Rulemaking Comments of the Attorneys General of New York, California, Connecticut, District of Columbia, Hawaii, Illinois, Iowa, Maine, Maryland, Massachusetts, Michigan, Minnesota, New Mexico, North Carolina, Oregon, Pennsylvania, Rhode Island, Vermont, Washington, and Wisconsin, and the County Attorney of Harris County, Texas

On EPA's Proposed Rule:

Safer Communities by Chemical Accident Prevention (Docket EPA-HQ-OEM-2022-0174)

OCTOBER 31, 2022

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### A. Introduction and Executive Summary

The undersigned Attorneys General and County Attorney ("States and Municipalities") hereby submit these comments on the Environmental Protection Agency's proposed rule, Safer Communities by Chemical Accident Prevention, published at 87 Fed. Reg. 53,556 (Aug. 31, 2022) ("Proposed Rule"). The Proposed Rule would revise EPA's Risk Management Program (RMP) regulations under section 112(r)(7) of the Clean Air Act. The States and Municipalities support the proposal's restoration of safeguards that were unjustifiably repealed in EPA's 2019 rule. We also applaud EPA's recognition of the need for regulated facilities to do more to address threats exacerbated by climate change and to protect fenceline communities. As explained in the attached comments, however, EPA should make changes to the Proposed Rule to strengthen it, consistent with the agency's statutory authority under section 112(r)(7)(B) of the Act to prevent and mitigate chemical accidents "to the greatest extent practicable."

These comments are organized as follows: Part B describes recent chemical accidents in our jurisdictions that further show the need for EPA to strengthen chemical accident safeguards. Part C contains relevant background on the RMP regulations.

Part D discusses environmental justice issues relevant to the rulemaking. Chemical accidents pose disproportionate risks to historically marginalized communities because RMP facilities are disproportionately located within these communities. The States and Municipalities urge EPA to use its authority to advance environmental justice in this rulemaking by assessing and redressing barriers to racial and socioeconomic justice, including by making chemical hazard information available in multiple languages.

Part E discusses why EPA has ample authority well supported by the record to revise its 2019 rule and to restore (and improve) its 2017 rule. Finally, Part F includes our comments on different aspects of the proposed rule. The States and Municipalities highlight some of our comments in Section F below: 1. <u>Natural Hazards</u>: The States and Municipalities support expressly requiring facilities with Program 2 and 3 processes to consider natural hazards. But EPA should broaden its proposed regulatory language to require consideration of natural hazards that are "caused <u>or exacerbated</u> by climate change." Furthermore, RMP facilities should be required to implement practicable measures that could prevent or mitigate accidents caused or worsened by natural hazards. Finally, we support EPA's issuance of guidance on facility natural hazard analysis.

2. <u>Power Loss</u>: The States and Municipalities support making express the obligation to analyze hazards associated with power loss. We also support requiring backup power for air pollution control and monitoring equipment associated with the prevention and detection of accidental releases but urge EPA to broaden that requirement to apply to any equipment relied on by a facility to prevent an accidental release from a process with RMP-regulated substances.

3. <u>Stationary Source Siting</u>: The States and Municipalities support amending the regulatory text for Program 2 and 3 processes to define stationary source siting evaluations as including placement of processes, equipment, buildings, and hazards posed by proximate facilities and accident release consequences posed by proximity to the public. In addition, the States and Municipalities recommend that facilities should be required to take practicable actions to eliminate or lessen hazards associated with RMP processes through different siting.

4. <u>Hazard Evaluation Recommendation Availability</u>: The States and Municipalities support including recommendations from hazard evaluations of natural hazards, loss of power, and facility siting that were not adopted in a facility's risk management plan. But facilities should be required to implement practicable recommendations. And owners of RMP facilities should be obligated to post hazard-related information online and provide a link in risk management plans so responders and local communities can access this information.

5. <u>Safer Technology Alternatives Analysis</u>: The States and Municipalities support the safer technology alternatives analysis requirements in the Proposed Rule. But EPA needs to go further to adequately protect workers and communities. Specifically, EPA should reinstate the full scope of the 2017 rule provisions without geographic limitation. In addition, EPA should require each refinery using hydrofluoric acid to conduct a more comprehensive and robust evaluation of alternatives than provided for in the Proposed Rule.

6. <u>Root Cause Analysis</u>: The States and Municipalities support restoration of the 2017 root cause analysis provisions as well as the 12month requirement for completing incident reports.

7. <u>Third-Party Audits</u>: The States and Municipalities support fully restoring the third-party auditing requirements of the 2017 rule, triggering those requirements if there is an RMP-reportable accident or findings of significant non-compliance for facilities with Program 2 and Program 3 processes.

8. <u>Employee Participation</u>: The States and Municipalities support EPA's proposal to improve worker participation at RMP facilities. We recommend further improvements, including involving employees in developing risk management plans, providing employees with access and information about a facility's risk management plan, and requiring all Program 2 and 3 facilities to implement stop work processes.

9. <u>Emergency Response Requirements</u>: The States and Municipalities support requiring facilities to develop procedures to inform the public and government authorities about accidental releases and ensure that a community notification warning system is in place. Facilities should be required develop these procedures with community input. But EPA should eliminate the requirement that community members demonstrate that they live within 6 miles of a facility to be able to access information.

10. <u>Emergency Response Exercises</u>: The States and Municipalities support restoring the emergency response program requirements, including requiring certain facilities to conduct field exercises. We further support mandatory field and tabletop exercise evaluation report components. 11. <u>Information Availability</u>: The States and Municipalities recommend EPA eliminate the proposed 6-mile residency requirement and reinstate the information availability requirements of the 2017 rule. EPA should also create a public, multi-lingual online database to facilitate public access to risk management plan information.

## 12. $\underline{Other}^1$

a. <u>Compliance Deadlines</u>: The States and Municipalities recommend that the compliance period under the Proposed Rule be shortened to two years for at least the emergency response public notification and exercise evaluation reports, employee participation, and information availability provisions.

b. <u>Adding Regulated Chemicals</u>: The States and Municipalities request that EPA expand the list of regulated substances to include ammonium nitrate and other reactive hazards.

c. <u>Fenceline Monitoring</u>: The States and Municipalities call on EPA to require real-time fenceline air monitoring for air toxics at the most dangerous RMP facilities.

## B. Recent Chemical Accidents in our States and Municipalities

The States and Municipalities continue to experience serious chemical accidents, harming our residents and damaging property. We highlight here some of the significant accidents that have occurred in our jurisdictions since we last submitted multistate comments in August 2019.<sup>2</sup> These continuing accidents further bolster EPA's finding that the current RMP regulations should be strengthened.

<sup>&</sup>lt;sup>1</sup> This category is topic #15 in the Proposed Rule, and we use that numbering in Section F below. See 87 Fed. Reg. at 53,559 and Section F.15, *infra*.

 $<sup>^2</sup>$  As discussed in Section C, infra, those comments are attached and incorporated by reference.

- California
  - *Marathon Refinery (2020).* In February 2020, an explosion occurred at the Marathon Los Angeles Refinery in Carson. The explosion, which took place at the refinery's Light Ends Depropanizer unit, caused significant damage to the refinery (a Tier 1 incident under the American Petroleum Institute classification) and the resulting fire burned for about a day and a half. Although there were no reported injuries, the incident resulted in the closure of Interstate 405 for about an hour.<sup>3</sup>
- Harris County, TX
  - *ExxonMobil Baytown (2021-22).* In December 2021, the Baytown Refinery Hydro Desulfurization Unit 1 experienced a fire that resulted in emissions to the atmosphere and use of the flare system. The emissions event lasted about 13 days. 275 residents living near the facility have reported injuries.<sup>4</sup>
  - LyondellBasell Acetyls (2021). In July 2021, a leak of acetic acid, hydrogen iodide, methyl iodide, and methyl acetate occurred at LyondellBasell Acetyls' facility in La Porte, resulting in two deaths and 30 hospitalizations. The event,

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target= 371947; Natalie Hee, Investigators said ExxonMobil Baytown fire burnt naptha, gasoline into the air for several hours, Fox 26 Houston, (Dec. 23, 2021), //www.fox26houston.com/news/investigators-said-exxonmobil-baytown-fire-burntnaptha-gasoline-into-the-air-for-several-hours; More than 275 residents claim injuries from explosion at ExxonMobil Baytown Complex: lawsuit, Fox 26 Houston, (May 12, 2022) https://www.fox26houston.com/news/more-than-275-residents-claiminjuries-from-explosion-at-exxonmobil-baytown-complex-lawsuit.

<sup>&</sup>lt;sup>3</sup> See MPC Los Angeles Refinery Carson North Area Fire Investigation (July 23, 2020), <u>https://fire.lacounty.gov/wp-content/uploads/2020/08/Los-Angeles-Refinery-Carson-North-Area-Fire-Incident-1.pdf</u>.

 $<sup>^4</sup>$  Air Emission Event Report Database Incident 37<br/>194, Tex. Comm'n. on Env't (Jan. 24, 2022),

which lasted 45 hours,<sup>5</sup> is being investigated by the Chemical Safety and Hazard Investigation Board (CSB).<sup>6</sup>

- Rohm & Haas Chemicals Bayport Plant (2021). On July 21, 2021, a tanker truck that was over pressurized caused a release of hydroxyethyl acrylate at Rohm & Haas Chemicals Bayport Plant, a subsidiary of Dow Chemical. The incident resulted in an evacuation order, school and road closures, and shelters in place.<sup>7</sup>
- *Exxon Baytown Complex (2019).* There were two fires in July 2019 at the Exxon Baytown Complex, including a fire in the refinery and an explosion at the Olefins Plant. The complex is one of the largest refining and petrochemical complexes in the world. 66 people were treated and more than 30 suffered injuries as a result of the explosion.<sup>8</sup>

<sup>6</sup> See CSB, LyondellBasell Fatal Chemical Release, <u>https://www.csb.gov/lyondellbasell-fatal-chemical-release-/</u>.

<sup>7</sup> Air Emission Event Report Database Incident 362917; Tex. Comm'n. on Env't, (Aug. 3, 2021),

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target= 362917; Paul DeBenedetto, *La Porte Issues Evacuation Notice Near Dow Chemical Plant*, KERAnews (July 21, 2021), https://www.keranews.org/texas-news/2021-07-21/la-porte-issues-evacuation-notice-near-dow-chemical-plant.

<sup>8</sup> Air Emission Event Report Database Incident 317789, Tex. Comm'n. on Env't, (Aug. 18, 2019),

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target= 317787; Ray Sanchez and Marlena Baldacci, 66 treated after fire breaks out at ExxonMobil plant in Baytown, Texas, CNN (July 31, 2019), https://www.cnn.com/2019/07/31/us/exxon-baytown-texas-plant-fire; Aaron Barker,

 $<sup>^5</sup>$  Air Emission Event Report Database Incident 363780, Tex. Comm'n. <br/>on Env't (Aug. 20, 2021),

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target= 363780; Ninfa Saavedra et. al., 2 dead, dozens of employees injured after chemical leak at LyondellBasell facility in La Porte, company says, KPRC, https://www.click2houston.com/news/local/2021/07/28/crews-responding-to-masscausality-incident-at-lyondellbasell-industries-in-laporte-officials-say/

https://www2.tceq.texas.gov/oce/eer/index.cfm?fuseaction=main.getDetails&target= 317789; Air Emission Event Report Database Incident 317787, Tex. Comm'n. on Env't, (Aug. 17, 2019),

## • Illinois

- *MPG Industries (2019).* In August 2019, multiple explosions occurred at a warehouse storing over 70 types of chemicals in New Lenox, leading to a fire destroying the warehouse. The fire and explosions caused smoke, odors, and unknown chemicals to be released into the air. The water and foam used to fight the fire mixed with chemicals and seeped into nearby soil and drainage. One of the firefighters responding to the blaze was hospitalized and a nearby interstate highway was closed due to heat exposure, smoke from the fire, and explosion hazards. The release of highly toxic chemicals into the ground and water required remediation.<sup>9</sup>
- *Chemtool, Inc. (2021).* A massive fire destroyed this chemical factory in Rockton in July 2021. The facility owned by Chemtool Inc. manufactured grease and lubricating oil held over 4 million gallons of crude oil. It caught fire in July 2021, and burned for several days, causing explosions and evacuations of residents and businesses in the surrounding area. The disaster released thick black smoke, particulate matter, and other contaminants into the air; residents living within three miles of the facility were directed to wear masks outside. In addition, the fire released debris and ash onto the surrounding land and resulted in runoff from firefighting foam into the nearby Rock River.<sup>10</sup>

Fire extinguished at ExxonMobil plant in Baytown; 37 injured in blast, KPRC, <u>https://www.click2houston.com/news/2019/08/01/fire-extinguished-at-exxonmobil-plant-in-baytown-37-injured-in-blast/</u>

<sup>&</sup>lt;sup>9</sup> See <u>https://illinoisattorneygeneral.gov/pressroom/2019\_08/20190828.html;</u> Final Report to EPA Regarding MPG Fire (Apr. 15, 2020), <u>https://response.epa.gov/sites/14375/files/MPG%20Final%20Report%20April%20202</u> <u>0.pdf</u>

