

**CALIFORNIA COMMUNITIES AGAINST TOXICS ~ ENVIRONMENTAL INTEGRITY PROJECT ~
LOUISIANA ENVIRONMENTAL ACTION NETWORK ~ OHIO VALLEY ENVIRONMENTAL
COALITION ~ RISE ST. JAMES ~ SIERRA CLUB ~
TEXAS ENVIRONMENTAL JUSTICE ADVOCACY SERVICES**

January 19, 2021

Andrew Wheeler
Administrator
Environmental Protection Agency
1101A EPA Headquarters
William Jefferson Clinton Building
1200 Pennsylvania Avenue, NW
Washington, D.C. 20460
wheeler.andrew@epa.gov

BY EMAIL & CERTIFIED MAIL

**RE: Petition for Rulemaking to Promulgate and Amend the Synthetic Organic
Chemical Manufacturing Industry (“SOCMI”) New Source Performance
and Air Toxics National Emission Standards**

Dear Administrator Wheeler:

Communities near chemical manufacturing plants need strong and urgent action from EPA to protect public health from the air pollution these sources release. As discussed below, there is strong evidence showing the need for EPA to amend its Clean Air Act standards for the Synthetic Organic Chemical Manufacturing Industry (“SOCMI”) source categories to bring the standards into compliance with the Clean Air Act and controlling judicial precedent.¹ Thus, Petitioners California Communities Against Toxics (P.O. Box 845, Rosamond, CA 935360), Environmental Integrity Project (1000 Vermont Ave. NW, Suite 1100, Washington, DC 20005), Louisiana Environmental Action Network (P.O. Box 66323, Baton Rouge, LA 70896); Ohio Valley Environmental Coalition (PO Box 6753, Huntington, WV 25773), RISE St. James (8581 Hwy 18, St. James, LA 70086), Sierra Club (2101 Webster Street, Suite 1300, Oakland, CA 94612), and Texas Environmental Justice Advocacy Services (900 North Wayside Drive, Houston, TX 77023) submit this petition under *Ojato Chapter of Navajo Tribe v. Train*, 515 F.2d 654 (D.C. Cir. 1975), and as a petition for rulemaking. By this petition, Petitioners request that EPA take expeditious action to:

- (1) Revise the regulations promulgated under § 7412 for SOCMI source categories to, for example, strengthen protections from ethylene oxide and the cumulative risks and impacts of other hazardous air pollutants (“HAPs”) to reflect the latest scientific

¹ The undersigned petitioners have filed suit to compel EPA to complete its nondiscretionary duties. *Texas Environmental Justice Advocacy Services v. Wheeler*, No. 1:20-cv-03733-RJL (D.D.C. Dec. 18, 2020). Petitioners have filed this petition in the alternative and as additional support to complement that case.

- information; remove illegal exemptions and loopholes still found in the regulations; control all uncontrolled HAP emissions; require fence-line monitoring; update the flare standards; and make all other necessary revisions to account for pollution control and monitoring developments, to assure an ample margin of safety to protect public health and the environment and to otherwise satisfy the Clean Air Act, *see, e.g.*, § 7412(d), (f)(2);
- (2) Revise the regulations promulgated under § 7411(b) for SOCOMI source categories to, for example, update the flare standards; and
 - (3) Promulgate the required final emissions guidelines, ending the delay to state regulation of existing SOCOMI sources under § 7411(d); *see* 40 C.F.R. §§ 60.22(a), 60.23(a)(1).

I. STRONG NEED FOR EPA RULEMAKING ACTION

The SOCOMI source category, including petrochemical and other chemical plants, are major sources of air pollution. These sources emit highly hazardous air pollutants, including carcinogens like ethylene oxide,² and other harmful pollutants, like volatile organic compounds which contribute to ozone formation and the resulting health effects, such as asthma and death.³ The over 500 SOCOMI sources are located around the United States, but are concentrated near Black and Latinx communities and low-income communities in Texas, Louisiana, West Virginia, and other communities⁴ that are already disproportionately burdened by air pollution.⁵ Fence-line communities in these states experience heightened cancer risk and other health threats,⁶ in part due to ethylene oxide and chloroprene emissions from SOCOMI sources.⁷ EPA promised to act to address these health threats, including by revisiting the SOCOMI standards,⁸ but has failed to

² *See* 40 C.F.R. Part 63, Subpart F, Table 2 (listing organic hazardous air pollutants regulated by the HON rule, including ethylene oxide and chloroprene).

³ EPA, Air Emissions Sources: Basic Information, https://www3.epa.gov/air/emissions/basic_2011.htm (last updated Feb. 22, 2016); EPA, Integrated Science Assessment for Ozone and Related Photochemical Oxidants, EPA 600/R-10/076F, at 6-1 to 6-3 (Feb. 2013), http://ofmpub.epa.gov/eims/eimscomm.getfile?p_download_id=511347.

