignores these methods in its discussion of available monitoring methods for ethylene oxide, EPA also has approved Method 18 and 320 for stack testing of ethylene oxide—Method 18 uses gas chromatography, and Method 320 uses Fourier transform infrared (FTIR) Spectroscopy. Final Rule, 85 Fed. Reg. at 49,137; *see also* Proposed Rule, 84 Fed. Reg. at 69,234. EPA has failed to consider much less explain why neither method could be applied at the fenceline. FTIR is a well-known fenceline monitoring method in use at some petrochemical sources, and EPA itself has employed this in certain consent decrees at petrochemical facilities—including the Mont Belvieu plastics plant which is a MON source.[65]

In addition, there are other major developments in real-time monitoring of pollutants emitted along with ethylene oxide that EPA should evaluate for monitoring of ethylene oxide or through using other pollutants as indicators. For example, EPA must at least consider requiring real-time monitoring for toxic air pollutants at ethylene oxide-emitting sources such as that required by the South Coast Air Quality Management District (SCAQMD).[66] For years communities exposed to chemical and petrochemical plants have called on EPA to require real-time fenceline monitoring that can provide immediate information to communities to protect their health and safety. Since the Refinery Rule there have been major developments in real-time monitoring technology and governmental jurisdictions in California have required such monitoring. Therefore, EPA must also evaluate the use of this for all MON sources,

---

[64] EIP, Kunstman & Schaeffer, Monitoring for Benzene at Refinery Fencelines: 10 Oil Refineries Across U.S. Emitted Cancer-Causing Benzene Above EPA Action Level (Feb. 2020), https://environmentalintegrity.org/wp-content/uploads/2020/02/Benzene-Report-Final-2.7.20.pdf.

[65] *See, e.g.*, SCAQMD, Demonstration of Remote Sensing Fenceline Monitoring Methods at Oil Refineries and Ports (Jan. 2015), http://www.aqmd.gov/docs/default-source/fenceline_monitroing/earlier_fenceline_studies/ucla_fenceline_monitroing_technology_study_2012-2014.pdf (attached); Environ, Long-Term, Open-Path Emissions Monitoring at Oil and Gas Exploration and Production Sites, https://www3.epa.gov/ttnchie1/conference/ei20/session7/rhashmonay.pdf (last visited Oct. 13, 2020) (attached); Phillips 66 Rodeo Refinery Fence Line Data, http://www.fenceline.org/rodeo/inst.php (last visited Oct. 13, 2020) (attached); *see, e.g.*, 2017 EPA Consent Decree, https://www.justice.gov/opa/press-release/file/1007591/download (attached).

[66] SCAQMD Rule 1180 & Rule 1180 Guidelines for Fenceline Monitoring at Refineries, http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/r1180.pdf; http://www.aqmd.gov/docs/default-source/rule-book/support-documents/1180/rule-1180-guidelines.pdf.

especially those that emit ethylene oxide, for indicator pollutants (as EPA monitored for benzene in the Refinery Rule to assess whether other pollutants were also crossing the fenceline). The science has also evolved to provide for the use of new technology (Cavity Ring-Down Spectrometer, or "CRDS") for direct real-time measurement of ethylene oxide for fenceline or community monitoring that EPA must evaluate. For example, after the comment period closed, in April 2020, a company launched the following new technologies, as described on its website:

- The G2910 Stack and Indoor Air Quality Analyzer introduces technical services companies to the most sensitive (<250 ppt LOD), interference free, real-time measurement of ethylene oxide concentrations, enabling new measurement opportunities and more efficient deployments.
- The G2920 Fugitive Analyzer introduces the measurement community to a platform that supports long-term monitoring of emissions at the fenceline. Performance standards set by expensive, difficult to use, research-grade instruments (e.g. PTR-MS) are overshadowed by this easy-to-deploy technology with best-in-class LOD (<100 ppt).
- The G2930 Ambient Analyzer represents the greatest improvement in ethylene oxide detection (<25 ppt LOD) and meets an ambitious goal of protecting communities from long-term exposure to ethylene oxide. Continuous monitoring removes unknowns that arise from data gaps, and lack of flask sampling and analysis.[67]

This technology has been "validated" by an independent company which stated that "the CRDS technology provided reliable and rapid ethylene oxide measurements down to extremely low levels."[68]

Thus, EPA's statement that it is "not aware" of a methodology or technology to use for ethylene oxide is factually incorrect, and shockingly so. *See* RtC at 102. EPA's cursory dismissal of such well-established methodologies and technologies shows how illegal, irrational and arbitrary EPA's decision not to require fenceline monitoring here

---

[67] *See, e.g.*, Picarro Press Release, Picarro Announces Family of Products for Measuring Ethylene Oxide Technology leap in measurement and monitoring to support accurate exposure data (Apr. 28, 2020), https://www.picarro.com/company/press-releases/2020/picarro_announces_family_of_products_for_measuring_ethylene_oxide (attached); Picarro launches ethylene oxide analysers, Gasworld (May 4. 2020), https://www.gasworld.com/picarro-launches-ethylene-oxide-analysers/2019014.article (attached); Lucic et al., Novel real-time measurements of ethylene oxide using a Cavity Ring-Down Spectrometer (CRDS) (Dec. 2019), https://ui.adsabs.harvard.edu/abs/2019AGUFM.A11I2681L/abstract.

[68] V. Schmid, CleanAir Engineering validates Picarro's Ethylene Oxide analyzer for stack, fenceline, and LDAR measurements (Aug. 20, 2020), https://www.cleanair.com/cleanair-validates-picarros-ethylene-oxide-analyzer/ (attached). A webinar on this technology will be held on Oct. 29, https://picarro.zoom.us/webinar/register/WN_EzFP0kpBRIqgeWwx--795g.

is. EPA must evaluate all available methods and the new method described above that states it can assess ethylene oxide at very low detection limits. The record contradicts EPA's conclusion and demonstrates reconsideration is required.

6. EPA's failure to propose fenceline monitoring last December does not excuse its unlawful failure to require fenceline monitoring.