<sup>&</sup>lt;sup>10</sup> See <u>https://illinoisattorneygeneral.gov/pressroom/2022\_04/Chemtool-</u> <u>Agreed%20Prelminary%20Injunction%20Order%20Entered%204-25-2022.pdf;</u> EPA, Chemtool Fire, <u>https://response.epa.gov/site/site\_profile.aspx?site\_id=15241</u>

• *Phillips 66 (2021).* In June 2021, unknown amounts of sulfuric acid and sulfur dioxide were released into the environment from railroad tank cars loaded by Phillips 66, which owns and operates a nearby oil refinery. The railroad tank cars were loaded with incompletely reacted sulfuric acid. Uncontrolled chemical reactions caused the cars to vent their contents into the atmosphere near the towns of Hartford and Wood River. The harmful emissions endangered the local environment and required nearby residential areas to be evacuated.<sup>11</sup>

## • Massachusetts

- Barnhardt Manufacturing (2019). On September 1, 2019, approximately 60 gallons of concentrated sulfuric acid sprayed out of an outdoor above-ground storage tank at a cotton bleaching facility owned by Barnhardt Manufacturing facility in Colrain. Dozens of gallons of acid flowed into a nearby brook and into the North River, which feeds into the Deerfield River. The acid dissolved nearly everything in its path, killing more than 270,000 fish in a popular fishery and damaging more than 14 acres of protected wetland resource areas and over 12 acres of designated habitat of two state-listed rare species. The spill resulted in parallel settlements with the Commonwealth of Massachusetts and EPA requiring Barnhardt to pay nearly \$1.5 million in natural resource and fisheries loss damages, penalties, and other payments and to undertake a comprehensive hazard assessment and facility improvements to prevent releases going forward.<sup>12</sup>
- North Carolina
  - *Weaver Fertilizer (2022).* On January 31, 2022, a large fire occurred at a fertilizer facility in Winston Salem involving

<sup>12</sup> <u>https://www.mass.gov/news/cotton-bleaching-company-to-pay-nearly-15-</u> million-for-acid-spill-that-killed-more-than-270000-fish-in-the-north-river

<sup>&</sup>lt;sup>11</sup> See <u>https://illinoisattorneygeneral.gov/pressroom/2021\_06/20210625.html</u>

nearly 600 tons of ammonium nitrate. The fire resulted in a multi-day evacuation of one-mile radius around the facility, including approximately 6,500 residents, as well as firefighters and first responders. Air monitoring conducted by EPA in connection with the fire showed some of the highest hazardous levels of particulate matter ever recorded in North Carolina for multiple days in the area surrounding the facility.<sup>13</sup>

• *Lineage Logistics (2020).* On January 10, 2020, an anhydrous ammonia refrigeration facility in Statesville, North Carolina experienced a catastrophic release of approximately 1,146 pounds of anhydrous ammonia. The release resulted in one fatality, one significant injury, the exposure of several first responders, the evacuation of the facility, including approximately 51 employees and contractors, as well as the closure of a public highway.<sup>14</sup>

The evidence that serious accidents harming life and property continue to occur offers further support for EPA's conclusion that the RMP regulations could be improved to provide additional protection to human health and the environment from chemical hazards.

<sup>&</sup>lt;sup>13</sup> See EPA, Weaver Plant Fertilizer Fire,

<sup>&</sup>lt;u>https://response.epa.gov/site/site\_profile.aspx?site\_id=15489</u> (Oct. 31, 2022); Minor Barnette, Director, Forsyth County Office of Environmental Assistance and Protection, Presentation to the NC Environmental Management Commission: Fertilizer Facility Fire,

<sup>&</sup>lt;u>https://edocs.deq.nc.gov/WaterResources/DocView.aspx?id=2244415&dbid=0&repo=</u> <u>WaterResources</u> (Mar. 2022)

<sup>&</sup>lt;sup>14</sup> See WCNC, 1 dead, multiple injured in Statesville ammonia leak, <u>https://www.wcnc.com/article/news/local/statesville-ammonia-hazmat-spill/275-7936486e-03fc-40e0-96b8-ccdbc499bdb4</u> (Jan. 10, 2020); Civil Penalty Assessment, In the matter of: Lineage Logistics Statesville, File No. DAQ 2021-014 (June 24, 2021), available at <u>https://xapps.ncdenr.org/aq/docs/FDocs\_Search.jsp</u>

#### C. Litigation and Regulatory Background

#### <u>The Risk Management Program</u>

Congress enacted section 112(r) of the Clean Air Act in 1990 in the aftermath of the 1984 accident at the Union Carbide plant in Bhopal, India, where more than 3,000 people died after a tank leaked a toxic chemical that the facility used to manufacture pesticides. *See* H.R. Rep. No. 101-490 at 154-57 (citing the Bhopal incident in support of the need to amend the statute).<sup>15</sup>

In section 112(r), Congress directed EPA to issue regulations that "provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for the response to such releases by the owners and operators of the sources." 42 U.S.C. 57412(r)(7)(B). Congress also directed the Occupational Health and Safety Administration (OSHA) to promulgate regulations to prevent and minimize the consequences of accidental chemical releases through implementation of management program elements that integrate technologies, procedures and management practices (referred to as "process safety management" regulations). *See id.* § 7412(r)(6)(K). The law also created the CSB to investigate and report on major chemical accidents, including their causes and recommendations for avoiding future accidents. *Id.* § 7412(r)(6).

EPA issued initial regulations pursuant to section 112(r)(7) in 1994 and 1996 that established the list of chemical substances with threshold quantities regulated under the program and that required facilities to comply with safeguards to prevent and mitigate accidental releases, respectively. 59 Fed. Reg. 4,478 (Jan. 31, 1994) & 61 Fed. Reg. 31,668 (June 20, 1996). The RMP regulations require facilities to conduct a worst-case scenario analysis and a review of accident history, coordinate procedures with local emergency response organizations, conduct a hazard assessment, document a management system, implement a prevention program and emergency response program, and

 $<sup>^{15}</sup>$  Excerpts from the legislative history cited in these comments are attached as Attachment 1.

submit a risk management plan that addresses all aspects of the RMP for all covered processes and chemicals. 87 Fed. Reg. at 53,562-63. A process at a source is covered under one of three different prevention programs (Program 1, Program 2, or Program 3) based directly or indirectly on the threat posed to the community and the environment. *Id.* at 53,563. Program 3 facilities have the most requirements due to the potential for greater harm if an accident were to occur. *See id.* 

### The 2017 Chemical Disaster Rule

Prompted by the 2013 West Fertilizer explosion in Texas that killed 15 people and other serious accidents, such as a refinery explosion in 2010 in Washington State that killed seven, President Obama issued an executive order in 2013 that required EPA and other federal agencies to review—and consider strengthening—regulations to prevent or mitigate chemical accidents. *See* Executive Order 13,650: Improving Chemical Facility Safety and Security (Aug. 1, 2013).<sup>16</sup>

In March 2016, EPA issued a notice of proposed rulemaking to amend the accidental release prevention regulations and related programs. Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 81 Fed. Reg. 13,638 (Mar. 14, 2016). In January 2017, EPA promulgated the final rule to "improve safety at facilities that use and distribute hazardous chemicals." Accidental Release Prevention Requirements: Risk Management Programs under the Clean Air Act ("Chemical Disaster" Rule" or "2017 rule"), 82 Fed. Reg. 4594 (Jan. 13, 2017). The Chemical Disaster Rule revised dozens of RMP requirements in three major areas: (1) accident prevention, including expanded post-accident investigations, more rigorous safety audits, safety training, and safer technology requirements; (2) emergency response, including more frequent coordination with local first responders and emergency response committees, and more intensive incident-response exercises; and (3) public information disclosure, including public disclosure of

<sup>&</sup>lt;sup>16</sup> Available at: <u>https://obamawhitehouse.archives.gov/the-press-</u> <u>office/2013/08/01/executive-order-improving-chemical-facility-safety-and-security</u>.

safety information and public-meeting requirements. *Air All. Houston v. EPA*, 906 F.3d 1049, 1055-56 (D.C. Cir. 2018).

EPA determined that March 14, 2017 was an appropriate effective date for the rule: it was practicable for regulated entities to comply with some provisions immediately, while they would need additional time to prepare to comply with others. 82 Fed. Reg. at 4675-76. For the latter category, compliance was phased in from March 14, 2018, to March 14, 2022. *Id.* at 4696. In setting dates for the different requirements, EPA explained that it had considered the time needed for facility operators to understand the new rules, train personnel, arrange responses, research technologies, and provide for public notification. *Id.* at 4676.

#### The Delay Rule and Litigation

After initially delaying the Chemical Disaster Rule's effective date following the change in Presidential administrations, on June 14, 2017, EPA promulgated the Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Further Delay of Effective Date ("Delay Rule"), 82 Fed. Reg. 27,133 (June 14, 2017). The Delay Rule further delayed the effective date of the Chemical Disaster Rule to February 19, 2019, for the purposes of EPA's reconsideration. Id. at 27,135.

In June and July 2017, several of the States and Municipalities and over a dozen community and environmental groups filed petitions for review of the Delay Rule in the D.C. Circuit. *Air. All. Houston*, 906 F.3d at 1057. The United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied Industrial and Service Workers International Union intervened on behalf of the community and environmental groups. *Id.* In August 2018, the Court vacated the Delay Rule. *Id.* at 1066. The Court concluded that EPA lacked authority under the applicable sections of the Clean Air Act, 42 U.S.C. §§ 7607(d)(7)(B) and 7412(r)(7), to delay the effective date of the Chemical Disaster Rule for 20 months for reconsideration; EPA could not avoid the statute's express limitations by invoking general rulemaking authority under a different statutory provision; and the Delay Rule was also arbitrary and capricious. *Air. All. Houston*, 906 F.3d at 1053.

#### The 2019 Rollback Rule and Litigation

On May 30, 2018, EPA proposed repealing critical aspects of the Chemical Disaster Rule, including almost all of the accident prevention requirements. Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, 83 Fed. Reg. 24,850, 25,852 (May 30, 2018) ("proposed Rollback Rule"). As to the accident prevention requirements, EPA proposed to weaken post-accident investigations, eliminate all requirements for third-party compliance audits, decrease safety training, and eliminate the obligation to perform safer technology and alternatives analysis. Id. at 24,857-58. EPA also proposed to limit the information facilities must provide annually to emergency responders and to remove the minimum frequency requirement for field exercises or, alternatively, rescind the field and tabletop exercise requirements entirely. Id. at 24,853. As to the public information disclosure requirements, the agency proposed to curtail the scope of the information that facilities are required to share with the public about chemical hazards. Id.

Several of the States and Municipalities subsequently submitted their comments on the proposed Rollback Rule, explaining why the proposal was unlawful under the Clean Air Act and unsupported by the record.<sup>17</sup> In August 2019, several of the States and Municipalities submitted supplemental comments on the proposed Rollback Rule to highlight numerous chemical accidents that had occurred and information that had been made public after the close of the comment period.<sup>18</sup> And in October 2019, several of the States and Municipalities

<sup>&</sup>lt;sup>17</sup> Comments from States and Municipalities on Proposed Rollback Rule (Aug. 23, 2018), <u>https://www.regulations.gov/document/EPA-HQ-OEM-2015-0725-1925</u>. The States and Municipalities' Original Comments are hereby incorporated by reference.

<sup>&</sup>lt;sup>18</sup> Supplemental Comments from States and Municipalities on Proposed Rollback Rule (Aug. 20, 2019), <u>https://www.regulations.gov/document/EPA-HQ-</u> <u>OEM-2015-0725-1998</u>. The States and Municipalities' Supplemental Comments are hereby incorporated by reference and also attached as *Attachment 2*.

submitted the CSB's preliminary investigation results regarding the June 2019 Philadelphia Energy Solutions Refinery (PES) accident.<sup>19</sup>

In December 2019, EPA published the final rule, *Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act*, 84 Fed. Reg. 69,834 (Dec. 19, 2019) ("Rollback Rule" or "2019 rule"). The Rollback Rule repealed critical aspects of the Chemical Disaster Rule, including those requiring safer technology and alternatives analysis, third-party audits, and more robust incident investigation. *Id.* at 69,836. Several of the States and Municipalities, community and environmental groups, and the United Steelworkers filed petitions for review of the Rollback Rule in the D.C. Circuit.<sup>20</sup>

The same group of States and Municipalities subsequently filed a petition for reconsideration with EPA regarding the Rollback Rule.<sup>21</sup> They argued that reconsideration was warranted because several objections that arose after the end of the comment period were centrally relevant to the Rollback Rule. 42 U.S.C. § 7607(d)(7)(B). In September 2020, EPA denied the petition for administrative reconsideration.<sup>22</sup> Subsequently, these States and Municipalities (along with community and environmental groups and the United Steelworkers) filed petitions

<sup>21</sup> See States and Municipalities' Petition for Reconsideration (Feb. 18, 2020), <u>https://www.regulations.gov/comment/EPA-HQ-OEM-2015-0725-2096</u>. The States and Municipalities' Petition for Reconsideration is hereby incorporated by reference and also attached as *Attachment 3*.