⁴ *See* Table I, Synthetic Organic Chemical Manufacturing Industry (“SOCMI”) Sources (collected from EPA ECHO database, searching by applicable subpart), attached.

⁵ Sharon Lerner, A Tale of Two Toxic Cities, *The Intercept* (Feb. 24, 2019), <https://theintercept.com/2019/02/24/epa-response-air-pollution-crisis-toxic-racial-divide/>, attached [hereinafter, Lerner article].

⁶ *Id.*

⁷ 2014 NATA Summary of Results, EPA, at 2, https://www.epa.gov/sites/production/files/2020-07/documents/nata_2014_summary_of_results.pdf, attached; *see* 40 C.F.R. Part 63, Subpart F, Table 2 (listing organic hazardous air pollutants regulated by the HON rule, including ethylene oxide and chloroprene).

⁸ EPA, Agency Actions on Ethylene Oxide, Regulations for Ethylene Oxide, <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/agency-actions-ethylene-oxide#regulations> (last visited Jan. 15, 2021), attached.

follow through. The National Environmental Justice Advisory Council (“NEJAC”) and EPA’s own Inspector General have since called for action on these chemical plants.⁹ For years, EPA has ignored the strong need to revise the SOCMCI standards, and it is time for EPA to end its failure to protect fence-line communities’ health and well-being from this pollution.

Action on this source category is critical to reduce the toxic air pollution and ozone burden on fence-line communities. While EPA has failed to act, a pandemic has worsened the harm for communities where, research shows, air pollution has increased mortality rates from COVID-19.¹⁰ For these reasons, EPA must ensure the applicable standards are up to date and follow the Act to assure an ample margin of protection for public health and to prevent adverse environmental effects, as well as to keep up with the technology review requirements. However, EPA has failed to (1) meet statutory deadlines to review and revise the applicable “Hazardous Organic” National Emissions Standards (“Hazardous Organic NESHAP” or “HON” rule), under § 7412(d) and § 7412(f); (2) meet statutory deadlines to review and revise the applicable SOCMCI New Source Performance Standards under § 7411(b)(1)(B); and (3) meet the Act’s requirements to propose and publish the emission guidelines as directed in 40 C.F.R. § 60.22(a), and end the delay in establishing, implementing, and enforcing standards for existing SOCMCI sources under § 7411(d).

This petition concerns the following standards promulgated under section 7412, within 40 C.F.R. Pt. 63:

- Subpart F: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry
 - 40 C.F.R. § 63.100-63.193
 - 71 Fed. Reg. 76,603 (Dec. 21, 2006)
- Subpart G: National Emission Standards for Organic Hazardous Air Pollutants From the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater
 - 40 C.F.R. § 63.110-63.135
 - 71 Fed. Reg. 76,603 (Dec. 21, 2006), and 73 Fed. Reg. 78,199 (Dec. 22, 2008)
- Subpart H: National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks
 - 40 C.F.R. § 63.160-63.183
 - 71 Fed. Reg. 76,603 (Dec. 21, 2006), and 73 Fed. Reg. 78,199 (Dec. 22, 2008)
- Subpart I: National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks
 - 40 C.F.R. § 63.190-63.193

⁹ NEJAC, Letter to Andrew Wheeler, EPA Admin. at 4 (May 3, 2019), https://www.epa.gov/sites/production/files/2019-08/documents/nejac-letter-ethylene_oxide-may-3-2019-final.pdf, attached; EPA, OIG Report No. 20-N-0128 at 5 & App. A (Mar. 31, 2020), <https://www.epa.gov/office-inspector-general/report-management-alert-prompt-action-needed-inform-residents-living-near>, attached.

¹⁰ See, e.g., Michael Petroni *et al.*, *Hazardous air pollutant exposure as a contributing factor to COVID-19 mortality in the United States*, 15 *Envtl. Res. Lett.* (Sep. 11, 2020), <https://iopscience.iop.org/article/10.1088/1748-9326/abaf86>, attached.

- 71 Fed. Reg. 76,603 (Dec. 21, 2006)

The petition also concerns the following SOCFI source categories for which EPA promulgated standards under section 7411(b), within 40 C.F.R. Pt. 60, but for which EPA has failed to promulgate emission guidelines under § 7411(d):

- Subpart III: SOCFI Air Oxidation Unit Processes
 - 40 C.F.R. § 60.610-60.618
 - 65 Fed. Reg. 78,275 (Dec. 14, 2000)
- Subpart NNN: SOCFI Distillation
 - 40 C.F.R. § 60.660-60.668
 - 65 Fed. Reg. 78,275 (Dec. 14, 2000)
- Subpart RRR: SOCFI Reactor Processes
 - 40 C.F.R. § 60.700-60.708
 - 65 Fed. Reg. 78,275 (Dec. 14, 2000)
- Subparts VV-VVa: SOCFI Equipment Leaks
 - 40 C.F.R. § 60.480-60.489, 40 C.F.R. § 60.480a.-60.489a
 - 72 Fed. Reg. 64,860 (Nov. 16, 2007)