Lastly, EPA contends that "finalizing any such [fenceline monitoring] provisions would violate our notice and comment obligations under CAA section 307(d)." RtC at 116. That rationale fails to support EPA's inaction. Fenceline monitoring is a "necessary" development under section 7412(d)(6), and EPA must revise its standards to require the maximum degree of reduction that can be achieved through fenceline monitoring. Fenceline monitoring is also required under section 7412(f)(2) to reduce health risks and provide an ample margin of safety. EPA should have before—and must now, in a reconsideration rulemaking, propose and take public comment on a fenceline monitoring proposal for MON sources that includes monitoring and necessary corrective action to assure compliance with the emission standards and protect public health. EPA cannot justify illegal action (or inaction) by the fact that public comment is required. EPA could have taken additional comment on a proposal for fenceline monitoring (and corrective action) for MON sources since receiving this comment early in 2020, and could and should take such comment on reconsideration. EPA's argument is nonsensical and would undercut the importance of comments and consideration of them in the first place. It is simply incorrect that EPA could not act on comments received, including to take further comment if needed to satisfy the Act's procedural and substantive requirements.

C. Petitioners' objections are "of central relevance" to the outcome of the rule.

These objections are "of central relevance," 42 U.S.C. § 7607(d)(7)(B), because they fatally undercut the legality of EPA's failure to require fenceline monitoring and provide "substantial support for the argument that the regulation should be revised." *CCAN*, 952 F.3d at 320. Petitioners' objections that EPA must require fenceline monitoring and related corrective action for fugitive emissions, including emissions of ethylene oxide, implicate threshold legal tests that would compel the agency to set such requirements. 42 U.S.C. §§ 7412(d)(2)-(3), (d)(6), (h). EPA's new rationales are arbitrary, capricious, and unsupported by evidence, and thus Petitioners' objections provide a basis for the court to reverse EPA's action. *Id.* § 7607(d)(9).

V. EPA must grant reconsideration on its new rationale for exempting malfunction emissions from smoking flares and pressure relief devices not in ethylene oxide service.

A. Petitioners were unable to raise their objections during the public comment period.

Petitioners commented at proposal that EPA's exemptions for releases from smoking flares and pressure relief devices were unlawful because the standards did not apply continuously. In the Final Rule, EPA advances a new rationale contending that piecemeal standards do apply such that flares and pressure relief devices (not in ethylene oxide service) are regulated during malfunctions. 85 Fed. Reg. at 49,120/3 (stating that standards "apply at all times" even though EPA has granted exemptions for PRDs and flares). For example, EPA states:

> Despite the force majeure provisions, the rule has requirements that apply at all times. Flares are required to comply with the requirements for a continuously lit pilot flame and combustion efficiency standards (*i.e.,* limits on the NHVcz) at all times, including during periods of emergency flaring caused by a force majeure event. Also, facilities are required to initiate a root cause analysis to assess the cause of a PRD release, including releases determined to be caused by a force majeure event. These requirements apply at all times; thus, the final work practice standards have requirements that apply to PRDs and flares at all times, and they are not contrary to the CAA requirements in CAA section 112.

RtC at 180, 183. EPA also states for the once or twice every three year exemptions in the work practice standard that it "disagree[s] . . . that the standards do not apply at all times." 85 Fed. Reg. at 49,124.

Lastly, in the Final Rule, EPA newly asserts that "[t]he definition of force majeure event in the December 17, 2019, proposed rule (84 FR 69201) is based specifically on a clause included in the SCAQMD rule, which served as the basis for the PRD MACT standard." RtC at 181.

B. Objections:

1. EPA has failed to demonstrate there are continuous § 112-compliant emission standards applicable to flares and pressure relief devices not in ethylene oxide service that reduce emissions.

Standards must be both "continuous" and "§ 112-compliant." *Sierra Club*, 551 F.3d at 1027-28 (citing §§ 7412, 7602(k)). Even if EPA could craft a work practice standard that could possibly "apply to the wide range of possible malfunctions," "the EPA would need to determine that the standard would 'reduce emissions of hazardous air pollutants,' an evidence-based standard that is difficult (perhaps impossible) to

apply to the unpredictable circumstances of malfunctions." *U.S. Sugar Co. v. EPA*, 830 F.3d 579, 608 (D.C. Cir. 2016) (*reh'g granted on remedy* 844 F.3d 268 (D.C. Cir. 2016) (changing remedy to remand instead of vacatur)). There is no applicable standard that "reduce[s] emissions" during the malfunction periods that EPA exempts. *Id.*

Further, the text of the Clean Air Act makes plain that any work practice requirements that EPA promulgates under § 112(h) must be consistent with § 112(d)(2)-(3)—i.e., reduce emissions by the "maximum" degree that is "achievable" and, at a minimum, to the level already "achieved" by the relevant best performing sources. *See also U.S. Sugar*, 830 F.3d at 608 ("EPA would need to determine that the standard would 'reduce emissions of hazardous air pollutants'"). EPA's new rationale fails to justify the illegal exemptions EPA has provided for PRDs not in ethylene oxide service and smoking flares, because the only requirements that are "continuous" are not "§ 112-compliant," *Sierra Club*, 551 F.3d at 1027-28.

EPA points to no standard that satisfies § 112(d)(2)-(3) during the exempted periods (one or two smoking events every three years, or any force majeure event). For example, EPA newly argues that there are flare standards that apply continuously because flares must always have a lit pilot flame and meet the combustion efficiency standards (98-percent destruction efficiency), even during periods of emergency flaring caused by a force majeure event, RtC at 183, 185; 85 Fed. Reg. at 49,122/3. The operational and monitoring requirements that EPA will exempt flares from are those that "ensure flares are achieving the required control efficiency,"[69] and EPA has not explained how a flare will continuously maintain the required 98% destruction efficiency standard to satisfy sections 7412(d)(2)-(3) while smoking.

EPA also newly argues that the pressure relief device standards apply continuously because of prevention measures, or a requirement to monitor to determine when a release occurs or initiate a root cause analyses to assess the cause of a pressure release, including releases determined to be caused by a force majeure event. RtC at 183. However, steps taken *before* or *after* a release has occurred are not standards that apply continuously, and monitoring is not a § 7412-compliant emissions standard. The D.C. Circuit has already rejected EPA's argument that a "general duty" provision that applies continuously but does not actually limit pollution during periods of startup, shutdown, and malfunction could satisfy the Act, in the case vacating the original general SSM exemption. *Sierra Club*, 551 F.3d at 1027-28.