<sup>22</sup> Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Final Action on Petitions for Reconsideration; Notice of Final Action Denying Petitions for Reconsideration, 85 Fed. Reg. 55,286 (Sept. 4, 2020); EPA-HQ-OEM-2015-0725-2099; EPA-HQ-OEM-2015-0725-2100; EPA-HQ-OEM-2015-0725-2101.

<sup>&</sup>lt;sup>19</sup> Second Supplemental Comments from States and Municipalities on Proposed Rollback Rule (Oct. 28, 2019), <u>https://www.regulations.gov/document/EPA-HQ-OEM-2015-0725-2001</u>. The States and Municipalities' Second Supplemental Comments are hereby incorporated by reference.

<sup>&</sup>lt;sup>20</sup> See State of New York, et al. v. Andrew Wheeler, et al., Case No. 20-1022 (D.C. Cir.); State of Delaware v. EPA, et al., Case No. 20-1034 (D.C. Cir. 2020); United Steel, Paper and Forest v. EPA, et al., Case No. 20-1005 (D.C. Cir. 2020); Air Alliance Houston, et al v. EPA, et al, Case No. 19-1260 (D.C. Cir.).

for review challenging EPA's denials of reconsideration, which were consolidated with the challenges to the underlying Rollback Rule.<sup>23</sup>

## The Current Rulemaking

On January 20, 2021, President Biden signed Executive Order 13,990, entitled "Protective Public Health and the Environment and Restoring Science to Tackle the Climate Crisis." The Order seeks to address climate change and environmental injustice through establishing a policy:

> to listen to the science; to improve public health and protect our environment; to ensure access to clean air and water; to limit exposure to dangerous chemicals and pesticides; to hold polluters accountable, including those who disproportionately harm communities of color and low-income communities; to reduce greenhouse gas emissions; to bolster resilience to the impacts of climate change; to restore and expand our national treasures and monuments; and to prioritize both environmental justice and the creation of the wellpaying union jobs necessary to deliver on these goals.

Executive Order 13,990, § 1. 86 Fed. Reg. 7037 (Jan. 25, 2021). To that end, the Order directs federal agencies to "immediately review" and, as appropriate, address actions from the last four years that conflict with that policy. *Id.* In a list of agency actions accompanying the Executive Order, the President specifically required EPA to review the Rollback Rule. Fact Sheet: List of Agency Actions for Review, at "U.S. Environmental Protection Agency" § 36.<sup>24</sup> EPA thereafter reviewed the Rollback Rule to decide whether any reconsideration of that action was necessary in light of the Order. To facilitate that review, the pending litigation challenging the Rollback Rule was placed in abeyance.

 $<sup>^{23}</sup>$  Consolidated case No. 19-1260 was then consolidated with consolidated case No. 20-1430. Order of November 30, 2020 (DN1873534).

<sup>&</sup>lt;sup>24</sup> Available at <u>https://whitehouse.gov/briefing-room/statements-</u> releases/2021/01/20/fact-sheet-list-of-agency-actions-for-review.

Meanwhile, EPA announced that it intended to initiate new notice and comment proceedings to review and revise the Rollback Rule. EPA held listening sessions in June and July 2021, and solicited written comments on potential changes to the Rollback Rule. EPA received over 100 oral comments and 379 unique written comments, including from the State of New York and Harris County, Texas.<sup>25</sup>

On August 18, 2022, EPA issued the Proposed Rule. EPA subsequently held three virtual public hearings in September 2022. The State of New York submitted oral and written comments at the September 26, 2022 hearing.<sup>26</sup>

#### **D.** Environmental Justice

The States and Municipalities support EPA's commitment to address environmental justice concerns in this rulemaking. Human health and our surrounding environments are in a moment of crisis as societies try to navigate the devastating impacts of climate change, impacts that are disproportionately borne by underserved communities.<sup>27</sup> This section addresses why EPA must comprehensively

<sup>&</sup>lt;sup>25</sup> Testimony of Laura Mirman-Heslin, Assistant Attorney General, Environmental Protection Bureau, Office of the New York State Attorney General Letitia James (July 8, 2021), <u>https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0312-0043</u>; Testimony of Sarah Jane Utley, Environmental Division Director, Office of the Harris County Attorney Christian D. Menefee (July 30, 2021), <u>https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0312-0080</u>. This testimony is hereby incorporated by reference.

<sup>&</sup>lt;sup>26</sup> Testimony of Sarah K. Kam, Assistant Attorney General, Environmental Protection Bureau, Office of the New York State Attorney General Letitia James (Sept. 26, 2022), <u>https://www.regulations.gov/comment/EPA-HQ-OLEM-2022-0174-0135</u>. This testimony is hereby incorporated by reference.

<sup>&</sup>lt;sup>27</sup> "Underserved communities" refers to populations sharing a particular characteristic, as well as geographic communities, that have been systematically denied a full opportunity to participate in aspects of economic, social, and civic life, such as Black, Latino, and Indigenous and Native American persons, Asian Americans and Pacific Islanders and other persons of color; members of religious minorities; lesbian, gay, bisexual, transgender, and queer (LGBTQ+) persons; persons with disabilities; persons who live in rural areas; and persons otherwise adversely affected by persistent poverty or inequality. *See* Executive Order 13,985,

assess and mitigate cumulative impacts to underserved communities in this rulemaking. We also urge EPA to ensure Title VI requirements are met at RMP facilities and we provide examples of underserved communities confronted with disproportionate climate change impacts.

The States and Municipalities recognize the environmental justice benefits the Proposed Rule would yield through restoration of important accident prevention and emergency planning and risk assessment requirements needed to protect frontline communities. Additionally, we support EPA's consideration of environmental justice concerns associated with the impacts on fenceline communities,<sup>28</sup> but urge EPA to go further to comprehensively consider the cumulative impacts and urgent needs workers and frontline communities face every day.

## EPA is required to comprehensively assess and redress cumulative impacts to underserved communities.

Executive Orders issued by President Biden in 2021 direct EPA to *proactively* promote and work toward achieving environmental justice. First, Executive Order 13,985, *Advancing Racial Equity and Support for Underserved Communities Through the Federal Government*, 86 Fed. Reg. 7009 (Jan. 25, 2021), commits that the Administration to advance equity, civil rights, racial justice, and equal opportunity throughout the federal government. It explains that an affirmative approach to "recogniz[ing] and redress[ing] inequities in their policies and programs that serve as barriers to equal opportunity" is necessary "because advancing equity requires a systematic approach to embedding fairness in decision-making processes." *Id.* 

Second, Executive Order 13,990, *Protecting Public Health and the Environmental and Restoring Science to Tackle the Climate Crisis*, 86 Fed. Reg. 7037 (Jan. 25, 2021), directs federal agencies to review

Advancing Racial Equity and Support for Underserved Communities Through the Federal Government, 86 Fed. Reg. 7009 (Jan. 25, 2021).

<sup>&</sup>lt;sup>28</sup> EPA, Regulatory Impact Analysis: Safer Communities by Chemical Accident Prevention Proposed Rule, 86 (Apr. 19, 2022).

existing regulations and to take action to, among other things, prioritize environmental justice.

Third, Executive Order 14,008, *Tackling the Climate Crisis at Home and Abroad*, 86 Fed. Reg. 7619 (Feb. 1, 2021), requires federal agencies acting to mitigate climate change to secure environmental justice and spur economic opportunity for disadvantaged communities that have been historically marginalized, overburdened by pollution, and underinvested in housing, transportation, health care, and water and wastewater infrastructure. To that end, federal agencies must develop programs, policies, and activities to address the disproportionately high and adverse human health, environmental, climate-related, and other cumulative impacts on disadvantaged communities. Thus, under these Executive Orders, EPA must affirmatively assess and redress barriers to environmental justice in EPA's RMP program that maintain cumulative impacts in underserved communities in order to embed fairness in its 112(r) decision-making process.

Section 112(r) of the Clean Air Act provides EPA with ample authority to proactively consider cumulative impacts and redress the barriers to environmental justice. Section 112(r)(7)(A) states that "in order to prevent accidental releases of regulated substances, [EPA] is authorized to promulgate release prevention, detection, and correction requirements which may include monitoring, record-keeping, reporting, training, vapor recovery, secondary containment, and other design, equipment, work practice, and operational requirements." In EPA's Legal Tools to Advance Environmental Justice, EPA's Office of General Counsel and the Offices of Regional Counsel concluded that it is within EPA's legal authority to (1) "explore whether it is reasonable for the regulations to provide more stringent requirements for stationary sources located in communities that are disproportionately exposed to the risk of a chemical accidental release[,]" (2) "under CAA 112(r)(7)(A) to require additional monitoring and recordkeeping related to accidental release prevention," (3) "to distinguish among sources by location[,]" and (4) to update its guidance on CAA

§ 112(r)(7)'s "general duty" clause to "address issues of importance to communities with environmental justice concerns."<sup>29</sup> EPA thus has the duty under Executive Orders and the authority under the statute to design an RMP system that is fully protective of underserved communities.

# EPA should comprehensively assess and redress barriers to adequate protections in the RMP regulations.

As a first step, EPA should comprehensively assess the RMP regulations for systemic barriers to environmental justice that underserved communities face. This includes identifying communities that are linguistically isolated and have limited access to internet, power, safe infrastructure, or trusting relationships with their emergency responders. These barriers may exist as a result of longstanding racial and socioeconomic injustice. As a second step, EPA should evaluate the RMP regulations with an eye toward redressing specific barriers it has identified. At both steps, EPA should analyze cumulative impacts, including climate-related cumulative impacts. Doing so will provide a more realistic picture of the environmental burdens faced by these underserved communities.

In the proposal, EPA has already begun important quantitative analyses to identify which historically underserved and overburdened populations in close proximity to RMP facilities face barriers to environmental justice.<sup>30</sup> Specifically, EPA conducted a proximity-based analysis using variables from EJSCREEN to overlay data on RMP facilities and quantified community sociodemographic variables of the surrounding populations.<sup>31</sup> Quantifying and identifying which populations are more likely to be exposed if an accidental release occurs

<sup>&</sup>lt;sup>29</sup> Office of General Counsel, *EPA Legal Tools to Advance Environmental Justice*, 55-56 (May 2022), <u>https://www.epa.gov/system/files/documents/2022-05/EJ%20Legal%20Tools%20May%202022%20FINAL.pdf</u>.

<sup>&</sup>lt;sup>30</sup> EPA, Regulatory Impact Analysis: for Safer Communities by Chemical Accident Prevention Proposed Rule, 83-86 (Apr. 19, 2022).

 $<sup>^{31}</sup>$  Id. at 85.

at an RMP facility is a crucial first step in understanding the cumulative impact on a population at greater risk to chemical accidents.

But EPA should also ensure that it analyzes the specific systemic barriers facing underserved communities when addressing the higher risk from living in proximity to RMP facilities. Such barrier analysis should go beyond identifying and quantifying which populations are disproportionately impacted by an EPA program or action. They must also account for the systemic policies, procedures, practices, and conditions limiting the impacted population's access to safety, emergency planning, transparency, accountability, and other forms of environmental justice. For example, factors that may influence Indigenous Peoples' vulnerability to climate change include socioeconomic factors, spiritual and cultural factors, ecosystem services and land use factors, infrastructural factors, and political factors, in addition to changes to the climate, hydrology, and ecosystems where a tribe resides.<sup>32</sup>

EPA should use these analyses to redress environmental injustices that would otherwise remain obstacles to worker and frontline community safety at and near RMP facilities, as discussed specifically below in Sections F.1 and F.9.

## EPA should adopt procedures to ensure that risk management plans do not exclude individuals on the grounds of race, color, or national origin, and are accessible to individuals with Limited English Proficiency.

Issues of language accessibility can pose another barrier to workplace and frontline community safety. For example, a 2011 release of chlorine gas at a Tyson Foods poultry processing plant in Arkansas

<sup>&</sup>lt;sup>32</sup> Mia Montoya Hammersley, *The Water-Energy Nexus and Environmental Justice, in* INDIGENOUS ENVIRONMENTAL JUSTICE, 152 (2020).

was the direct result of a Spanish-speaking worker not understanding an English drum label.<sup>33</sup>

Facilities receiving federal financial assistance are required to address such impediments under Title VI of the Civil Rights Act of 1964<sup>34</sup> (Title VI)—as the Department of Justice recognized in issuing its Limited English Proficiency (LEP) guide and the EPA Office of Land and Emergency Management recognized in its recent Environmental Justice Action Plan.<sup>35</sup> The LEP guide states that under Title VI, it is unlawful to deny the benefits of or discriminate on the basis of race, color, or national origin in any program or activity receiving federal financial assistance.<sup>36</sup> Thus, as DOJ's Title VI Legal Manual explains,<sup>37</sup> once a public or private entity—like an RMP facility—receives federal financial assistance, it is unlawful for any of its programs and activities

<sup>36</sup> U.S. Dept. of Justice, Federal Coordination and Compliance Section, Civil Rights Division, *Tips and Tools for Reaching Limited English Proficient Communities in Emergency Preparedness, Response, and Recovery*, i-ii (2016) (recognizing Title VI "prohibition on national origin discrimination requires recipients to take steps to ensure that Limited English Proficiency persons have meaningful access to the same benefits, services, information, and any other vital aspect of the recipient's programs or activities as everyone else"); see also U.S. Dept. of Health & Human Services, *Ensuring Effective Emergency Preparedness, Response, and Recovery for Individuals with Access and Functional Needs: A Checklist for Emergency Managers*, <u>https://www.justice.gov/crt/fcs/TitleVI</u> (listing action steps emergency responders can take to address the needs of individuals with disabilities, children, older adults, and populations having limited English proficiency, limited access to transportation, and/or limited access to financial resources to prepare for, respond to, and recover from the emergency).