EPA has failed to meet statutory deadlines to review and revise these National Emissions Standards for Hazardous Air Pollutants under § 7412(d) and (f). Specifically, § 7412(d) requires the Administrator to “review, and revise as necessary (taking into account developments in practices, processes, and control technologies)” the emission standards for hazardous air pollutants promulgated under § 7412(d) “no less often than every 8 years.” 42 U.S.C. § 7412(d)(6). In addition, eight years after promulgating § 7412(d) standards, the Administrator must conduct a “residual risk” review under § 7412(f)(2) to identify any remaining health or environmental risks after the application of the § 7412(d) standards. EPA must then either promulgate additional standards if “required in order to provide an ample margin of safety to protect public health . . . or to prevent, taking into consideration costs, energy, safety, and other relevant factors, an adverse environmental effect,” or state no such standards are required. *Id.* § 7412(f)(2).

EPA last reviewed the HON Rule under § 7412(d)(6) in 2006,¹¹ and therefore should have performed a new review rulemaking within eight years, i.e. by 2014. *See* § 7412(d)(6). However, EPA still has not performed a subsequent § 7412(d)(6) review for the SOCFI source categories, more than *six years* after its 2014 statutory deadline. Further, the § 7412(d)(6) revisions in 2006 triggered a § 7412(f)(2) residual risk review to evaluate the remaining risk after implementation of the 2006 revisions. Again, this should have been completed within eight years, i.e. by 2014, *see* § 7412(f)(2), but EPA has not done so.

EPA has also failed to meet statutory deadlines to review and revise New Source Performance Standards under § 7411(b). Similar to § 7412(d) and (f), § 7411(b) requires EPA to “establish Federal standards of performance for new sources within such category” and “at least every 8 years, review and, if appropriate, revise such standards....” *Id.* § 7411(b)(1)(B). Such

¹¹ 71 Fed. Reg. at 76,606 (e.g., revising standards for wastewater streams, and changing requirements for certain owners or operators and off-site reloading and cleaning operations).

revision “shall” consider “the emission limitations and percent reductions beyond those required by the standards promulgated” that “are achieved in practice.” *Id.* However, three of the five standards were last reviewed in 2000, Subparts III, NNN, and RRR, and the other two in 2007, Subparts VV and VVa. EPA therefore should have done a review under § 7411(b)(1)(B) by December 14, 2008 for Subparts III, NNN, and RRR, and by November 16, 2015 for subparts VV and VVa.¹² *See* § 74122(b)(1)(B). However, EPA has still not performed these reviews.

Lastly, EPA has unreasonably delayed required action under § 7411(d) to regulate existing SOCMCI sources, leaving emissions from existing SOCMCI sources unregulated.¹³ Under § 7411(d), the Administrator “shall” establish by regulation a procedure under which States “shall” submit to the Administrator their plan to establish, implement, and enforce standards of performance for existing sources (which would be subject to a standard of performance if new) of air pollutants (not already subject to air quality criteria or regulated under § 7412). Under the implementing regulations, before states are required to submit their plan for existing sources to the Administrator, EPA must promulgate a final guideline document for existing sources. 40 C.F.R. §§ 60.22(a) (listing requirements for emission guidelines documents), 60.23(a)(1) (requiring state plans “within 9 months after notice of the availability of a final guideline document”). The Administrator is required to publish this draft guideline document “[c]oncurrently upon or after” proposal of New Source Performance Standards, and to finalize the guideline document after public notice and comment. 40 C.F.R § 60.22(a).

EPA promulgated New Source Performance Standards for SOCMCI source categories in 2000 and 2007,¹⁴ yet has not issued the required proposed or promulgated final emissions guideline documents as required by the Clean Air Act and its implementing regulations. *See* 40 C.F.R. § 60.22(a). EPA’s failures to propose and promulgate emissions guidelines thereby delay regulation of existing SOCMCI sources under § 7411(d), leaving emissions from existing SOCMCI sources, including of ozone precursors, unregulated under § 7411(d). Communities need strong and urgent action from EPA to regulate and reduce the harmful air pollution they breathe from existing SOCMCI sources.

For some of these actions, EPA has a clear statutory duty that it has failed to fulfill by a date certain. For some, EPA has unreasonably delayed or refused to exercise its full authority to fulfill its responsibility under the Act to act promptly to protect public health and the environment. Fenceline community groups have had to sue EPA and file this petition in the alternative and as a complementary method of seeking relief to attempt to avoid further foot-dragging and illegal delay by the agency, *see* note 1. Now, we call on EPA to prioritize all action discussed in this petition to finally protect communities whom the agency has left unprotected for years, in some instances decades, contrary to the Clean Air Act and its promise.

¹² *See* 65 Fed. Reg. 78,275 (Dec. 14, 2000); 72 Fed. Reg. 64,860 (Nov. 16, 2007).