The work practice standards finalized by EPA for PRDs and smoking flares plainly contain explicit exemptions that break the standards' continuity. EPA has finalized gaping holes in the emission standards during malfunctions that unlawfully

[69] *See, e.g.*, 2015 Refinery Rule RTC, EPA-HQ-OAR-2010-0682-0802 at 8 ("we proposed and are finalizing significant new operating and monitoring requirements for flares to ensure flares are achieving the required control efficiency."), 75 ("98 percent destruction efficiency . . . forms the basis for the MACT flaring provisions"), 83; *see also* 80 Fed. Reg. at 75,182.

excuse emissions that would otherwise qualify as a violation. During the malfunctions the exemptions allow, there is simply no § 7412-compliant standard in place that reduces emissions during the release. That deficiency is fatal to the standards' legality. The Act does not allow a piecemeal approach where, as here, EPA sets a standard that purports to meet § 7412, but crafts regulatory provisions that periodically and unjustifiably lift key requirements from that standard. *See Sierra Club*, 551 F.3d at 1028; 42 U.S.C. § 7602(k).

Further, EPA has recognized that it must control PRDs in ethylene oxide service. 85 Fed. Reg. at 49,104 (40 C.F.R. § 63.2493(d)(4), at 85 Fed. Reg. 49,149). That EPA has not applied equal controls to other PRDs, or to flares in ethylene oxide service, underscores the illegality of its actions. In recognizing the need to control PRDs in ethylene oxide service, EPA has implicitly acknowledged that this is important for all PRDs and flares as well (and at least, those in ethylene oxide service). Treating these releases so differently is also arbitrary and capricious.

2. EPA must revise the standard "as necessary" under section 112(d)(6) to fully remove the unlawful startup, shutdown, and malfunction exemptions.

As the D.C. Circuit held and EPA recognizes, the general exemption for emissions during periods of startup, shutdown and malfunction is unlawful. *Sierra Club*, 551 F.3d at 1028; 85 Fed. Reg. at 49,088. And, as the D.C. Circuit held in *LEAN*, EPA must revise standards "as necessary" under section 7412(d)(6) to bring the standards into compliance with the Act. 955 F.3d at 1095-96. As such, EPA must remove all startup, shutdown, and malfunction exemptions. However, EPA did not fully remove malfunction exemptions in the final MON rule. Instead, EPA kept this exemption, now repackaged as a work practice standard that allows uncontrolled emissions during malfunctions from PRDs and flares (once or twice every three years, and any time there is a "force majeure event"). EPA must grant reconsideration to fully remove all unlawful malfunction exemptions (for flares and pressure relief devices not in ethylene oxide service) and bring the MON standards into compliance with the Act.

By allowing the one or two per three-year period free passes to pollute for those PRDs and flares, as discussed above, and by allowing MON sources to continue to claim a malfunction exemption, newly relabeled as "force majeure event" exemption, EPA has implicitly *continued* the prior SSM exemption in these particular circumstances. This runs directly contrary to binding D.C. Circuit precedent and EPA must grant reconsideration to cure this fatal error at the heart of its PRD and flare standards. Because these pieces of equipment are connected to many other parts of MON sources, this is a fundamental problem within the MON Final Rule that cannot stand.

3. EPA's new reliance on the California Local Air District Rules does not justify EPA's unlawful force majeure exemption.

In the Final Rule, EPA newly tries to justify the "force majeure event" exemption for PRDs and flares by contending that "[t]he definition of force majeure event . . . is based specifically on a clause included in the SCAQMD rule, which served as the basis for the PRD MACT standard." RtC at 181. However, the promulgated work practice standards are less stringent than the SCAQMD rule EPA claims they are based on as shown in comments (and EPA failed to dispute in the record). And, importantly, this new rationale does not save EPA's unlawful exemption.

That Rule 1173 includes an exemption for releases that a facility has "demonstrated to the satisfaction of the [SCAQMD] Executive Officer" to "result from natural disasters, acts of war, or external power curtailment beyond the refinery's control"[70] does not justify EPA's MON exemptions. Just because a local rule includes an exemption does not mean that EPA may codify that same exemption in the federal standards. *See, e.g., U.S. Sugar v. EPA*, 830 F.3d at 608 ("If anything, the statutory language on its face prevents the EPA from taking into account the effect of potential malfunctions when setting MACT emission standards."). Section 7412(d)(2)-(3) does not allow EPA to turn local exemptions into national ones. Doing so violates the Act's requirement for "continuous section 112-compliant standards," just as the D.C. Circuit has held the SSM exemption and affirmative defense to civil penalties for malfunctions did. *Sierra Club*, 551 F.3d at 1027-28; *NRDC*, 749 F.3d 1055. In those cases there were also examples of local or state rules that had similarly implemented those exemptions, and that was irrelevant to the court's recognition that the regulatory provisions EPA promulgated for the exemption and affirmative defense were unlawful. That the local rule includes an exemption does not mean that sources cannot meet PRD (or flare) restrictions, and avoid releases, during all or most of the exempted types of incidents. EPA has not shown that it has evaluated use of the SCAQMD exemption to consider either how it has affected implementation of Rule 1173 and whether sources have actually attempted to take advantage of that exemption (or not done so because they have complied during such incidents), nor the health and environmental impacts of that exemption locally (where facilities have taken advantage of it).

Furthermore, the SCAQMD clause on which EPA now relies is narrower and more restrictive than the broad "force majeure event" definition and exemption that EPA promulgated in this Rule. *Compare* SCAQMD Rule 1173 with, *e.g.*, 40 C.F.R.

---

[70] SCAQMD Rule 1173(*l*)(5) ("Atmospheric PRD releases demonstrated to the satisfaction of the Executive Officer that result from natural disasters, acts of war or terrorism, or external power curtailment beyond the refinery's control, excluding power curtailment due to an interruptible service agreement, shall not be subject to the provisions of paragraphs (h)(6) and (h)(7).").