<sup>37</sup> U.S. Dept. of Justice, *Title VI Legal Manual*, Section V.A, 1-3 (Apr. 22, 2021).

<sup>&</sup>lt;sup>33</sup> Industrial Safety & Hygiene News, *Language Barrier Leads to Toxic Gas Release*, (Jan. 2, 2013), <u>https://www.ishn.com/articles/94767-language-barrier-leads-to-toxic-gas-release</u>.

<sup>&</sup>lt;sup>34</sup> 42 U.S.C. § 2000d et seq.

<sup>&</sup>lt;sup>35</sup> EPA, Office of Land and Emergency Management (OLEM), *EJ Action Plan: Building Up Environmental Justice in EPA's Land Protection and Cleanup Programs*, 2 (Sept. 2022), <u>https://www.epa.gov/system/files/documents/2022-</u> <u>09/OLEM-EJ-Action-Plan\_9.2022\_FINAL-508.pdf</u>.

to discriminate on the basis of race, color, or national origin. The prohibition on national origin discrimination requires recipients to take reasonable affirmative steps to ensure that limited English proficient persons have meaningful access to the same benefits, services, information, and any other vital aspect of the recipient's programs or activities as everyone else.<sup>38</sup> EPA should adopt analyses, procedures, and protections and continue to work closely with its Office of Civil Rights and DOJ's Office of Environmental Justice and Civil Rights Division to ensure RMP operations receiving federal financial assistance comply with Title VI.

## EPA must adequately address the needs of underserved and coastal frontline communities.

We have already seen the devastating impacts of not redressing barriers to environmental justice faced by fenceline communities and not having proactive emergency plans in place before an RMP facility in an underserved community faces a climate change event or disaster.

For example, the Hovensa oil refinery and storage facility in St. Croix experienced an explosion in the aftermath of Hurricane Maria in 2017.<sup>39</sup> After projectile wood breached the roof, a tarp was haphazardly placed over the facility to keep the workers from being electrocuted, and a spark caused an explosion. Local residents and workers also reported that one of the stacks at the plant had been damaged and was precariously hanging during the explosion.<sup>40</sup> Many workers and

<sup>39</sup> EPA, Hazardous Waste Cleanup: HOVENSA Environmental Response Trust, in Christiansted, U.S. Virgin Islands, <u>https://www.epa.gov/hwcorrectiveactioncleanups/hazardous-waste-cleanup-hovensa-environmental-response-trust</u>.

<sup>40</sup> John McCarthy, *Explosion Rocks Limetree Bay Terminals About a Month After Hurricane Maria...Blast was not Reported to OSHA as Required by Law*, Virgin Islands Free Press (Nov. 11, 2017), <u>https://vifreepress.com/2017/11/explosion-rocks-limetree-bay-terminals-month-hurricane-maria-blast-not-reported-u-s-chemical-safety-board/</u>.

<sup>&</sup>lt;sup>38</sup> U.S. Dept. of Justice, *Tips and Tools for Reaching Limited English Proficient Communities in Emergency Preparedness, Response, and Recovery*, i-ii (2016).

neighboring residents, however, reported not knowing what to do to prevent electrocution and harm throughout the incident. And workers and neighboring residents faced these risks and uncertainties within the context of preexisting releases and accidents at Hovensa and the racial and socioeconomic injustices the workers and frontline communities were already navigating. Hovensa has a long track record of accidents and is located in an underserved area of the Caribbean that will likely experience increasingly devastating climate change disasters.<sup>41</sup> Hovensa is a Program Level 3 RMP facility with a long list of reported fires and releases, including one that led to 16 individuals being hospitalized and 1,300 individuals evacuated in 2010 and a history of leaking over 43 million gallons of oil into St. Croix's only aguifer between 1982 and 2011.<sup>42</sup> In its latest series of releases, Hovensa showered a fine mist of oil and sulfur dioxide over neighboring communities causing fires, flares, spills, and noxious emissions. Oil from the facility regularly rains down onto neighborhoods and has led to severe illness, loss of food, and loss of drinking water.<sup>43</sup> A 2021 Community Impact Survey found extensive environmental and health impacts from Hovensa's incidents in predominantly low-income Black and Brown neighborhoods including frequent noxious smells, trouble breathing, cistern contaminations, damaged farms, and several untimely deaths.<sup>44</sup> These and other examples highlight the pressing

<sup>&</sup>lt;sup>41</sup> See University of Bristol, *Hurricanes could be up to five times more likely in the Caribbean if tougher targets are missed* (Aug. 27, 2020), https://www.sciencedaily.com/releases/2020/08/200827130612.htm.

<sup>&</sup>lt;sup>42</sup> Kristoffer Tigue, *EPA to Send Investigators to Probe 'Distressing' Incidents at the Limetree Refinery in the U.S. Virgin Islands*, Inside Climate News (Apr. 28, 2021), <u>https://insideclimatenews.org/news/28042021/epa-to-send-investigators-to-</u> probe-distressing-incidents-at-the-limetree-refinery-in-the-u-s-virgin-islands/.

<sup>&</sup>lt;sup>43</sup> Juliet Eilperin, St. Croix refinery halts operations after raining oil on residents once again, (May 13, 2021), <u>https://www.washingtonpost.com/climate-environment/2021/05/12/limetree-bay-refinery/</u>.

<sup>&</sup>lt;sup>44</sup> Center for Advancement of Public Action, *Environmental Justice Begins in St Croix*, <u>https://www.bennington.edu/center-advancement-of-public-</u> <u>action/environment-and-public-action/environmental-justice-begins-st</u>.

need for EPA to work proactively to incorporate environmental justice into chemical accident disaster prevention regulations.

In its Regulatory Impact Analysis, EPA acknowledges that higher percentages of low-income people and higher percentages of people belonging to historically underserved and overburdened racial and ethnic groups face increased risks from RMP facilities.<sup>45</sup> EPA does not, however, fully address the urgent needs of island and coastal frontline communities, including Puerto Rico and the U.S. Virgin Islands, in this rulemaking. These urgent needs include a proactive set of requirements for facilities to account for crumbling or nonexistent infrastructure in locations already devastated by climate change events such as rising sea-level and lethal heat waves. Despite the distinct risks to these communities, the datasets in the Proposed Rule's Technical Background Document discussing extreme weather events and power loss do not distinguish the climate change impacts the communities in Puerto Rico and the U.S. Virgin Islands face,<sup>46</sup> two areas in the U.S. that have experienced some of the most extreme climate change events. In the final rule, EPA should specifically consider these areas in designing sufficiently protective RMP regulations.

In sum, EPA should use its authority to advance environmental justice by assessing and redressing barriers to racial and socioeconomic justice in the RMP regulations.

### E. Comments on EPA's Authority to Revise the RMP Regulations

We concur with EPA that the agency has ample authority and record support to propose changes to the Rollback Rule. As the agency notes, courts have recognized that agencies may change their approach to regulations—or more accurately here, return to previous regulatory

<sup>&</sup>lt;sup>45</sup> EPA, Regulatory Impact Analysis Safer Communities by Chemical Accident Prevention Proposed Rule, 86 (Apr. 19, 2022).

<sup>&</sup>lt;sup>46</sup> EPA, Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, 3-7 (Apr. 19, 2022).

approaches—so long as they provide a reasoned basis for doing so. 87 Fed. Reg. at 53,564 (citing *Federal Comm'ns Comm'n v. Fox Television Stations*, 556 U.S. 502, 515 (2009)). EPA has provided ample, wellsubstantiated reasons for adopting more protective regulations, similar to (or improving on) the Chemical Disaster Rule.

First, EPA is correct to reconsider its position that the Chemical Disaster Rule's accident prevention safeguards were unnecessary because EPA could instead use targeted enforcement to adequately prevent and mitigate accidents. 87 Fed. Reg. at 53,565. Our comments opposing the proposed Rollback Rule explained the importance of having sufficiently protective regulations <u>and</u> robust enforcement to prevent and mitigate harmful accidents. States and Municipalities' Original Comments at 38-39. As EPA noted in the Proposed Rule here, relying solely on an enforcement approach can result in delays and uncertainty about whether enforcement actions will in fact prevent future accidents. 87 Fed. Reg. at 53,565.

Furthermore, EPA recognizes that the Rollback Rule "improperly reli[ed] on only annual account of total accidents," rather than also considering the need to address "low probability, high consequence" accidents. *Id*.<sup>47</sup> The legislative history demonstrates that Congress enacted section 112(r) to avoid or mitigate low probability, high consequence incidents, not just to decrease the number of accidents. In addition to the House Report cited above, the legislative history is replete with references to the Bhopal disaster and other serious accidents that caused widespread loss of life and damage to property. For example, during the Senate and House debates on the final bill, multiple legislators cited Bhopal or similar disasters as the reason for enacting section 112(r). *See, e.g.*, Committee on Environment and Public Works, U.S. Senate A Legislative History of the Clean Air Act

<sup>&</sup>lt;sup>47</sup> In addition, Community Petitioners provided evidence calling into question EPA's conclusion that even the total number of accidents materially decreased during 2004-13 and 2014-16 (the time periods EPA considered in the 2019 rule). *See* Community Petitioners' Comments on the Proposed Rollback Rule (Aug. 23, 2018), <u>https://www.regulations.gov/comment/EPA-HQ-OEM-2015-0725-1969</u>.

Amendments of 1990 (Nov. 1993) at 863 (remarks of Sen. Durenberger) ("The bill also contains a program to prevent chemical accidents. The purpose of this section is to prevent accidents like that which occurred at Bhopal and require preparation to mitigate the effects of those accidents that do occur."); *id.* at 1436 (remarks of Rep. Richardson) (noting a chemical leak in Texas in 1983 that killed 22 people and citing an EPA study that concluded that "since 1980, 17 different chemical accidents in the U.S. had the potential to create disasters as great as the one in Bhopal, India, which killed over 2,000 people").<sup>48</sup> This history further supports EPA's conclusion that the "RMP rule[s] must be broader based, and rule-driven in order to have stationary sources handling dangerous chemicals work to prevent potentially catastrophic incidents." 87 Fed. Reg. at 53,565.

Such an approach also would further EPA's aim to address pollution that disproportionately impacts underserved communities already navigating a disproportionate amount of racial, socio-economic, and environmental injustice, including injustices related to the immigration system, disaster relief efforts, access to health care, access to safe drinking water, emergency response, and other environments in which disability and workers' rights have not been fully protected. *Id.* at 53,563.<sup>49</sup> As EPA recognizes, communities near facilities more likely to have accidents (e.g., chemical manufacturing, petroleum refineries) would especially benefit from rule-based prevention. *Id.* at 53,565-66.

<sup>&</sup>lt;sup>48</sup> See also Committee on Environment and Public Works, U.S. Senate A Legislative History of the Clean Air Act Amendments of 1990 (Nov. 1993) at 1030 (remarks of Sen. Baucus) (referring to Bhopal and an accident at a West Virginia facility in 1985 that resulted in more than 400 people being hospitalized); *id.* at 1065 (remarks of Sen. Reid) (referring to an "explosion and leveling of a chemical plant in Henderson, Nevada"); *id.* at 2531 (remarks of Rep. Waxman) (discussing "catastrophic accidental releases," including Bhopal and mentioning particularly dangerous accidents that "involve substances that form ground-hugging, toxic clouds when released").

<sup>&</sup>lt;sup>49</sup> See EPA, Office of Land and Emergency Management (OLEM), *EJ Action Plan: Building Up Environmental Justice in EPA's Land Protection and Cleanup Programs*, at 8 (Sept. 2022), <u>https://www.epa.gov/system/files/documents/2022-</u> <u>09/OLEM-EJ-Action-Plan 9.2022 FINAL-508.pdf</u>.

Second, EPA has reasonably explained its decision to return to its approach in the Chemical Disaster Rule that the RMP regulations need not be identical to OSHA's process safety management regulations. As discussed in our comments on the proposed Rollback Rule, there is no requirement in the statute that EPA defer to OSHA in rulemaking or proceed simultaneously with OSHA in making regulatory changes. States and Municipalities' Original Comments at 29-32. In addition to acknowledging these facts, "EPA now believes the benefits of a rulebased prevention for certain high-risk classes of facilities could help prevent high consequence accidents that affect communities." 87 Fed. Reg. at 53,566. Furthermore, the proposed rule changes "do not conflict with the prevention provisions of OSHA [process safety management regulations]." *Id*.