¹³ The undersigned groups have submitted a Notice of Intent to Sue letter to EPA for this unreasonable delay. *See* Notice of Intent Letter of Texas Environmental Justice Advocacy Services *et al.* (Jan. 19, 2021).

¹⁴ 40 C.F.R. Part 60, Subparts III, NNN, and RRR, 65 Fed. Reg. 78,275 (Dec. 14, 2000), and Subparts VV and VVa, 72 Fed. Reg. 64,860 (Nov. 16, 2007).

II. GROUNDS FOR PETITION

A. National Emission Standards for Hazardous Air Pollutants Under Section 7412(d) and (f)

EPA must promptly perform a rulemaking to strengthen the § 7412(d) and (f) standards to protect the health of fenceline communities both because the agency has an overdue legal duty to do so, and because EPA otherwise has an obligation and the authority to, for example, strengthen protections from the cumulative health impacts from ethylene oxide and other pollutants; remove unlawful startup, shutdown, and malfunction exemptions; control all unregulated and inadequately regulated emissions; and require fenceline monitoring.

i. Strengthen Protections from the Resulting Cumulative Health Impacts from Ethylene Oxide and Other Pollutants

EPA must review and amend the HON rule applicable to SOCMIs sources because the scientific body of information has changed significantly since 2006. EPA now knows that one of the pollutants emitted from SOCMIs facilities, ethylene oxide, causes cancer at a much greater rate than was understood in 2006.¹⁵

In 2016, EPA scientists in the Integrated Risk Information System determined that ethylene oxide is 30 times more potent than previously understood, and elevated this pollutant from a “probable carcinogen” to one known to be carcinogenic to humans.¹⁶ Ethylene oxide has been shown to cause reproductive problems, respiratory tract irritation, headaches, memory loss, and certain cancers, including leukemia, non-Hodgkin lymphoma, and breast cancer.¹⁷ And, in September 2020, the Agency for Toxic Substances & Disease Registry released a toxicological profile for ethylene oxide, showing that it is even more toxic than EPA found in 2016 (by three orders of magnitude).¹⁸

The 2014 National Air Toxics Assessment (“NATA”), released in 2018, identified several cancer risk hotspots—places where people face a risk of developing cancer from air pollution, including ethylene oxide, greater than EPA’s own benchmark of presumed unacceptable cancer risk (100 per 1 million people).¹⁹ In fact, SOCMIs facilities emit at least two of the three pollutants contributing to most of the risk in these tracts—ethylene oxide and

¹⁵ EPA, IRIS, Evaluation of the Inhalation Carcinogenicity of Ethylene Oxide (Dec. 2016), https://cfpub.epa.gov/ncea/iris/iris_documents/documents/toxreviews/1025tr.pdf, attached.

¹⁶ *Id.*

¹⁷ Lerner article, attached.

¹⁸ See ATSDR, Draft Toxicological Profile for Ethylene Oxide (Sept. 2020), <https://www.atsdr.cdc.gov/toxprofiles/tp137.pdf>, attached (81 mg/m³, or 81,000 µg/m³ compared with 0.4 ppm, or 720 µg/m³).

¹⁹ 2014 NATA Summary of Results, EPA, at 2, https://www.epa.gov/sites/production/files/2020-07/documents/nata_2014_summary_of_results.pdf, attached; Lerner article, attached.

chloroprene,²⁰ and at least 134 SOCFI sources are located in the counties that experience heightened cancer risk.²¹

Due to the results of this assessment, EPA announced that it would “work[] with industry, state, local and tribal air agencies to address” ethylene oxide,²² and listed the HON rule for SOCFI sources as one it planned to review to reduce the health threats from ethylene oxide.²³

In May 2019, NEJAC advised EPA to provide information to communities regarding ethylene oxide, and to review and strengthen the HON rule for SOCFI sources due to the high health threats from ethylene oxide.²⁴ In July 2019, EPA responded that it was “evaluating possible schedules” to review all of the ethylene oxide-emitting source categories, including the HON rule for SOCFI sources.²⁵ In March 2020, EPA’s Office of Inspector General further advised EPA to communicate with communities exposed to ethylene oxide emissions.²⁶

Despite EPA’s assurances and pressure from EPA’s own Office of Inspector General, EPA has not communicated with the communities living and breathing air near most SOCFI chemical plants. The HON Rule, which regulates some of the largest facilities emitting ethylene oxide, remains critically out of date including because it did not use the 2016 IRIS value. Many predominantly Black and Latinx communities in Louisiana, Texas, West Virginia, and across the country continue to bear unacceptable cancer risk and other health threats, including from ethylene oxide and other emissions from SOCFI sources.²⁷

²⁰ *Id.*; see 40 C.F.R. Part 63, Subpart F, Table 2 (listing organic hazardous air pollutants regulated by the HON rule, including ethylene oxide and chloroprene).