§ 63.2550 Final Rule, 85 Fed. Reg. 49,160.[71] The SCAQMD does not apply to flares (as EPA's definition does), only to releases from PRDs. SCAQMD Rule 1173. Further, the examples EPA's definition includes go beyond what Rule 1173 allows: e.g., a fire or explosion at a near or adjoining facility. 40 C.F.R. § 63.2550. Most importantly, the SCAQMD rule is far narrower. It does not include any "event beyond the refinery owner or operator's control"; it is limited to a specific list of events. EPA's rule gives no discrete set of incidents and leaves an indefinite set of exemption incidents up to industry and EPA to determine, without public notice-and-comment, or judicial review (as would occur in an enforcement case pursuant to § 7604 or 7413). EPA's rule arrogates far too much discretion to the Administrator—far more than Rule 1173 allows.

This is also more than the statute allows, as discussed in Petitioners' comments (as EPA cannot lawfully set a force majeure event exemption; it is just another variation of an unlawful malfunction exemption, as discussed above). Yet, even if EPA could create such an exemption, it has failed to show that its rule satisfies § 7412(d)(2)-(3) when it allows more pollution and more releases than Rule 1173, which EPA is characterizing as the floor. It is also irrational and capricious because EPA is allowing sources to have more releases in additional circumstances than the rule on which it is relying, and because this will lead to greater emissions and health impacts. And, it is arbitrary because the EPA definition is overbroad and there are insufficient criteria for EPA or the public to determine what is within the refinery owner or operator's control. For example, the CSB and EIP reports have provided numerous ways a facility can control pollution and prevent PRD and other releases even where there is a hurricane or other form of natural disaster.[72] That a facility cannot prevent the natural disaster does not mean it could not avoid the release; EPA has failed to demonstrate otherwise.

---

[71] 40 C.F.R. § 63.641: "Force majeure event means a release of HAP, either directly to the atmosphere from a pressure relief valve or discharged via a flare, that is demonstrated to the satisfaction of the Administrator to result from an event beyond the refinery owner or operator's control, such as natural disasters; acts of war or terrorism; loss of a utility external to the refinery (e.g., external power curtailment), excluding power curtailment due to an interruptible service agreement; and fire or explosion originating at a near or adjoining facility outside of the refinery that impacts the refinery's ability to operate."

[72] U.S. Chemical Safety Board, CSB Releases Arkema Final Report (May. 24, 2018), https://www.csb.gov/csb-releases-arkema-final-report/ ("CSB Chairperson Vanessa Allen Sutherland said, 'Considering that extreme weather events are likely to increase in number and severity, the chemical industry must be prepared for worst case scenarios at their facilities. We cannot stop the storms, but working together, we can mitigate the damage and avoid a future catastrophic incident.'") (attached); EIP, Preparing for the Next Storm (Aug. 16, 2018),

The fact is that Rule 1173 has an exemption thus does not save EPA's exemption. EPA has failed to lawfully and rationally justify such a broad exemption that could allow a facility to evade the standards simply because there is a hurricane, without showing it did all that was possible to prevent the release, notwithstanding high winds or rain. EPA has not even evaluated any specific examples of a force majeure event release prior to the 2020 Rule or afterward, or shared any information to give the public any understanding of how this provision would work or is working, now that it has been in place and EPA has been allowing these exemptions. EPA must grant reconsideration and consider actual releases during and after Hurricane Harvey, for example, to determine how much of the HAPs released were actually preventable and require those steps to be taken—before deciding whether or not to allow any type of force majeure event exemption.

Finally, the SCAQMD has stated plans to further strengthen its Rule 1173. Thus EPA cannot assume that Rule alone still reflects the floor.[73]

EPA must reconsider the MON Rule to further strengthen the PRD and flare requirements and ensure that it sets standards that satisfy § 7412(d)(2)-(3), as discussed in our original comments.

Further, even if EPA were justified in setting a work practice standard for pressure relief devices, which as discussed above it is not, EPA has failed to meet the Act's requirements for setting appropriately protective work practice standards. The statute directs EPA to set emission standards that assure the average emission limitation "achieved" by the relevant best performers. 42 U.S.C. § 7412 (d)(2)-(3), (h). However, EPA's work practice standards are weaker than what the best performers are achieving under the SCAQMD rules that EPA newly claims is the basis for the force majeure exemption. First, Rule 1173 for pressure relief devices does not contain any

---

https://environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-8.16.18-final.pdf (attached).

[73] SCAQMD, Rule and Control Measure Forecast (Mar 6, 2020), http://www.aqmd.gov/docs/default-source/Agendas/Governing-Board/2020/2020-mar6-016.pdf?sfvrsn=6, attached (stating that SCAQMD is considering proposed revisions to "improve the effectiveness, enforceability, and clarity of the rule. Other proposed amendments may be needed to further reduce emissions from operations, implement early leak detection, odor minimization plans, and enhanced emissions and chemical reporting"); *see also* SCAQMD, Community Emissions Reduction Plan, Wilmington, Carson, West Long Beach (Sept. 2019), http://www.aqmd.gov/docs/default-source/ab-617-ab-134/steering-committees/wilmington/cerp/final-cerp-wcwlb.pdf?sfvrsn=8.

force majeure exemption. SCAQMD, Rule 1173.[74] Instead, it numerically controls pressure relief device releases. *Id.* Further, Rule 1173 defines an emergency more narrowly ("not reasonably preventable equipment failure" as opposed to "equipment failure," 85 Fed. Reg. at 49,155).[75] EPA has unlawfully and arbitrarily labeled its preferred choice of parts of the SCAQMD rules as the "floor" and refused to recognize that it must further restrict emissions from PRDs and flares as the Act directs. 42 U.S.C. § 7412(d)(2)-(3). Instead, while a storm may be out of the facility's control, there are many steps they can and should take to prevent emission releases during a storm.[76] As such, EPA must reconsider and remove the unlawful force majeure and other malfunction exemptions and require continuous, § 7412-compliant standards, as the Act requires.