In sum, EPA has reasonably explained its decision to abandon the Rollback Rule's misguided and ineffective approach to preventing accidents and return to (and improve on) the approach in the Chemical Disaster Rule.

#### F. Comments on the Proposed Rule

The States and Municipalities' comments on the specific aspects of the Proposed Rule are set forth in this section. The comments follow the requested number and comment headings that EPA included in the proposal. *See id.* at 53,557-59.

### 1. Natural Hazards

EPA proposes to explicitly require that facilities with Program 2 and 3 processes consider, as part of their hazard review, "external events such as natural hazards, including those caused by climate change or other triggering events that could lead to an accidental release." Proposed 40 C.F.R. §§ 68.50(a)(5) (Program 2) & 68.67(c)(8) (Program 3). EPA also proposes to add a definition of "natural hazard," which would encompass certain enumerated meteorological and geological hazards that have the potential for negative impact. *See* Proposed 40 C.F.R. § 68.3 ("Natural hazard"). Relatedly, facilities that decide not to adopt any recommendation to address natural hazards would need to document and explain that decision in their risk management plan. Proposed 40 C.F.R. §§ 68.170(e)(7) (Program 2) & 68.175(e)(8) (Program 3).

As EPA explains, natural hazards—such as severe storms, floods, and wildfires—have the potential to initiate accidents at RMP facilities and the risk is increasing as a result of climate change. 87 Fed. Reg. at 53,567. The States and Municipalities agree with EPA in this regard and support its proposed approach. We further urge EPA to strengthen this requirement, as discussed below.

Natural hazards cause or contribute to chemical accidents, and the number and severity of these occurrences are likely to increase due to climate change. EPA notes that during 2004-20, RMP facilities have reported that natural hazards caused or contributed to more than 80 accidents. 87 Fed. Reg. at 53,567-68. Some accidents caused or exacerbated by natural hazards—such as the 2017 Arkema accident in Harris County, Texas caused by heavy rainfall from Hurricane Harvey—resulted in numerous injuries to workers and first responders. In its report on the Arkema fire, the CSB noted the increasing risk severe weather poses for chemical facilities.<sup>50</sup> The CSB found that the Arkema team that performed the process hazard analysis for its low temperature warehouses did not document any flooding risk.<sup>51</sup> The Board noted that in recent years, flooding from extreme rainfall events has increased, and that a 2015 EPA report found that this trend is projected to continue as a result of climate change, increasing the flood risk in many parts of the country.<sup>52</sup> As a result, CSB recommended that chemical manufacturing, handling and storage facilities perform

<sup>&</sup>lt;sup>50</sup> CSB, Organic Peroxide Decomposition, Release, and Fire at Arkema Crosby Following Hurricane Harvey Flooding, 16 (May 2018), https://www.csb.gov/assets/1/20/final arkema draft report 2018-05-23.pdf.

<sup>&</sup>lt;sup>51</sup> *Id.* at 84.

<sup>&</sup>lt;sup>52</sup> *Id.* at 15 (citing EPA, *Climate Action Benefits Report* (2015), <u>https://www.epa.gov/cira/climate-action-benefits-inland-flooding</u>).

analyses to determine their susceptibility to these extreme weather events and evaluate the adequacy of relevant safeguards. $^{53}$ 

The Proposed Rule notes that "the locations of many RMP facilities leave them exposed to natural hazards." See 87 Fed. Reg. at 53,568 (citing National Oceanic and Atmospheric Administration's Storm Events Database showing that extreme weather events are common in counties with RMP facilities). EPA cites two important recent reports—*Preventing Double Disasters*<sup>54</sup> and *Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change*<sup>55</sup>— calling on EPA to address impacts on chemical disasters from climate change. Both reports found that about one-third of RMP facilities are located in areas at risk of climate-related events, such as wildfire, flooding, hurricane storm surge or coastal flooding. *Id.* 

The findings in these reports also are consistent with the States and Municipalities' experience. For example, in New York, more than 100 RMP facilities are located in potential flood zones, which includes Federal FEMA Special Flood Hazard Areas and Moderate Flood Areas.<sup>56</sup>

The threat of flooding in and around New York City is worsened by sea level rise and from more extreme storms. The twelve inches of sea level rise New York City has experienced in the past century

<sup>55</sup> U.S. Government Accountability Office, *Chemical Accident Prevention: EPA Should Ensure Regulated Facilities Consider Risks from Climate Change*, GAO-22-104494 (Feb. 28, 2022), <u>https://www.gao.gov/products/gao-22-104494</u>.

<sup>&</sup>lt;sup>53</sup> Id. at 16.

<sup>&</sup>lt;sup>54</sup> Center for Progressive Reform, Earthjustice, and the Union of Concerned Scientists, *Preventing "Double Disasters": How the U.S. Environmental Protection Agency Can Protect the Public from Hazardous Chemical Releases Worsened by Natural Disasters* (July 2021), <u>https://www.ucsusa.org/sites/default/files/2021-</u> <u>07/preventing-double-disasters%20FINAL.pdf</u>.

<sup>&</sup>lt;sup>56</sup> See Testimony of Laura Mirman-Heslin, Assistant Attorney General, Environmental Protection Bureau, Office of the New York State Attorney General Letitia James, 5-6 (July 8, 2021), <u>https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0312-0043</u>.

exacerbated the flooding caused by Hurricane Sandy by about twentyfive square miles.<sup>57</sup> That flooding led to numerous oil spills in New York and New Jersey, and devastated areas of New York City, with some areas losing power and other critical services for an extended period of time. New York State has also experienced dramatic increases in the frequency and intensity of extreme rainstorms, consistent with scientists' predictions of the alteration of historical weather patterns resulting from climate change.<sup>58</sup> Similarly, the Massachusetts Environmental Policy Act Office's Interim Protocol on Climate Change Adaptation and Resiliency requires that all new projects filing with the state Environmental Protection Agency to consider sea level rise/storm surge, extreme precipitation, and extreme heat, as well as what adaptation strategies the project will employ to mitigate these risks.<sup>59</sup>

As a result of the increasing risks from natural hazards, states have taken steps to require facilities to consider threats from extreme weather. For example, New York's Climate Leadership and Community Protection Act, enacted in 2019, requires applicants for major permits issued by the Department of Environmental Conservation "to demonstrate that future physical climate risk has been considered."<sup>60</sup> The Department "may require the applicant to mitigate significant risks to public infrastructure and/or services, private property not

<sup>&</sup>lt;sup>57</sup> New York City Panel on Climate Change, 2015 Report, Chapter 2: Sea Level Rise and Coastal Storms (Feb. 16, 2015), Ann. N.Y. Acad. Sci. ISSN 0077-8923, <u>http://onlinelibrary.wiley.com/doi/10.1111/nyas.12593/full.</u>

<sup>&</sup>lt;sup>58</sup> New York State Office of the Attorney General, *Current & Future Trends in Extreme Rainfall Across New York State, A Report from the Environmental Protection Bureau of New York State Attorney General Eric T. Schneiderman* (Sept. 2014) (based on data from the 2014 National Climate Assessment and the National Oceanographic and Atmospheric Administration's Northeast Regional Climate Center), <u>https://ag.ny.gov/pdfs/Extreme\_Precipitation\_Report%209%202%2014.pdf.</u>

<sup>&</sup>lt;sup>59</sup> Massachusetts Environmental Policy Act Office, Interim Protocol on Climate Change Adaptation and Resiliency (2021), <u>https://www.mass.gov/doc/mepainterim-protocol-on-climate-change-adaptation-and-resiliency-effective-oct-1-</u> <u>2021/download</u>

<sup>&</sup>lt;sup>60</sup> S. 6599, Section 17-b (New York 2019), <u>https://www.nysenate.gov/legislation/bills/2019/s6599</u>.

owned by the applicant, adverse impacts on disadvantaged communities, and/or natural resources in the vicinity of the project."<sup>61</sup> Other states have enacted similar laws or regulations. A summary of some of those state laws and regulations concerning natural hazards is attached as *Attachment 4*.

Consideration of the resiliency of RMP facilities to extreme weather events is further warranted because of the direct, substantial, and cumulative risk these facilities pose to environmental justice communities, as described above. For example, low-income and communities of color are more likely to be located in areas susceptible to flooding.<sup>62</sup>

Additionally, although the States and Municipalities support this aspect of the proposed rule, we are concerned that the regulatory language "caused by climate change" is too narrow. For example, flooding that occurred in the New York City area due to Hurricane Sandy may not have been "caused by climate change," but the extent of the flooding—and correspondingly, the scale of the damage that resulted—was worsened by climate change. Arguably, the same could be said about the structural collapse of the Guajataca Dam in Puerto Rico caused by flash floods in the aftermath of Hurricane Maria<sup>63</sup> and Hurricane Harvey's historic rainfall that led to the Arkema accident. To avoid a situation where the natural hazard language is construed to exclude these types of situations, the States and Municipalities recommend that EPA broaden the regulatory language to refer to natural hazards that are "caused <u>or exacerbated</u> by climate change."

 $<sup>^{61}</sup>$  Id.

<sup>&</sup>lt;sup>62</sup> Brie Sherwin, After the Storm: The Importance of Acknowledging Environmental Justice in Sustainable Development and Disaster Preparedness (Spring 2019),

https://scholarship.law.duke.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article =1362&context=delpf.

<sup>&</sup>lt;sup>63</sup> The Guardian, Puerto Rico evacuates 70,000 after dam fails in Hurricane Maria's wake (Sept. 22, 2017),

https://www.theguardian.com/world/2017/sep/22/puerto-rico-hurricane-maria-dam.

EPA also is seeking comment on whether the agency should develop specific guidance on facility natural hazard analysis. 87 Fed. Reg. at 53,569. As the agency notes, there is existing industry guidance on this topic, including the guidance issued by the Center for Chemical Process Safety (CCPS) in response to the CSB's recommendation for guidance in the Arkema accident report. The States and Municipalities encourage EPA to issue guidance in this area in order to encourage and assist RMP facilities to evaluate and prepare for natural hazards. For example, a facility that is dependent on local emergency responders should prepare to confront a delay in receiving assistance from those responders as a result of extreme weather.

Finally, in addition to evaluating natural hazards, the States and Municipalities support requiring RMP facilities to implement practicable measures (such as backup power, discussed in more detail in the next section) that could prevent or mitigate accidents caused or worsened by natural hazards. If a facility's hazard analysis identifies any natural hazard that poses a foreseeable risk of causing or contributing to a chemical accident, the owner/operator should be required to implement measures to address that risk "to the greatest extent practicable." *See* 42 U.S.C. § 7412(r)(7)(B). The States and Municipalities support requiring risk management plans to document decisions by an owner/operator not to implement measures to address natural hazards, *see* Proposed 40 C.F.R. § 68.170(e)(7) (Program 2) & 68.175(e)(8) (Program 3), but that provision should not substitute for requiring facilities to adopt practicable measures.

#### 2. Power Loss

EPA proposes to require that facilities with Program 2 and 3 processes evaluate, as part of their hazard review, the safeguards used or needed to control the hazards or prevent equipment malfunction or human error, including standby or emergency power systems. *See* Proposed 40 C.F.R. § 68.50(a)(3) (Program 2); *see also* Proposed 40 C.F.R. § 68.67(c)(3) (similarly requiring facilities with Program 3 processes to consider applicable engineering and administrative controls to the hazards and providing early warning of releases and use of standby or emergency power systems). Relatedly, EPA proposes to require air pollution control or monitoring equipment associated with prevention and detection of accidental releases from RMP-regulated processes have standby or backup power. 87 Fed. Reg. at 53,571. As with the analysis of natural hazards, recommendations not to adopt measures to address power loss for RMP processes would have to be documented in the facility's risk management plan. Proposed 40 C.F.R. §§ 68.170(e)(7) (Program 2) & 68.175(e)(8) (Program 3).

The States and Municipalities support making express the obligation to analyze hazards associated with power loss, which should help ensure that threats of power loss are properly evaluated with an eye toward preventing and mitigating releases of RMP-regulated substances. We also support requiring backup power for air pollution control and monitoring equipment associated with prevention and detection of accidental releases, but we urge EPA to broaden that requirement to apply to any equipment relied on by a facility to prevent an accidental release from a process with RMP-regulated substances.

RMP facilities should be expressly required to analyze hazards associated with power loss. The lack of reliable backup or emergency power at RMP facilities is a longstanding problem. The legislative history of section 112(r) references a 1988 EPA survey of 150 facilities handling hazardous substances that found "[f]ew facilities used emergency backup systems, such as emergency power or cooling systems, to prevent accidental releases." A Legislative History of the Clean Air Act Amendments of 1990 at 2532.