²¹ Table I, Synthetic Organic Chemical Manufacturing Industry (“SOCFI”) Sources (collected from EPA ECHO database, searching by applicable subpart), attached; Lerner article, attached (listing counties with cancer risk above 100 in 1 million).

²² EPA, Hazardous Air Pollutants: Ethylene Oxide, <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide> (last visited Jan. 15, 2020), attached.

²³ EPA, Agency Actions on Ethylene Oxide, Regulations for Ethylene Oxide, <https://www.epa.gov/hazardous-air-pollutants-ethylene-oxide/agency-actions-ethylene-oxide#regulations> (last visited Jan. 15, 2021), attached.

²⁴ NEJAC, Letter to Andrew Wheeler, EPA Admin. at 4 (May 3, 2019), https://www.epa.gov/sites/production/files/2019-08/documents/nejac-letter-ethylene_oxide-may-3-2019-final.pdf, attached.

²⁵ EPA, Letter to Richard Moore, Chair of NEJAC at 1 (July 19, 2019), https://www.epa.gov/sites/production/files/2019-08/documents/nejac_final_epa-response-ethylene-oxide-letter.pdf, attached.

²⁶ EPA OIG Report No. 20-N-0128 at 5 & App. A (Mar. 31, 2020), <https://www.epa.gov/office-inspector-general/report-management-alert-prompt-action-needed-inform-residents-living-near>, attached.

²⁷ Lerner article, attached.

In addition to ethylene oxide, SOCFI sources emit other hazardous air pollutants, such as toluene,²⁸ that recent science shows is more toxic than previously understood (by one order of magnitude).²⁹ And, EPA has strengthened its health risk assessment approach since 2006—such as by adding persistent, bioaccumulative pollutants to the multipathway assessment—that would likely show greater health risks now. In 2009, the National Academy of Sciences advised EPA to further strengthen its health risk assessment approach to better account for exposure in early life and other vulnerabilities, including socioeconomic disparities, and to assure a more complete look at cumulative risks and impacts.³⁰ In recent years, California’s Office of Health and Environmental Hazard Assessment (“OEHHA”) has also updated its risk assessment guidelines based on the science in ways that EPA should also take into account and employ in a new risk assessment here—such as by adding age-dependent adjustment factor for *in utero* or fetal exposure.³¹ In addition, EPA had previously committed to recognizing the need to address cumulative risks and impacts and environmental justice and demographic disparities in ways that EPA has never done for SOCFI chemical plants. The recognition of these important responsibilities and scientific evidence show a compelling need for EPA to review the health risks from these sources and likely to strengthen the standards to protect public health as § 7412(f)(2) requires. The undersigned groups would welcome an opportunity to meet and discuss the new scientific evidence discussed here in brief, with EPA. In sum, to fulfill its responsibility under the Clean Air Act, EPA must amend the HON Rule to strengthen protections from ethylene oxide, chloroprene, toluene, and other toxic air pollutants based on new scientific information and EPA’s commitments to fenceline communities.

ii. Remove Unlawful Startup, Shutdown, and Malfunction Exemptions

In 2008, the D.C. Circuit vacated the blanket exemption from emission limits during periods of startup, shutdown, and malfunction (“SSM”) included in the General Provisions governing all air toxics regulations in Part 63 of the Code of Federal Regulations. *Sierra Club v. EPA*, 551 F.3d 1019, 1027-1028 (D.C. Cir. 2008). The D.C. Circuit held that the Clean Air Act § 7412 and § 7602(k) require “continuous section [7412]-compliant standards,” and therefore, the SSM exemption “violates the CAA’s requirement that some section [7412] standard apply continuously.” *Id.* While EPA recently amended the General Provisions to remove the SSM exemption—more than twelve years after it was vacated,³² the unlawful exemption persists in the

²⁸ See 40 C.F.R. Part 63, Subpart F, Table 2 (listing organic hazardous air pollutants regulated by the HON rule, including ethylene oxide and chloroprene.).

²⁹ Cal. EPA OEHHA, *Toluene RELs* (Aug. 20, 2020), <https://oehha.ca.gov/media/downloads/crnrtoluenerel082020.pdf>, attached (37,000 µg/m³ to 5,000 µg/m³ and 5,000 µg/m³ to 420 µg/m³).

³⁰ See generally, National Academy of Sciences, *Science and Decisions: Advancing Risk Assessment* at 203-04, 207 (2009), http://www.nap.edu/catalog.php?record_id=12209, attached.

³¹ See Cal. OEHHA, *Technical Support Document for Cancer Potency Factors, Appendix J: In Utero and Early Life Susceptibility to Carcinogens: The Derivation of Age-at-Exposure Sensitivity Measures* (May 1 2009), <https://oehha.ca.gov/media/downloads/crnrt/appendixjearly.pdf>, attached.

³² EPA, *Amendments to General Provisions - Exemption from Emission Standards During Periods of Startup, Shutdown, and Malfunction (SSM)* (Jan. 5, 2021) (prepublication version),

SOCMI-specific standards.³³ The D.C. Circuit’s vacatur of the SSM exemption nullifies and voids it in the General Provisions, and shows that it is illegal and must be removed from every air regulation for specific source categories that contains it, including the SOCMI-specific regulations.