EPA also asserts that "the concept of force majeure . . . is consistent with the PRD and flare requirements in other recently amended Part 63 NESHAP rules, such as the Refinery MACT and ethylene production MACT." RtC at 181. However, as EPA is well aware, none of the exemptions it cites have been found lawful by a court. The exemptions in the cited petrochemical rules (refinery sector & ethylene production) are in pending litigation before the D.C. Circuit. EPA cannot rely on other similar illegal action to justify its illegal action here.

C. Petitioners' objections are "of central relevance" to the outcome of the rule.

Petitioners' objections are "of central relevance" to the outcome of the rule, 42 U.S.C. § 7607(d)(7)(B) because the objections go to the "legality" of the exemptions for smoking flares and pressure relief device not in ethylene oxide service and provide "substantial support for the argument that the regulation should be revised." *CCAN*, 952 F.3d at 320.

---

[74] Available at http://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1173.pdf (attached).

[75] SCAQMD, Rule 1118, https://www.aqmd.gov/docs/default-source/rule-book/reg-xi/rule-1118.pdf?sfvrsn=8.

[76] U.S. Chemical Safety Board, CSB Releases Arkema Final Report (May. 24, 2018), https://www.csb.gov/csb-releases-arkema-final-report/ ("CSB Chairperson Vanessa Allen Sutherland said, 'Considering that extreme weather events are likely to increase in number and severity, the chemical industry must be prepared for worst case scenarios at their facilities. We cannot stop the storms, but working together, we can mitigate the damage and avoid a future catastrophic incident.'"); EIP, Preparing for the Next Storm (Aug. 16, 2018), https://environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-8.16.18-final.pdf (attached).

Petitioners' objections are also "of central relevance" because of the serious harm to communities exposed to pollution from these exemptions. Extremely high amounts of toxic emissions can be and are released directly into local communities' air during the types of malfunction events which EPA standards would allow. EPA estimates that *10%* of the 5,100 PRDs at MON sources would release uncontrollably *every year* under the Final Rule.[77]

EPA refused to assess the emission or health impact of these releases—and refused even to collect data on such releases from more than one facility in this rulemaking. The ICR response from Lanxess (-0022) shows it tracked at least one PRD release due to an alarm (and contending that it does not know whether any other releases occurred without an alarm). Memo Re: Data Received from Information Collection Request for the Miscellaneous Organic Chemical Manufacturing Source Category at 52 (Sept. 2019) ("Lanxess identified a single release from a PRD. A summary of that incident is provided in Appendix 3.i."). But the Appendix that describes it (3.i) is described as confidential business information so Petitioners are unable to evaluate the full impact of this. Emission data does not qualify as confidential business information under the Act, so it is unclear how EPA can hide this information from the public. 42 U.S.C. § 7414(c); 40 C.F.R. § 2.301. Regardless, because Lanxess is an ethylene oxide emitter, any uncontrolled PRD release has strong potential to be dangerous. EPA's decision to keep this information confidential, and its refusal to collect similar data from any other sources has denied the public the full impact of PRD releases from MON sources from the public.

Other data collections by EPA have found serious examples of such releases. For example, on August 9, 2015, a single PRD release at Shell Deer Park released more than 150 tons of 1,3-butadiene in less than one hour.[78] There is evidence that MON sources have had ethylene oxide releases that could have turned into serious events if not ended quickly.[79] These emissions increase cancer and other chronic and acute health threats to nearby communities already facing extremely high health threats, as EPA's risk assessment here shows.[80] Thus, the pollution impact of these exemptions makes this objection critically important to the Act's purpose of protecting public health. 42 U.S.C. § 7401(a).

---

[77] EPA Memo, Review of Regulatory Alternatives for Certain Vent Streams in the Miscellaneous Organic Chemical Manufacturing Source Category at 8 (Dec. 17, 2019), https://beta.regulations.gov/document/EPA-HQ-OAR-2018-0746-0010.
[78] 2016 Refinery Rule Comments at 18-20 (citing TCEQ Emissions Event Inventory, Incident 218482) (attached); *see also* Refinery Rule Information Collection Request Data, and Ethylene Production Information Collection Request data in dockets incorporated by reference here.
[79] *See, e.g.*, Dow/Union Carbide, Institute, WV – 2012 release of ethylene oxide, https://rtk.rjifuture.org/rmp/facility/100000061381#accidents.
[80] Final RRA at 6, 7.

The COVID-19 pandemic provides an example of how dangerous the "force majeure event" exemptions are and why EPA must reconsider and remove them from the Final MON standards. As is, the Final MON Rule imposes no decisive constraints on how EPA may choose to interpret a "force majeure event," which is defined expansively within the regulations as a PRD or flare emissions release that the Administrator deems to "result from an event beyond the owner or operator's control, such as natural disasters; acts of war or terrorism; loss of a utility external to the MCPU . . . and fire or explosion originating at a near or adjoining facility outside of the miscellaneous organic chemical manufacturing process unit that impacts the miscellaneous organic chemical manufacturing process unit's ability to operate." 40 C.F.R. § 63.2550; 85 Fed. Reg. at 49,160.

According to the Federal Emergency Management Agency "[a]ll 50 states, the District of Columbia, and 4 territories have been approved for major disaster declarations" related to COVID-19."[81] The COVID-19 health crisis amply demonstrates how such an unlawful exemption could threaten to swallow the rule wholesale, by potentially allowing polluting facilities to seek, and EPA to grant, unlimited free passes for PRD releases and visible flare emissions during the pendency of a years-long pandemic.

After the President issued a national emergency declaration on March 13, 2020,[82] the American Petroleum Institute asked the EPA for extraordinarily broad enforcement and regulatory exemptions (such as from fenceline monitoring for pollution releases, leak detection and repair requirements to identify and end pollution releases, and other undefined "regulatory noncompliance") due to the virus, described as "non-essential compliance discretion."[83]

Shortly thereafter, on March 26, 2020, EPA's Assistant Administrator for Enforcement ("OECA") published a new "temporary" enforcement discretion policy regarding "implications" of COVID-19 that, when originally issued, applied for an

---

[81] U.S. Federal Emergency Management Agency, Covid-19 Disaster Declarations (last updated July 27, 2020), https://www.fema.gov/disasters/coronavirus/disaster-declarations.