The lack of an explicit requirement that RMP facilities plan for a sudden loss in power has resulted in accidents such as the 2017 Arkema Crosby facility fire, where extensive flooding from Hurricane Harvey caused the facility's refrigeration system to fail, leading to the combustion of organic peroxides. Arkema Crosby is located in the 100year and 500-year flood plains. Although Arkema's insurer identified flood risks to the facility, including flood risk designations, employees at the time of the incident appeared to be unaware of this information. In its report on the accident, the CSB recommended that facilities develop systems to retain key incident summary information that better documents facility risks based on historical external events.<sup>64</sup>

Additionally, the CSB noted that Arkema addressed only a lower level of floodwater and did not consider the possibility of Harvey-level flooding.<sup>65</sup> The plan also did not anticipate that flooding could lead to a loss of electric power, the subsequent loss of refrigeration capability, and the resulting decomposition of organic peroxide products, all of which occurred during Harvey.<sup>66</sup> Backup power generators and the liquid nitrogen for alternative cooling were placed at locations and heights that didn't account for flood risk.<sup>67</sup> Although Arkema had multiple safety systems in place to ensure that organic peroxide products were kept cold and would not reach their self-accelerating decomposition temperature, these systems all failed during Hurricane Harvey because they were not built to withstand a foreseeable level of flooding experienced.<sup>68</sup> CSB therefore recommended that facilities ensure there are not common modes of failure in their layers of protection.<sup>69</sup>

Related to the natural hazard analysis discussion above, flood risk changes over time – as evidenced by the flood map history at Arkema. In 1985, the map showed minimal food risk. By 2016, updated FEMA Field Inspection Reference Manuals showed Arkema to be located in both the 100 and 500-year floodplain.<sup>70</sup> Therefore, a requirement to evaluate the risk of power loss during extreme weather events should include a continuing obligation to re-evaluate the risk as climate change

- <sup>66</sup> Id. at 84.
- <sup>67</sup> Id. at 14
- <sup>68</sup> Id.
- <sup>69</sup> Id.
- $^{70}$  *Id*.

<sup>&</sup>lt;sup>64</sup> CSB, Organic Peroxide Decomposition, Release, and Fire at Arkema Crosby Following Hurricane Harvey Flooding, 15 (May 2018), https://www.csb.gov/assets/1/20/final arkema draft report 2018-05-23.pdf.

<sup>&</sup>lt;sup>65</sup> Id. at 83.

continues to alter floodplains and rainfall depths for 100-year events.<sup>71</sup> As discussed in the previous section, climate change is expected to cause more extreme weather, increasing the risk that facilities will lose power that may be needed to run systems to prevent chemical releases.

The States and Municipalities also support EPA's proposal to require air pollution control or monitoring equipment associated with prevention and detection of accidental releases from RMP-regulated processes to have standby or backup power. As EPA notes, "[a] largescale natural disaster may threaten multiple RMP facilities in a community simultaneously, leaving communities to endure the direct effects of a natural disaster without receiving warning of associated chemical releases." 87 Fed. Reg. at 53,571. As the EPA's Office of Inspector General found in a report issued in 2019, industrial facilities (including RMP facilities) in the Houston area shut down their operations for a week or more in response Hurricane Harvey in 2017.72 Based on voluntary facility reporting after-the-fact, the startup and shutdown of these facilities resulted in at least 340 tons of hazardous air pollutants emitted from facilities in Harris County and Jefferson County.<sup>73</sup> In addition to the fact that any facility monitoring equipment would have been off line, the Texas Council on Environmental Quality also turned off its air quality monitors prior to Hurricane Harvey to protect the equipment. As a result, "[o]ver half of all known toxic air emission incidents began when no monitors were operating."<sup>74</sup> The EPA Inspector General found that environmental justice communities in the Houston area bore the brunt of these emissions: 93 percent of the

https://www.weather.gov/media/owp/oh/hdsc/docs/Atlas14\_Volume11.pdf.

<sup>&</sup>lt;sup>71</sup> U.S. Department of Commerce, National Oceanic and Atmospheric Administration, and National Weather Service, *Precipitation-Frequency Atlas of the United States* (2018),

<sup>&</sup>lt;sup>72</sup> EPA Needs to Improve its Emergency Planning to Better Address Air Quality Concerns During Future Disasters, Report No. 20-P-0062 (Dec. 16, 2019), https://www.epa.gov/sites/default/files/2019-12/documents/\_epaoig\_20191216-20-p-0062.pdf.

<sup>&</sup>lt;sup>73</sup> Id. at 2.

<sup>&</sup>lt;sup>74</sup> *Id.* at 16.

emissions occurred within four miles of an environmental justice community in East Houston.<sup>75</sup> Although, as discussed later in these comments, the current RMP facility monitoring requirements are inadequate, *see* Section 15.c, *infra*, facilities should at least be required to have backup power for existing monitoring equipment in order to better inform neighboring communities of risks from pollutant exposure. The States and Municipalities suggest that EPA add this requirement and specify an appropriate compliance deadline (which, like most of the other proposed rule provisions, should be no later than three years from the date of promulgation).

But EPA's statutory directive to issue regulations that prevent and mitigate accidents "to the greatest extent practicable," 42 U.S.C. § 7412(r)(7)(B), requires the agency to do more. Any RMP process that is dependent on power to prevent an accidental release should have a backup power supply. In other words, if it is practicable for facilities to have backup power where power is necessary to prevent a release, the facility should be required to take that step. The States and Municipalities agree that risk management plans should document decisions by an owner/operator not to implement measures to address loss of power, but facilities should not have the option to decline to adopt practicable measures.

## 3. Stationary Source Siting

EPA also proposes to require that facilities with Program 2 and 3 processes evaluate stationary source siting as part of their hazard review. *See* Proposed 40 C.F.R. §§ 68.50(a)(6) (Program 2) & 68.67(c)(5) (Program 3). The proposed language would define stationary source evaluation as inclusive of the placement of processes, equipment, buildings, and hazards posed by proximate facilities, and accidental release consequences posed by proximity to the public. 87 Fed. Reg. at 53,574. As with consideration of natural hazards and power loss, facilities would be required to document in their risk management plan any decision not to implement a recommendation to address siting

<sup>&</sup>lt;sup>75</sup> *Id.* at 18.

hazards. Proposed 40 C.F.R. §§ 68.170(e)(7) (Program 2) & 68.175(e)(8) (Program 3).

The States and Municipalities support EPA's proposal to amend regulatory text for Program 2 and 3 processes to define stationary source siting evaluations as including placement of processes, equipment, buildings, and hazards posed by proximate facilities and accident release consequences posed by proximity to the public. As EPA acknowledges, a "lack of sufficient distance between the source boundary and neighboring residential areas was a significant factor in the severity of several chemical accidents in the Unites States and internationally." 87 Fed. Reg. at 53,571-72 (citing accidents); *see also id.* at 53,573 ("Despite enforcement and the consequences of catastrophic accidents, issues of siting continue to threaten process safety."). This is another proposed improvement that could provide significant benefits to fenceline communities.

We further suggest that EPA adopt the same approach to siting hazards as we advocate above for handling natural hazards and power loss. Specifically, if it is practicable for a facility to take an action to eliminate or lessen hazards associated with RMP processes through different siting, e.g., moving part or all of a process farther away from neighboring communities, it should be required to do so. As with natural hazards and power loss, the States and Municipalities agree that risk management plans should document decisions by an owner/operator not to implement measures to address siting hazards, but facilities should not have the option to decline to adopt practicable measures to address those hazards.

## 4. Hazard Evaluation Recommendation Availability

EPA is proposing that recommendations resulting from hazard evaluations be included in a facility's risk management plan. 87 Fed. Reg. at 53,574. Specifically, facilities would be required to implement recommendations or list in their risk management plans the recommendations from their natural hazard, power loss, and siting evaluations that were not adopted and the justification for those decisions. *Id.* EPA believes that this will enable the public to ensure facilities have conducted appropriate evaluations to address potential hazards that can affect fenceline communities. *Id.* EPA further believes that when local citizens have adequate information and knowledge about facility hazards, facilities may be motivated to further improve their safety in response to community pressure and oversight. *Id.* 

The States and Municipalities support EPA's proposal that recommendations resulting from evaluations of natural hazards, loss of power, and facility siting that were not adopted be included in a facility's risk management plan. However, as EPA recognizes, access to hazard-related information and other information is critical for communities, workers, local planners, local first responders, and the public to be able to protect their health and safety. 87 Fed. Reg. at 53,574. To improve access to hazard-related information, the States and Municipalities support EPA's suggestion to require that the owner or operator post this information online and provide a link to such information within their risk management plan so that responders and the local community can readily access this information. In communities that have limited English proficiency or have limited access to online platforms, EPA should ensure that RMP facilities adequately publish public-facing materials on platforms that frontline communities may also rely on and translate those materials into languages that are accessible to the impacted community, as further described *infra*. The States and Municipalities discuss other ways to improve access to chemical hazard information in section 11 infra.

Furthermore, EPA should require facilities to implement practicable recommendations, consistent with the agency's statutory charge to prevent accidental releases to the maximum extent practicable. *Air All. Houston*, 906 F.3d at 1062. Although it is important that communities remain meaningfully engaged and have ample opportunity to define what environmental injustice may look like in their communities, EPA should require facilities to improve safety at their own facilities instead of shifting that additional burden to communities that have already been historically underserved and overburdened by systemic injustices.

#### 5. Safer Technology Alternatives Analysis

EPA also proposes to require that certain petroleum and coal products manufacturing and chemical manufacturing facilities consider and document the feasibility of applying safer technologies alternatives analysis (STAA) as part of their process hazard analysis. Proposed 40 C.F.R. § 68.67(c)(9). The requirement would apply to these facilities if located within a mile of another RMP-regulated facility within the same industrial category and also to all petroleum refineries that use the chemical hydrofluoric acid in an alkylation process. Id. Owners and operators would be required to include the results of the STAA analyses as part of their process hazard analysis requirements and document the feasibility of inherent safety measures based on more than solely cost. Id. Facilities would have to consider the application of inherently safer technology (IST) or inherently safer design (ISD), passive safeguards, active safeguards, and procedural safeguards. Id. § 68.67(c)(9)(i). For any inherently safer technologies and designs implemented, facilities must document and submit to EPA a description of the technology implemented. Id. § 68.67(c)(9)(ii).

The States and Municipalities generally support the STAA requirement in the Proposed Rule, which largely reinstates an important accident prevention measure that the Chemical Disaster Rule established. Relatedly, the States and Municipalities endorse EPA's rethinking of its previous conclusions about New Jersey's and Massachusetts's inherently safer design programs. *See* 87 Fed. Reg. at 53,578-79. As the States explained in comments on the 2019 proposed rule—and EPA now recognizes—statistics about these state programs do not support the agency's 2019 decision to repeal the STAA provision.

Set forth below are additional comments on specific aspects of the STAA proposal:

*Facilities subject to STAA requirements.* The Chemical Disaster Rule imposed the STAA requirements on three classes of facilities: petroleum and coal products manufacturing; chemical manufacturing; and pulp and paper manufacturing. *See* 40 C.F.R. § 68.67(c)(8) (2017). In contrast, the Proposed Rule limits the STAA

obligations to the first two classes of facilities and also imposes a 1-mile geographical limit between facilities to trigger the obligation (e.g., a chemical manufacturing facility would have to be located within a mile of another chemical manufacturer or a petroleum refinery to trigger STAA requirements). Proposed 40 C.F.R. § 68.67(c)(9).<sup>76</sup> Regarding the exclusion of pulp and paper facilities, the agency states that although the accident rate for those facilities is similar to that for petroleum refineries, there is "a low actual number of incidents and comparatively fewer accident consequences." 87 Fed. Reg. at 53,578. With respect to the geographic limitation, EPA cites several grounds to justify the onemile limit, among them that these industry categories have relatively higher accident rates, that communities near densely co-located facilities in these industry categories have experienced more frequent accidents and more offsite impacts, and that the close proximity of facilities increases the risk of a "knock on" release (where an accident at one facility impacts safety at the nearby facility, increasing the chances of an accident at the second facility). See id. at 53,577. EPA is also taking comment on "whether the RMP rule should simply reinstate the 2017 rule provisions." Id. at 53,580.

The States and Municipalities support reinstating the scope of the STAA requirement to that in the 2017 regulation so that the requirement would apply to all petroleum and coal, chemical, and pulp and paper manufacturers. Given the statute's mandate that EPA provide for the prevention of accidental releases "to the greatest extent practicable," 42 U.S.C. § 7412(r)(7)(B), EPA is required to show that it would be impracticable for facilities to comply with the 2017 rule's STAA provisions in order to narrow the scope of that obligation. It has not done so here.

First, EPA acknowledges that the pulp and paper industry's accident rate is relatively high and that workers at and communities near petroleum refineries and chemical manufacturing facilities still face significant risks from those facilities even if the facilities are not

<sup>&</sup>lt;sup>76</sup> The STAA requirement would apply regardless of geographic limitation to petroleum refineries that use hydrofluoric acid (discussed below).

densely co-located. 87 Fed. Reg. at 53,678. Second, although EPA observes that the STAA provision in the Proposed Rule will save industry about \$20 million in compliance costs annually compared to the 2017 rule,<sup>77</sup> the agency does not even attempt to make the case that it would be <u>impracticable</u>—on a cost basis or otherwise—for facilities to comply with the 2017 STAA requirements. Absent such a showing, the States support the alternative of reinstating the scope of the 2017 STAA provisions.