EPA’s failure to remove this exemption from the SOCMI source categories for years is causing harm to public health and the environment. Many SOCMI sources are located along the Gulf coast and vulnerable to natural disasters that could lead to “malfunctions” and a free reign to pollute under this illegal exemption.³⁴ For example, in August 2020, a SOCMI chemical plant in Westlake, Louisiana caught fire after Hurricane Laura, releasing chlorine.³⁵ Emissions due to other “malfunctions” can be equally devastating. In late 2019, a SOCMI chemical plant in Port Neches, Texas exploded twice and burned, injuring workers and nearby residents.³⁶ In January 2020, a SOCMI chemical plant in Geismar, Louisiana malfunctioned, releasing ethylene oxide.³⁷ In February 2020, a SOCMI chemical plant in Baton Rouge, Louisiana caught fire, burning for over six hours and releasing carcinogens such as benzene and 1,3-butadiene.³⁸ On December 9th,

<https://www.epa.gov/stationary-sources-air-pollution/amendments-general-provisions-exemption-emission-standards-during-0>, attached.

³³ See, e.g., 40 C.F.R. § 63.102(a)(1) (providing that standards “shall apply at all times except during periods of start-up or shutdown (as defined in § 63.101 of this subpart), malfunction . . .”); see also e.g., 40 C.F.R. § 60.482-1(e) (exempting equipment in VOC service only “during process malfunctions”); 40 C.F.R. § 65.3 (alternative compliance option incorporated into NSPS).

³⁴ See Table I, Synthetic Organic Chemical Manufacturing Industry (“SOCMI”) Sources (collected from EPA ECHO database, searching by applicable subpart), attached.

³⁵ Erin Douglas & Paul Takahashi, *Chlorine leak at chemical facility started fire near Lake Charles during storm, authorities say*, Houston Chronicle (Aug. 27, 2020), <https://www.houstonchronicle.com/business/energy/article/Chemical-fire-breaks-out-in-Louisiana-after-15519225.php>, attached; Doug Delony, *Large chemical fire reported off I-10 in Westlake, Louisiana; shelter-in-place issued*, KHOU*11 (Aug. 27, 2020), <https://www.khou.com/article/news/national/westlake-louisiana-chemical-plant-fire-after-hurricane-laura/285-328e29f2-cf34-4912-afbe-0ae3cdc77ae2>, attached.

³⁶ Kiah Collier, *Port Neches plant rocked by multiple explosions has history of environmental missteps*, The Texas Tribune (Nov. 27, 2019), <https://www.texastribune.org/2019/11/27/texas-plant-rocked-explosions-mandatory-evacuations-ordered/>, attached; Kiah Collier & Jolie McCullough, *County ends voluntary evacuation of Port Neches, the second since last week’s plant explosion*, The Texas Tribune (Dec. 5, 2019), <https://www.texastribune.org/2019/12/05/port-neches-plant-explosion-prompts-evacuation-order-one-week-later/>, attached.

³⁷ Mykal Vincent, *Hazmat situation reported near Shell-Geismar plant*, WAFB9 (Jan. 24, 2020), <https://www.wafb.com/2020/01/24/hazmat-situation-reported-near-shell-geismar-plant/>, attached.

³⁸ WAFB Staff, *ExxonMobil releases cause of fire at Baton Rouge refinery in February*, WAFB9 (Apr. 13, 2020), <https://www.wafb.com/2020/04/13/exxonmobil-releases-cause-fire-baton-rouge-refinery-february/>, attached; David J. Mitchell, *ExxonMobil fire released carcinogenic chemicals, report says, but monitoring found no local risk*, The Advocate (Feb. 13,

2020, there was an explosion at a SOCOMI chemical plant only 15 minutes outside of Charleston, West Virginia, that erupted into a fire that took nearly two hours to extinguish and resulted in a shelter in place order for residents in the area.³⁹ EPA must remove this unlawful exemption in all parts of the SOCOMI standards, to ensure emissions standards apply at all times to protect surrounding communities.

iii. Control All Uncontrolled and Inadequately Controlled Emissions

As discussed above, the overdue § 7412(d)(6) duty requires EPA to “review, and revise as necessary” the emission standards for this source category, which includes making all changes that are “necessary” to bring standards into full compliance with the Clean Air Act, such as setting limits on all uncontrolled HAP emissions. *See Louisiana Env'tl. Action Network v. EPA*, 955 F.3d 1088, 1096 (D.C. Cir. 2020) (“LEAN”). In 2020, the D.C. Circuit held that EPA must set all missing HAP emission limits and otherwise assure the standards comply with the Act during the § 7412(d)(6) review. *LEAN*, 955 F.3d at 1096. This provision also requires EPA to take into account all “developments” in pollution controls, practices, and methods. Therefore, to fully satisfy the § 7412(d)(6) provision, EPA must review the standards to assure it sets limits on all currently uncontrolled HAP emissions from the HON/SOCMI source category. *See id.* And, EPA must perform a review to ensure that it promulgates emission standards that reflect all developments in pollution control. That must include assuring stronger protection from fugitive emissions like leaks, tanks, and reviewing and strengthening protections from all kinds of emission points at these sources.