[82] White House, Proclamation on Declaring a National Emergency Concerning the Novel Coronavirus Disease (COVID-19) Outbreak (Mar. 13, 2020), https://www.whitehouse.gov/presidential-actions/proclamation-declaring-national-emergency-concerning-novel-coronavirus-disease-covid-19-outbreak/.

[83] Letter from Sr. Vice Pres. Frank J. Macchiarola, Am. Petrol. Inst., to Adm'r Wheeler on "Compliance Discretion" (Mar. 23, 2020) (attached) (providing a list seven pages long of "detailed examples of issues for which industry is seeking temporary relief through enforcement discretion, waivers or revised compliance timeframes in response to the COVID-19 pandemic").

indefinite period of time.[84] In this policy, EPA provided advance notice that it would not seek penalties for violations of monitoring, reporting, or compliance certification requirements "where the EPA agrees that COVID-19 was the cause of the noncompliance."[85] The policy also stated that EPA is open to considering similar direct violations of administrative settlement agreements and consent decrees as "force majeure," and excusable as caused by COVID-19.[86] EPA stated that the policy should not "be read as a willingness to exercise enforcement discretion in the wake of [an accidental hazardous chemical] release," implicitly referring to § 7412(r).[87] This seems to signal, however, that in nearly any other circumstances, including circumstances pertaining to compliance with routine air pollution regulations, EPA was inviting requests from industry to not enforce or seek penalties for violations using COVID-19 as an excuse. On April 2, 2020, EPA issued a letter to members of Congress describing this memo as a temporary policy illustrating how EPA would exercise its "case-by-case" enforcement discretion "after the pandemic is over."[88] EPA later issued "termination addendum" stating that this policy would longer be in effect as of August 31, 2020.[89] So far, has provided no information on how many exemptions were given pursuant to this policy nor any assessment of the harm caused.

EPA has occasionally issued narrowly tailored advance enforcement statements during past emergencies, and this policy appears to be unusually broad, illustrating how sweepingly industry could attempt to seek, and EPA could attempt to apply, the "force majeure" exemption. 40 C.F.R. § 63.2550; 85 Fed. Reg. at 49,160. Certain states have classified COVID-19 as a natural disaster in order to trigger executive powers associated with a natural disaster declaration, and certain state courts have upheld such

---

[84] EPA Enforcement Policy Memo from Susan Bodine, Ass't Adm'r, OECA, to All Governmental and Private Sector Partners, Re: COVID-19 Implications for EPA's Enforcement and Compliance Assurance Program (Mar. 26, 2020), https://www.epa.gov/sites/production/files/2020-03/documents/oecamemooncovid19implications.pdf (attached) ("OECA Policy on COVID-19"). This memo expired on August 31, 2020 but EPA has not released information showing the full impact it had in authorizing exemptions or allowing dangerous emissions.

[85] *Id.* at 2-3.

[86] *Id.* at 4.

[87] *Id.* at 7.

[88] *See, e.g.*, Letter from Ass't Adm'r, OECA, to Sen. Feinstein (Apr. 2, 2020) (attached) ("OECA Letter to Feinstein"), https://www.epa.gov/sites/production/files/2020-04/documents/2020-04-02_epa-feinstein_epa_temporary_enforcement_compliance_guidance.pdf.

[89] EPA, COVID-19 Implications for EPA's Enforcement and Compliance Assurance Program: Addendum on Termination (June 29, 2020), https://www.epa.gov/sites/production/files/2020-06/documents/covid19addendumontermination.pdf; EPA, COVID-19 Enforcement and Compliance Resources (last updated Sept. 21, 2020), https://www.epa.gov/enforcement/covid-19-enforcement-and-compliance-resources.

declarations.[90] EPA's enforcement policy memorandum further makes clear that the types of challenges the agency envisages as being associated with COVID-19, a presidentially declared nationwide emergency, include facility staffing shortages that EPA misguidedly, and unlawfully, believes warrant absolution from statutorily-mandated enforcement activity.[91]

EPA's enforcement policy memorandum, which provided guidance on how EPA may choose to exercise its *enforcement discretion*, where industry makes a case-by-case showing that "COVID-19 was the cause of non-compliance," shows how harmful and wide-ranging an advance regulatory exemption that authorized broad non-compliance could become.[92] The fact that API and EPA have already pointed to the COVID-19 crisis as a "force majeure" event illustrates how dangerous and unlawfully broad the advance regulatory exemption in this rule is. A federal government plan responding to COVID-19 has suggested that the pandemic could extend for as long as 18 months.[93] The harm from allowing industry to evade requirements for such an extended period under the cloak of a "force majeure event" would be extraordinarily severe. For communities where families are sheltering at home and facing increased exposure to routine and non-routine air pollution, EPA's suggestion that it would entertain requests from industry to use COVID-19 as an excuse for violating health-protective regulations and exceeding standards that protect people vulnerable to both air pollution and COVID-19 is unconscionable.

Moreover, the exemption in the regulation is not limited to releases related to natural disasters or the examples provided within the regulatory provisions. Under the regulatory language, industry may attempt to rely on the force majeure event exemption for any release that it contends "result[s] from an event beyond the [MON] owner or operator's control," with no stopping point. 40 C.F.R. § 63.2550; 85 Fed. Reg. at 49,160. The Act does not allow this kind of back-and-forth between regulated industries and EPA in defining what regulations apply, when. In contrast to a negotiated enforcement agreement between parties that has a "force majeure" clause curtailing the scope of the agency's enforcement discretion, the MON standards under the Clean Air Act must be "continuous" and apply at all times to assure the level of health protection required. *Sierra Club*, 551 F.3d at 1027-28. The statute is not a contract that industry may negotiate.

---

[90] U.S. Federal Emergency Management Agency, Covid-19 Disaster Declarations (last updated July 27, 2020), https://www.fema.gov/disasters/coronavirus/disaster-declarations.
[91] OECA Policy on COVID-19 at 2.
[92] *Id.* at 3.
[93] U.S. Dep't of Health & Human Services, PanCAP Adapted U.S. Government COVID-19 Response Plan at 4 (Mar. 13, 2020), https://int.nyt.com/data/documenthelper/6819-covid-19-response-plan/d367f758bec47cad361f/optimized/full.pdf#page=1.