*Hydrofluoric acid provisions.* The States and Municipalities support EPA's choice in the Proposed Rule to require STAA for all petroleum refineries using hydrofluoric acid (hydrogen fluoride, in its gaseous state) ("HF") in their alkylation processes. But the history of releases and near-releases of hydrofluoric acid from refineries and the extraordinary harm that could come from a catastrophic release of the chemical demonstrate the need for EPA to take even stronger steps than are in the current Proposed Rule to accelerate the elimination of alkylation using hydrofluoric acid.

As discussed above, the States and Municipalities urge EPA to extend the STAA provisions of Proposed 40 C.F.R. § 68.67(c)(9) to all refineries, chemical plants and paper and pulp plants. Those provisions, however, are not strong enough to drive refineries still using hydrofluoric acid to employ safer alternatives. We recommend that EPA require each of those refineries to conduct more comprehensive and robust evaluation of alternatives to hydrofluoric acid alkylation than is required in the Proposed Rule. Local agencies and the CSB have done much to promote hydrofluoric acid safety, but only EPA can effectively compel the industrywide effort needed to eliminate hydrofluoric acid alkylation nationwide.

<sup>&</sup>lt;sup>77</sup> Compare 87 Fed. Reg. at 53,560, tbl. 2 (estimating it will cost facilities \$51.8 million annually (in 2020 dollars) to comply with Proposed Rule's STAA provisions) *with* 82 Fed. Reg. at 4597, tbl. 2 (estimating it would have cost \$70 million annually (in 2015 dollars) to comply with Chemical Disaster Rule's STAA provisions).

From the outset of the federal RMP program, hydrofluoric acid has been a significant concern. In the 1990 Clean Air Act amendments, Congress specifically directed EPA to study the "potential hazards of hydrofluoric acid . . . considering a range of events including worst-case accidental releases and . . . make [appropriate] recommendations to Congress."<sup>78</sup> 42 U.S.C. § 7412(n)(6). That "Hydrogen Fluoride Study," which EPA finalized in 1993, described the chemical's extraordinary hazard:

HF can travel significant distances downwind as a dense vapor and aerosol under certain accidental release conditions. Because HF can exist as an aerosol, the cloud can contain a substantially greater quantity of the chemical than otherwise would be the case. Thus, the potentially high concentration of HF in these dense vapor and aerosol clouds could pose a significant threat to the public, especially in those instances where HF is handled at facilities located in densely populated areas.<sup>79</sup>

Since EPA issued the Hydrogen Fluoride Study, the risk of a catastrophic release of the chemical has become increasingly clear to regulators and increasingly terrifying to the communities near refineries that continue to use it.<sup>80</sup> The Proposed Rule acknowledges

<sup>&</sup>lt;sup>78</sup> Congressman Levine (CA) referred to "the problem . . . of hydrofluoric acid . . . a chemical which can form a deadly cloud that travels for miles in the instance of a worst case release." A Legislative History of the Clean Air Act Amendments of 1990 at 1392.

<sup>&</sup>lt;sup>79</sup> United States Environmental Protection Agency, *Hydrogen Fluoride Study*, 123 (1993) (*Hydrogen Fluoride Study*) https://nepis.epa.gov/Exe/ZyPURL.cgi?Dockey=10003920.txt.

<sup>&</sup>lt;sup>80</sup> Nick Green, Wisconsin refinery fire a cautionary tale for South Bay, local activists say, Daily Breeze (Apr. 27, 2018),

https://www.dailybreeze.com/2018/04/27/wisconsin-refinery-fire-a-cautionary-talefor-south-bay-local-activists-say/; Danielle Keating, 3 Years After An Explosion Rocked Wisconsin's Only Refinery, Superior Is Still Waiting For Answers, Wisconsin

that hydrofluoric acid "is an extremely toxic chemical that is lethal at 30 parts per million (ppm)" and discusses three recent incidents where a catastrophic release of the chemical was narrowly averted. 87 Fed. Reg. at 53,576.<sup>81</sup>

The States and Municipalities have experienced serious accidents that caused or nearly caused the release of hydrofluoric acid. Three stand out. A 2015 explosion at the Torrance, California refinery spread debris, narrowly missing two tanks containing hydrofluoric acid. A 2018 explosion at the Husky Superior Energy refinery in Wisconsin similarly scattered debris near a tank storing hydrofluoric acid and injured more than a dozen employees. Just two months later, a leak of hydrogen fluoride and propane occurred at the Philadelphia Energy Solutions (PES) refinery in South Philadelphia, creating a ground-hugging cloud that ignited, resulting in several violent explosions that destroyed much of the refinery.<sup>82</sup> The communities near refineries in our jurisdictions and around the country that use hydrofluoric acid continue to endure the tremendous fear that an even more tragic release could occur within their communities at any time.

It is EPA's responsibility to pave the way for the elimination of hydrofluoric acid alkylation. That Congress recognized the threat from the chemical as a national problem is evident from its mandate that EPA prepare the Hydrogen Fluoride Study "for those regions of the country which do not have comprehensive health and safety regulations with respect to hydrofluoric acid." 42 U.S.C. § 7412(n)(6).

Public Radio (Apr. 28, 2021), <u>https://www.wpr.org/3-years-after-explosion-rocked-wisconsins-only-</u> refinery-superior-still-waiting-answers.

<sup>&</sup>lt;sup>81</sup> See also United Steelworkers, A Risk Too Great: Hydrofluoric Acid in U.S. Refineries (April 2013), <u>https://www.usw.org/workplaces/oil/oil-reports/ARisk-Too-Great.pdf</u>, cited at 87 Fed. Reg. at 53,576.

<sup>&</sup>lt;sup>82</sup> The Torrance, Husky, and the Philadelphia Energy Solutions accidents were discussed in detail in two previous submissions from many of the States and Municipalities to EPA: States and Municipalities' Supp. Comments and States and Municipalities' Petition for Reconsideration. *See Attachments 2 and 3*.

Two decades later, the threat of a hydrofluoric acid release remains a national problem, leading the CSB, in 2019, to call on EPA to update the Hydrogen Fluoride Study and determine, *inter alia*, "whether there are commercially viable, inherently safer alkylation technologies for use in petroleum refineries."<sup>83</sup> CSB noted that doing so was "fully within the authority and responsibility of the EPA pursuant to the newly adopted [Chemical Disaster Rule] Risk Management Plan (RMP) Rule (40 CFR Part 68.67) as well as through its General Duty Clause." *Id*.

The Proposed Rule likewise acknowledges that hydrofluoric acid alkylation is a national hazard, noting that 45 of the 163 petroleum refineries in the U.S., roughly one in four, use hydrofluoric acid in their alkylation process. *Id.* Twelve of those 45 are located in the States and Municipalities.

Because of its unique responsibility, EPA should use this rulemaking to impose a robust safer technology protocol that will drive the remaining hydrofluoric acid-using refineries to identify and implement safer alternatives. As discussed below, the CSB, and local agencies, such as California's South Coast Air Quality Management District (SCAQMD), have responded to specific accidents and made substantial progress, but their experience shows why only EPA can compel nationwide identification and implementation of safe alternatives to hydrofluoric acid alkylation.

Start with the CSB, which investigates chemical accidents but has no regulatory authority. The 2015 explosion and fire at the Torrance Refinery occurred in the refinery's electrostatic precipitator, adjacent to but not part of the alkylation unit. Debris from the explosion, including large pieces of concrete, came with a few feet of the hydrofluoric acid storage tanks. A slightly more powerful explosion would have caused a catastrophic release. The CSB therefore sought in its investigation to examine the consequences of a direct hit to consider, for example,

<sup>&</sup>lt;sup>83</sup> Letter from Kulinowski, K, Interim Executive, CSB, to Wheeler, A., Administrator, EPA, April 23, 2019, *See* Att. 2, Exh. B at 3.

whether the two units should be so close together.<sup>84</sup> ExxonMobil, thenowner of the refinery, refused to comply with subpoenas for information about hydrofluoric acid, arguing that information was unrelated to the root cause of the explosion. *U.S. v. Exxon Mobil Corp.*, 943 F. 3d 1283 (9th Cir. 2019). Although CSB ultimately prevailed and obtained the information, the incident shows industry's resistance to providing information about hydrofluoric acid alkylation, even after a near, likelycatastrophic, release of hydrofluoric acid and the need for EPA to promote safer alkylation technologies.

The CSB is still investigating the Husky Refinery Explosion, but as noted above, in 2019, it called on EPA to update the Hydrogen Fluoride Study and determine whether there were yet viable, inherently safer alkylation technologies available.

The CSB also investigated the PES accident; its 2022 report included its strongest endorsement of alternatives to hydrofluoric acid alkylation. The CSB evaluated inherently safer design options for refineries currently using hydrofluoric acid and concluded that "[u]sing a sulfuric acid catalyst or other new alkylation technologies . . . could prevent off-site human exposure to toxic chemicals in the event of future loss-of-containment events, fires, and explosions in refinery alkylation units."<sup>85</sup> It identified four alternative technologies, three of which were already in use.<sup>86</sup> The CSB concluded that safer technologies are being developed, one of which is "now operating at commercial scale" and that "the continued development and use of alternative alkylation technologies can prevent future releases of toxic HF from

<sup>85</sup> CSB, Fire and Explosions at Philadelphia Energy Solutions Refinery Hydrofluoric Acid Alkylation Unit, 66, 69-72 (Oct. 11, 2022), <u>https://www.csb.gov/assets/1/6/pes\_final\_report\_published\_october\_2022.pdf</u> (discussing these approaches). The CSB's October 2022 PES incident report is attached as **Attachment 6**.

<sup>86</sup> Id. at 69.

<sup>&</sup>lt;sup>84</sup> CSB, *ExxonMobil Refinery Explosion*, 50-51 (May 2017), <u>https://www.csb.gov/exxonmobil-refinery-explosion-/</u>. The report is attached as *Attachment 5*.

refinery alkylation units." *Id.* And, as discussed below, the CSB ended its PES report calling for EPA to push harder for safer alternatives to hydrofluoric acid alkylation.

The CSB's PES investigation also showed the limits to measures merely reducing the harm from hydrofluoric acid alkylation. The PES explosion was devastating. Five workers and a firefighter experienced injuries during the incident and response.<sup>87</sup> The accident resulted in an estimated property damage loss of \$750 million, the third-largest refinery loss worldwide since 1974.<sup>88</sup>

Regarding off-site impacts, the CSB noted that modeling of the release performed by FEMA showed that "significant HF [concentration] was unlikely to have crossed the facility's perimeter."<sup>89</sup> However, the CSB cautioned that "a specific set of circumstances contributed to the modeled low HF concentration offsite during the event, but that these specific circumstances will not always be present during releases of HF."<sup>90</sup> Thus, as U.S. Senators Baldwin, Klobuchar, Smith, Booker, and Menendez remarked in a letter sent to the EPA Administrator shortly after the accident, "hundreds of thousands of people in the densely populated area near the refinery could have been injured or killed." Att. 6, Ex. C at 1.

The CSB also evaluated three common safety measures employed at alkylation units that use hydrofluoric acid—rapid acid de-inventory (RAD) systems, water spray systems, and the use of an additive in the hydrofluoric acid to lower the amount of the chemical that becomes vapor upon release—the first two of which were used at PES. Att. 6 at 60-61. CSB concluded that although the RAD system did work to significantly limit the amount of hydrogen fluoride released, the water

<sup>90</sup> *Id.*; *see also id.* at 52-53 (discussing 1987 hydrogen fluoride release from Texas refinery that harmed about 1,000 people living in nearby residences) and 57 (discussing 2012 hydrogen fluoride release from South Korea facility that killed five workers and injured about 12,000 people living nearby).

<sup>&</sup>lt;sup>87</sup> Id. at 6.

<sup>&</sup>lt;sup>88</sup> Id.