iv. Require Fenceline Monitoring

As one important example, it is also “necessary” to revise the emission standards to require fenceline monitoring, as EPA did for petroleum refineries. In 2015, EPA recognized fenceline monitoring as a development that required revisions to the emission standards under § 7412(d)(6), and required fenceline monitoring and corrective action for benzene to assure compliance with the standards and improve control of fugitive emissions. 80 Fed. Reg. 75,178 (Dec. 1, 2015). EPA similarly recognized fenceline monitoring as a development in the Ethylene Production and Organic Liquids Distribution Rules (although it failed to require it in those rulemakings as it should have done).⁴⁰ Thus, EPA must amend the standards to require fenceline

2020), https://www.theadvocate.com/baton_rouge/news/environment/article_2a030ce4-4e89-11ea-a720-6fcae35453c7.html, attached.

³⁹ Jessica Schladebeck, *West Virginia chemical plant explosion leaves at least four injured, forces school closures*, New York Daily News (Dec. 9, 2020), <https://www.nydailynews.com/news/national/ny-west-virginia-chemical-plant-explosion-injured-shelter-place-20201209-4efmhllm6zh2bbkcxpd6mxj5aq-story.html>, attached.

⁴⁰ *See* EPA, Ethylene Production Response to Comments at 192 (“evaluate[d] fenceline monitoring as a development”), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0357-0074>; National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) Residual Risk and Technology Review, 84 Fed. Reg. 56,288, 56,313 (Oct. 21, 2019). Some undersigned groups are challenging EPA’s refusal to require fenceline monitoring in those and an additional chemical plant rule (Miscellaneous Organic

monitoring as a development under § 7412(d)(6), and to protect surrounding communities' health under § 7412(f)(2).

B. NESHAP Standards Under Section 7412 and NSPS Standards Under Section 7411(b) – Update Flare Standards

EPA must strengthen the §§ 7412(d), (f) and 7411(b) standards to protect the health of fenceline communities because the agency has an overdue legal duty to perform these rulemakings, and because both sets of standards incorporate EPA's general flare standards under 40 C.F.R. § 63.11 and 40 C.F.R. § 60.18. EPA itself recognizes that the general flare standards are outdated, lead to the operation of flares with poor destruction efficiency, and require revision.⁴¹ At least nine regulations within the HON/SOCMI standards under 40 C.F.R. Part 63 Subpart G reference the general flare standards under 40 C.F.R. § 63.11.⁴² Similarly, § 7411(b) standards for the five SOCMI categories listed above all reference the general flare standards of 40 C.F.R. § 60.18.⁴³

As parties contend in separate litigation in litigation with respect to the general flare standards under 40 C.F.R. § 63.11 and 40 C.F.R. § 60.18, EPA must also revise the general flare standards themselves, in order to most effectively and efficiently address the problem across multiple source categories.⁴⁴ Nonetheless, the HON/SOCMI flare standards must be updated, as

Chemical Manufacturing) as it did in the Refinery Rule. *See RISE St. James v. EPA*, No. 20-1336 (D.C. Cir. Sep. 4, 2020); *Am. Fuel & Petrochemical Mfrs. v. EPA*, No. 20-1342 (D.C. Cir. Sep. 8, 2020); *Huntsman Petrochemical v. EPA*, No. 20-1414 (D.C. Cir. Oct. 9, 2020).

⁴¹ The EPA published two documents in 2012 that acknowledged the shortcomings of the general flare standards. First, EPA published an Enforcement Alert regarding flaring violations, in which the agency recognized that certain needed parameters affecting the efficiency of flares are not captured within current standards, including maintaining the appropriate steam-to-vent-gas ratio and ensuring that the heating value of combustion zone gas is high enough to maximize combustion efficiency, neither of which are included in the General Flare Requirements. *See* EPA, EPA Enforcement Targets Flaring Efficiency Violations, Enforcement Alert (Aug. 2012), <https://www.epa.gov/sites/production/files/documents/flaringviolations.pdf>, attached. Second, following on the uniform emission standards rulemaking, EPA published a report in April 2012 entitled "Parameters for Properly Designed and Operated Flares", which noted in particular that reliance on the net heating value of the vent gas—the parameter the General Flare Requirements use—"as an indicator of good combustion ignores any effect of steaming." EPA Office of Air Quality Planning and Standards, Parameters for Properly Designed and Operated Flares at 3-32 (April 2012), <https://www3.epa.gov/airtoxics/flare/2012flaretechreport.pdf>, attached.