At the same time, the EPA enforcement policy memo also illustrates that creating an advance regulatory exemption is neither rational nor necessary. In the event an unusual circumstance comes up that makes it impossible to comply, EPA has well demonstrated that it believes it has other options where it deems that facility compliance was truly impossible. It can simply exercise enforcement discretion case-by-case, it can issue a temporary policy to this effect in narrow circumstances, or it can use other legal authority granted by Congress to address emergencies. EPA's letter to Congress highlighted examples of past exercises of enforcement discretion during and after hurricanes that provide ways EPA has chosen to address compliance concerns it deemed valid—without the need for a broad, advance exemption to be promulgated into a permanent regulation.[94] Where a facility operator can demonstrate that all available advance preparation to prevent releases occurred but compliance was still impossible due to a natural disaster, EPA enforcement discretion may well be warranted in limited circumstances, and a court may well apply similar discretion in a private enforcement suit pursuant to § 7604. However, EPA may not lawfully or rationally authorize non-compliance *by regulation*, before any such planning, before there is any such result, and before the facility makes all available attempts to prevent the violations occur, and in such broad terms that a facility loses any incentive to even attempt to comply.

Allowing regular malfunction exemptions and even broader exemptions for some of the most dangerous releases during times EPA attempts to deem so-called "force majeure events," such as natural disasters like Hurricane Harvey, Hurricane Laura,[95] and, most recently, Hurricane Delta, means there is no pollution control during these particularly dangerous times even though facilities can and should take additional precautions and have a strong incentive to avoid pollution during these periods that are particularly dangerous to human health. Thus, this objection is of "central relevance." EPA must grant reconsideration to remove the unlawful malfunction exemptions, and

---

[94] OECA Letter to Feinstein at 2 (describing 41 examples of enforcement discretion, one fuel waiver, and 21 force majeure letters during Hurricanes Katrina and Rita, as well as other similar examples).

[95] Rebecca Hersher, *Millions Of Pounds Of Extra Pollution Were Released Before Hurricane Laura's Landfall*, NPR.org (Aug. 28, 2020), https://www.npr.org/sections/health-shots/2020/08/28/906822940/millions-of-pounds-of-extra-pollution-were-released-before-laura-made-landfall (attached); Zoya Teirstein, *Even shut down, Texas oil refineries in Hurricane Laura's path will emit nearly 4 million pounds of pollution*, Grist.org (Aug. 26, 2020), https://grist.org/climate/even-shut-down-texas-oil-refineries-in-hurricane-lauras-path-will-emit-nearly-4-million-pounds-of-pollution/ (attached); Ron Brackett, *Oil, Chemical Plants Released Tons of Pollutants While Shutting Down for Hurricane Laura*, weather.com (Aug. 31, 2020), https://weather.com/news/news/2020-08-31-hurricane-laura-pollution-refineries-chemical-plants.

to set limits that satisfy the Act's requirement for emission standards to apply at all times.

VI. EPA must grant reconsideration on its new rationale for subcategorizing pressure relief devices and recognize that it must fully control all pressure relief devices and additional flares.

A. Petitioners were unable to raise their objections during the public comment period.

After Petitioners commented at proposal that EPA was unlawfully subcategorizing pressure relief devices by control (those that vent to a control device and those that do not), *see* Petitioners' Comments at Section VIII(C), in the Final Rule, EPA newly argues this unlawful subcategorization is justified because "the only information [EPA has] available about when PRD releases occur is from those PRDs that release directly to atmosphere." 85 Fed. Reg. 49,119. EPA must reconsider its unlawful subcategorization by control, and instead require that a release from any pressure relief device is a deviation of the standard—all pressure relief devices must vent to a control.

B. Objections: EPA's subcategorization by control is unlawful and unsupported, and EPA must instead require that any release from a pressure relief device is a deviation of the standard.

EPA's rationale and decision to leave certain PRDs uncontrolled are illegal and arbitrary. First, the Act does not allow subcategorization by control, as the statute makes clear and as the D.C. Circuit has held. In setting standards, the statute only authorizes EPA to subcategorize, or "distinguish" among "classes, types, and sizes of sources within a category or subcategory." 42 U.S.C. § 7412(d)(1). The D.C. Circuit has held that distinguishing by control or no control violates this language and is not allowed.[96] Thus EPA may not so subdivide PRDs and leave uncontrolled PRDs with the weakest protection.

Further, EPA's subcategorization of PRDs undermines the core requirements of the Act by allowing much stronger standards for sources already controlled, and much weaker standards for those not controlled at all. To the contrary, the Act directs EPA to ensure that the lesser controlled standards must meet, at least, the floor that is based on

---

[96] See also *Davis Cty. Solid Waste Mgmt. v. EPA*, 101 F.3d 1395, 1398 (D.C. Cir. 1996). (D.C. Cir. 1996), *opinion amended on reh'g*, 108 F.3d 1454 (D.C. Cir. 1997) ("[T]he MACT floor will obviously be lower if the category includes more units with advanced pollution control devices than if the category contains fewer units with such devices"); *Sierra Club*, 895 F.3d at 15 ("But once the EPA identifies a source in a category it must set the MACT floor based on the 'best' performing sources" and "[t]he EPA has the authority to 'distinguish among classes, types, and sizes' of emissions sources and set separate MACT floors for each.").

what the best performing sources have achieved. 42 U.S.C. § 7412(d)(3). And, EPA must set standards for all sources based on the "maximum degree" of emission reduction that is "achievable." *Id.* § 7412(d)(2). The best performing sources are likely to be those that have some control. Removing the best performing sources from the calculation of what other sources must do automatically leads to much weaker standards for the part of a source category (that without control) for which pollution restrictions are most needed. Thus, EPA's subcategorizing of PRDs also violates § 112(d)(2)-(3) because it prevents EPA from being able to satisfy the floor requirement, or come anywhere close to assuring the "maximum degree of reductions" in HAP emissions "that is achievable." *Id.* § 7412(d)(2).

EPA's new rationale fails to show how its subcategorization could satisfy § 112(d)(1)-(3) of the Act. EPA simply has no response because it cannot lawfully do what it has done here. EPA has admitted that it must satisfy the § 112(d)(2)-(3) test in the MON rulemaking as it is setting PRD limits for the first time; the agency must therefore grant reconsideration to set § 112(d)-compliant standards as the Act directs.

Even if EPA could otherwise subcategorize PRDs (which the statute does not allow), EPA's limited information on "when PRD releases occur" could not rationally justify EPA's subcategorization here. It is obvious that uncontrolled PRDs have more releases to the atmosphere—indeed, that is the point of why EPA must set limits on the pollution from these releases. The best performing pressure relief devices vent to a control device. EPA must therefore require that all pressure relief devices vent to a control device. EPA itself assumes that 25-50% of MON PRDs vent to a control device. 85 Fed. Reg. at 49,119/1. That is far higher than the top 12% that the statute directs EPA to assess to set the floor requirements. 42 U.S.C. § 7412(d)(3). So, at minimum, EPA must assure such control for all and prohibit uncontrolled PRD releases to the atmosphere.

Instead of setting the floor as no emissions (achievable through venting to a control device), however, EPA only, and improperly, considers venting to a control device as a beyond the floor measure, and dismisses it as not cost-effective. 85 Fed. Reg. at 49,119/1. EPA cannot consider cost in setting the MACT floor. 42 U.S.C. § 7412(d)(3). EPA is leaving PRDs not in ethylene oxide service uncontrolled, and *LEAN* makes clear that EPA must instead set limits for the first time on previously uncontrolled HAP emissions. *LEAN*, 955 F.3d at 1095-96 (adding missing limits). Therefore, EPA cannot justify leaving any PRDs uncontrolled. 85 Fed. Reg. 49,090-91; *see also* Memo (-0010) (explaining that EPA was setting limits for the first time from PRD emissions that were previously allowed under the malfunction exemption).

Additionally and importantly, any release event from a PRD in ethylene oxide service is a deviation of the standard. 85 Fed. Reg. at 49,104. EPA is properly controlling PRDs in ethylene oxide service. *Id.* EPA has given no excuse not to similarly modify the standards to make all uncontrolled releases from other PRDs (not in ethylene oxide service) also a deviation. Nor could it. EPA's recognition that PRDs *in ethylene oxide*

service must be controlled (so that any release is a "deviation") shows that EPA can, and must, similarly control *all PRDs*.

Further, EPA has repeatedly recognized the need to categorically limit PRD releases, such that any uncontrolled release is a violation, in other source categories. *See, e.g.*, NESHAP for Polyether Polyols, 79 Fed. Reg. at 17,344. Most recently, since finalizing the MON rule, EPA has issued the Final Rule for Organic Liquids Distribution that made any uncontrolled release from a PRD a violation.[97] EPA must grant reconsideration to remove the illegal PRD exemptions from this rule, consistent with these other similar source categories.

Finally, EPA's recognition that PRDs in ethylene oxide service must be controlled shows that, *at minimum*, EPA must assure appropriate and full control of *flares* in ethylene oxide service. EPA has given no lawful or rational justification for not assuring proper control of these pieces of equipment that release this highly potent carcinogen, by allowing smoking flare exemptions (as discussed earlier in this petition).

C. Petitioners' objection is "of central relevance" to the outcome of the rule.

Petitioners' objection is "of central relevance" to the outcome of the rule, 42 U.S.C. § 7607(d)(7)(B) because the objection goes to the "legality" of the exemptions for smoking flares and pressure relief device not in ethylene oxide service and provide "substantial support for the argument that the regulation should be revised." *CCAN*, 952 F.3d at 320. EPA cannot lawfully subcategorize pressure relief devices by control or lack thereof.

CONCLUSION

For the reasons this petition provides, EPA must convene a reconsideration proceeding for the Final Rule. EPA must strengthen the MON chemical plant standards to satisfy the Act's requirements in § 7412(d) and (f)(2), as cited above, to ensure that communities exposed to toxic air pollution from MON sources finally receive the emission limits and resulting health and environmental protections that all Americans deserve and to which people near these facilities are legally entitled.

We appreciate your thoughtful evaluation of the important issues in this petition and urge you to act to fulfill your responsibility to protect public health. Please contact us if you have any questions or would like additional information regarding this petition.

---

[97] OLD Response to Comments at 83 ("EPA proposed to remove the allowance for safety devices and is finalizing as proposed. It is our intent that owner/operator would report a deviation upon opening of a safety device and releasing unregulated emissions or emissions in excess of a limit.").

Sincerely,

Kathleen Riley
Associate Attorney
Emma C. Cheuse
Staff Attorney
EARTHJUSTICE
1001 G Street, NW, Suite 1000
Washington, D.C. 20001
kriley@earthjustice.org
echeuse@earthjustice.org
(202) 745-5220 or 5227

Counsel for Petitioners

RISE St. James, Louisiana Bucket Brigade, Louisiana Environmental Action Network, Texas Environmental Justice Advocacy Services, Air Alliance Houston, Ohio Valley Environmental Coalition, Blue Ridge Environmental Defense League, Environmental Justice Health Alliance For Chemical Policy Reform, Environmental Integrity Project, Sierra Club, and Union Of Concerned Scientists

Cc:
Associate General Counsel for the
Air & Radiation Law Office
Office of General Counsel
Mail Code 2344A
U.S. EPA
1200 Pennsylvania Ave., NW.
Washington, D.C. 20460

Ms. Tegan Lavoie,
Sector Policies and
Programs Division (E–143–01)
Office of Air Quality Planning and Standards

U.S. EPA
Research Triangle Park, NC 27711
lavoie.tegan@epa.gov

Mr. Matthew Woody
Health and Environmental
Impacts Division (C539–02)
Office of Air Quality Planning and Standards
U.S. EPA
Research Triangle Park, NC 27711
woody.matthew@epa.gov

Enc: Documents cited as Appendix attached