⁴² *See* 40 C.F.R. §§ 63.113(a)(1)(i), 63.116(a)(1)-(3), 63.119(e)(1), 63.120(e)(1), (6), 63.122(g)(3), 63.126(b)(2)(i), 63.128(b)(1)-(3), 63.139(a)(3), (d)(3), 63.145(j)(1)-(3).

⁴³ *See* 40 C.F.R. §§ 60.482-10(d) (Subpart VV, equipment leaks), 60.482-10a(d) (Subpart VVa, equipment leaks), 60.612(b) (Subpart III, Air Oxidation Unit processes), 60.614(d) (same), 60.662(b) (Subpart NNN, Distillation Operations), 60.664(d) (same), 60.702(b) (Subpart RRR, Reactor Processes), 60.704(c) (same).

⁴⁴ *See Environmental Integrity Project v. Wheeler*, No. 1:20-cv-03119-TNM (D.D.C. Oct. 29, 2020).

EPA strengthened such standards in recent rulemakings for similar petroleum refinery, chemical, and petrochemical source categories. In particular, EPA recognized the need to promulgate specific revisions that improve flare operational and monitoring requirements (in part) and show some of the essential revisions EPA should undertake here (though without adding the unlawful exemptions EPA added in some of these rules).⁴⁵

C. Section 7411(d) – Promulgate Required Emissions Guideline Documents to Finally Assure VOC Control from Existing Sources

EPA must also promulgate the required emission guideline documents to begin the process to establish, implement, and enforce standards for existing SOCOMI source standards under § 7411(d). *See* 40 C.F.R. § 60.22(a) (listing requirements for emission guideline documents); *id.* at § 60.23(a)(1) (requiring state plans “within 9 months after notice of the availability of a final guideline document”). For years, communities have had no protections under § 7411(d) from ozone-forming emissions of volatile organic compounds from existing SOCOMI sources. Promulgating these emission guideline documents and fulfilling EPA’s 7411(d) obligations would likely lead to a further reduction in emissions of dangerous volatile organic compounds, in ozone formation, and in the health harms from ozone pollution.

III. CONCLUSION

Petitioners petition EPA for prompt rulemaking action to protect fence-line communities from toxic air pollution and other volatile organic chemical pollution from SOCOMI sources. Specifically, Petitioners request EPA conduct the required rulemakings to review and revise its standards under § 7412(d), (f), and § 7411(b) for the SOCOMI source categories described above. Petitioners additionally request that the Administrator promulgate final emissions guideline documents for the SOCOMI source categories listed above, and end the delay to state regulation

⁴⁵ EPA has promulgated revised, stricter flare NESHAP standards for similar industries: petroleum refineries, miscellaneous organic chemical manufacturing, ethylene production, and organic liquids distribution facilities. *See* Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards, 80 Fed. Reg. 75,178 (revising petroleum refinery flare standards to ensure better combustion efficiency); National Emission Standards for Hazardous Air Pollutants: Organic Liquids Distribution (Non-Gasoline) Residual Risk and Technology Review, 85 Fed. Reg. 40,740 (July 7, 2020); National Emission Standards for Hazardous Air Pollutants: Generic Maximum Achievable Control Technology Standards Residual Risk and Technology Review for Ethylene Production, 85 Fed. Reg. 40,386 (July 6, 2020); National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing Residual Risk and Technology Review, 85 Fed. Reg. 49,084 (Aug. 12, 2020). The record for these rulemakings well shows that flares are not achieving the requisite 98% destruction efficiency but a far lower percentage that fails to assure compliance with the emission standards. *See, e.g.*, Memorandum from Andrew Bouchard to EPA Docket No. EPA-HQ-OAR-2017-0357, Re: Control Option Impacts for Flares Located in the Ethylene Production Source Category 8 (March 2019), <https://www.regulations.gov/document?D=EPA-HQ-OAR-2017-0357-0017>.

and control of volatile organic compound and ozone pollution from existing SOCMCI sources under § 7411(d).

The example regulatory improvements this petition discusses are only some of the important steps EPA must consider in revision rulemakings for the SOCMCI sources. As a result of EPA's failures to act and its rulemaking delays, communities do not have the benefit of the most current information that EPA should collect and provide for public notice-and-comment as part of these rulemakings. We call on EPA to perform these rulemakings in a way that prioritizes public health, the environment, and environmental justice, through providing information on all methods to reduce the pollution and strengthen protection, and taking the most health-protective approach to finally solve the air pollution problem communities are facing from SOCMCI sources.

As communities have lived for years without the benefit of vital protections from EPA rulemakings required years ago, Petitioners request that EPA respond to this matter promptly and begin taking necessary steps to review the relevant regulations and revise them to assure the full health and environmental protection that EPA has the authority to provide to fulfill its promises to protect fenceline communities and provide environmental justice.

Thank you for your time and consideration of this important matter. If you have any questions or would like to arrange a meeting, please contact us.

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