<sup>&</sup>lt;sup>89</sup> *Id.* at 24 n.a.

spray system was rendered largely ineffective as a result of damage from the explosion. *Id.* at 61. And both of these are considered "active" measures that require a person or technology to trigger their activation, and therefore have the potential to fail in major incidents involving fires and explosions. *Id.* 

The experience of California's local air district in southern California, the SCAQMD, in promoting alternatives to hydrofluoric acid further demonstrates that while incremental improvements in safety at the local level are possible, local agencies themselves are unlikely to compel the implementation of safer alternatives to hydrofluoric acid alkylation. The SCAQMD first considered banning hydrofluoric acid alkylation in 1990, following the 1988 explosion and fire at the Torrance Refinery. The SCAQMD passed a motion to adopt a rule that prohibited oil refineries from using or storing hydrofluoric acid after January 1, 1998 unless the physical characteristics of hydrofluoric acid were reduced to levels specified in the rule. Ultramar, Inc. v. South Coast Air Quality Management District, 17 Cal. App. 4th 689, 697 (1993) (upholding the SCAQMD's authority to adopt that rule). Ultimately, however, the SCAQMD did not phase out hydrofluoric acid; instead, it allowed the refineries to convert to a modified form of hydrofluoric acid, commonly called "MHF," which the refiners assured the agency was much safer than pure hydrofluoric acid. That assurance was never substantiated. Neither the CSB nor the SCAQMD has received evidence that MHF is substantially safer than unmodified hydrofluoric acid.<sup>91</sup>

The switch to MHF did not provide sufficient safety and following the 2015 explosion at the Torrance Refinery that involved a near-miss release of hydrofluoric acid, the SCAQMD resumed consideration of a phase out of the chemical. The agency comprehensively studied

<sup>91</sup> The CSB's attempt to get data showing the alleged safety of MHF is described in a Ninth Circuit case upholding the CSB's subpoena authority. *U.S. v. Exxon Mobil Corp.*, 943 F. 3d 1283, 1289 (9th Cir. 2019). The SCAQMD conclusions are described in the February 1, 2019, Status Update on PR 1410 –Hydrogen Fluoride Storage and Use at Petroleum Refineries, at 22, <u>http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposedrules/rule-1410.</u> alternatives to the use of hydrofluoric acid and the risks associated with a release.<sup>92</sup> At the conclusion of the investigation, the SCAQMD staff was prepared to develop a rule that would give the refineries one final chance to demonstrate the safety of HF or endure a complete phase-out of its use.<sup>93</sup> Instead, however, on September 6, 2019, the SCAQMD agreed to accept commitments from the refineries to implement further harm mitigation measures. *See* SCAQMD Resolution 1919.<sup>94</sup>

Those mitigation measures, however, fall low in the safer technology hierarchy specified in the Proposed Rule. 87 Fed. Reg. at 53,575. The measures include enhanced monitoring, improved responses to a hydrogen fluoride release, such as a water curtain, and physical barriers to protect the hydrofluoric acid storage tanks from projectiles, such as those resulting from the explosions at the Torrance and Husky refineries.<sup>95</sup> Even if they provide some additional safety, none of the measures would qualify as inherently safer technology or design, most could not even be described as passive safeguards. They would at best be considered active safeguards and more likely procedural safeguards, at the bottom of the safety hierarchy.

In short, though the SCAQMD has successfully pushed the two hydrofluoric acid-using refineries in Southern California—the Torrance Refinery and the Valero (formerly Ultramar) Refinery in Wilmington to adopt additional hydrofluoric acid safety measures, its experience

<sup>&</sup>lt;sup>92</sup> See <u>http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1410</u>. The SCAQMD staff and governing board received detailed presentation and reports from the two refineries, commissioned a detailed economic study of alternatives to HF alkylation and thoroughly investigated the efficacy of measures to mitigate the consequences of an HF release. *Id*.

<sup>&</sup>lt;sup>93</sup> February 1, 2019, Status Update on PR 1410 –Hydrogen Fluoride Storage and Use at Petroleum Refineries, at 37, <u>http://www.aqmd.gov/home/rules-</u> <u>compliance/rules/scaqmd-rule-book/proposed-rules/rule-1410.alkylation</u>

<sup>&</sup>lt;sup>94</sup> www.aqmd.gov/home/research/documents-reports/hf-at-refineries

<sup>&</sup>lt;sup>95</sup> SCAQMD, Status Update[s] to the South Coast AQMD Refinery Committee on Implementation of Hydrogen Fluoride Safety Enhancements in Proffer Letters for Torrance Refining Company and Valero Refinery, dated December 2020 and March 2022, <u>www.aqmd.gov/home/research/documents-reports/hf-at-refineries</u>.

shows that that a strong national STAA standard is necessary to ensure refineries develop and implement true alternatives to hydrofluoric acid alkylation.

Further, SCAQMD's investigations, like those of the CSB, have reported progress in alternative alkylation technologies, indicating that robust STAA provisions for hydrofluoric acid alkylation would accelerate the ultimate elimination of hydrofluoric acid at refineries. In 2016, SCAQMD commissioned an economic study of alternatives to hydrofluoric acid, which identified only two alternative technologies sufficiently developed to support conversion of an existing hydrofluoric acid alkylation unit, one of which was sulfuric acid alkylation, which presents its own safety problems.<sup>96</sup> More promising, SCAQMD reports issued in 2020 and 2022 showed significant progress in alternatives to hydrofluoric acid alkylation.<sup>97</sup> The 2020 report discussed Ionic Liquid Alkylation, which Chevron had implemented at a Utah refinery, and Ionikylation, which had been implemented at six refineries in China. By the 2022 report, a refinery in Utah was preparing to replace its hydrofluoric acid alkylation with Ionic Liquid Alkylation and a Turkish refinery was in talks to adopt Ionic Liquid Alkylation as well.

In sum, the history of hydrofluoric acid releases and near-releases at refineries shows both that EPA can best drive the eventual phase out of hydrofluoric acid alkylation, but also that the groundwork is laid for EPA to take that action. In its final report on the PES explosion, the CSB made several recommendations to EPA, including that the agency:

• Develop a program that prioritizes and emphasizes inspections of refinery hydrofluoric acid alkylation units.

<sup>&</sup>lt;sup>96</sup> Norton Engineering, Alkylation Technology Study, (September 9, 2016) at 38, <u>http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/rule-1410</u>. A copy of the study is attached as *Attachment* 7.

<sup>&</sup>lt;sup>97</sup> SCAQMD, Status Update[s] to the South Coast AQMD Refinery Committee on Implementation of Hydrogen Fluoride Safety Enhancements in Proffer Letters for Torrance Refining Company and Valero Refinery, dated December 2020 and March 2022, <u>www.aqmd.gov/home/research/documents-reports/hf-at-refineries</u>. Copies of these documents are attached as *Attachment 8* and *Attachment 9*.

Such a program should verify that facilities are complying with industry standards for inspecting all individual carbon steel piping components to identify areas of accelerated corrosion, protect critical safeguards from fire and explosion hazards, and install remotely-operated emergency isolation valves on all hydrofluoric acid containing vessels. Att. 6 at 8.

• Revise RMP regulations to require refineries with hydrofluoric acid alkylation units to conduct safer technology and alternatives analysis and to evaluate the practicability of any inherently safer technology identified. *Id.* "Because alternative and safer alkylation technologies exist, as described in this report, the CSB determined that it is critical that petroleum refineries evaluate the applicability of these technologies for implementation in existing HF alkylation units." *Id.* at 75.

The States and Municipalities endorse those recommendations and suggest these specific augmentations of the STAA requirements as they apply to hydrofluoric acid alkylation:

- As part of each process hazard analysis, the owner/operator shall identify all alternative alkylation technologies—or other inherently safer designs or inherently safer technologies—that are currently in operation and identify all refineries where that technology is in use or is being implemented. The owner/operator must gather enough information about each alternative technology to evaluate the feasibility and practicability of implementing that inherently safer design or technology.
- For each inherently safer alternative to hydrofluoric acid alkylation, the owner/operator shall thoroughly determine and document the practicability of replacing hydrofluoric acid alkylation with that technology.
- For each technology, whether implemented or not, the owner/operator must include that documentation in its process hazard analysis and submit the full analysis to EPA,

which shall maintain a database of alternative alkylation technologies, with non-propriety information publicly available.

• The owner/operator shall comply with the assessment team requirements specified in section 68.67(9)(iii).

Implementation and reporting. The States and Municipalities have concerns with EPA's approach in the proposal concerning the implementation and reporting of measures identified in the STAA process. First, EPA is making implementation of any safer technologies or designs voluntary. Facilities subject to STAA need only "determine and document the practicability of the inherently safer technologies and designs considered." Proposed 40 C.F.R. § 68.67(c)(9)(ii). If a facility determines that a safer design or technology is "practicable," however, it is well within EPA's authority under the statute to require the facility to implement that measure. 42 U.S.C. § 7412(r)(7)(B). Therefore, EPA should require facilities that identify "practicable" measures in the STAA process to implement them. The Proposed Rule's definition of "practicability" already allows facilities to consider, among other things, "economic factors," but the agency should include additional regulatory text (or separate guidance) that fleshes out under what circumstances costs may make implementation of a STAA measure impracticable.

With respect to reporting of the results of STAA, the proposed regulatory text does not appear to require facilities to inform EPA, local officials, or fenceline communities about decisions rejecting the adoption of safer technologies or alternatives. Proposed 40 C.F.R. § 68.67(c)(9)(ii). Instead, facilities need only "document" their analysis. By contrast, facilities that decide to implement safer technologies or alternatives are required to "submit to EPA a description of the technology implemented." *Id.* EPA does not explain why facilities that choose *not to* adopt safer designs or technologies should be exempted from reporting those decisions to EPA. Requiring such reporting would both incentivize facilities to adequately justify any decisions not to adopt such measures and also would provide additional information to EPA on the development of safer technologies and alternatives in these industries. In addition, as with decisions not to adopt measures to mitigate natural hazards, power loss, and siting risks, facilities that choose not to adopt safer designs or technologies should be required to include those rejected alternatives together with justifications for not adopting them in their risk management plans. *See* Proposed 40 C.F.R. §§ 68.170(e)(7) & 68.175(e)(8). This change would be consistent with EPA's view that publicizing such decisions may result in community or public pressure on facilities that choose not to implement safer alternatives to reconsider. *See* 87 Fed. Reg. at 53,574 ("EPA believes that when local citizens have adequate information and knowledge about facility hazards, facility owners and operators may be motivated to further improve their safety in response to community pressure and oversight.").

#### 6. Root Cause Analysis

EPA is proposing to require all facilities with Program 2 and 3 processes to conduct a root cause analysis as part of an incident investigation for an RMP-reportable accident or a near miss under 40 C.F.R. § 68.42. Proposed 40 C.F.R. §§ 68.60(h)(2) (Program 2) & 68.81(h)(2) (Program 3). EPA proposes to define "root cause" as "a fundamental, underlying, system-related reason why an incident occurred." *Id.*, § 68.3 ("root cause"). Relatedly, EPA is proposing to require that owners or operators complete an incident investigation report as soon as reasonably practicable, but no later than 12 months after an RMP-reportable accident. *Id.*, § 68.60(h)(1).

The States and Municipalities support EPA's restoration of these provisions that the 2019 rule repealed. As EPA recognized in 2017, "including root cause information in incident investigation reports is vital for understanding the nature of these events." 82 Fed. Reg. at 4607. Moreover, root cause analysis can help address environmental injustices. For example, the Tyson Foods accident in Arkansas noted above happened, in part, because the safety labels were not accessible to workers with limited English proficiency. *See* Section D, *supra*. In addition to linguistic isolation, there are other examples of barriers that can help cause an incident at a RMP facility, such as when undocumented workers lack a safe way to report noncompliance.

The States and Municipalities support the 12-month requirement for completing incident reports as a needed improvement in light of EPA's finding of "situations where owners and operators of regulated facilities indefinitely delayed completing incident investigations." 87 Fed. Reg. at 53,583.

#### 7. Third-Party Audits

Compliance audits help to ensure a systematic evaluation of the full prevention program for all covered processes. 87 Fed. Reg. at 53,584. EPA's RMP general guidance explains, "An audit reviews each of the prevention program elements to ensure that they are up-to-date and are being implemented and will help you identify problem areas and take corrective actions." *Id.* But self-auditing may be insufficient to prevent accidents, determine compliance with RMP prevention program requirements, and ensure safe operation. *Id.* EPA and CSB have cited poor compliance audits as a contributing factor to the severity of past chemical accidents. 87 Fed. Reg. at 53,585. Thus, EPA has required third-party audits in enforcement settlement agreements. *Id.* Meanwhile, other federal programs require third-party audits in existing rules to ensure safe operations and that industry has also recognized the benefits of third-party auditing programs. *Id.* 

In the Chemical Disaster Rule, EPA added compliance audit provisions to require independent third-party compliance audits after an RMP-reportable accident or findings of significant non-compliance for facilities with Program 2 and 3 processes. 82 Fed. Reg. at 4609. EPA explained that independent third-party auditing can assist owners and operators determine whether the procedures and practices developed by owners or operators for the prevention program requirements are adequate and being followed. *Id.* at 4613.

The Rollback Rule rescinded the third-party compliance audit requirements. 87 Fed. Reg. at 53,585. But the decision to roll back the audit requirements was not based on a determination that third-party audits are not beneficial or justified in certain cases. *Id.* Rather, EPA stated this change would allow for coordination of process safety requirements with OSHA and to reduce unnecessary regulatory costs and burdens of a broad rule-based approach to third-party audits rather than a case-by-case approach. *Id.* 

EPA is now proposing to restore third-party auditing requirements of the Chemical Disaster Rule, but with significant limits. *Id.* at 53,586. Under the Proposed Rule, a third-party audit would only be required after two accidental releases meeting the criteria of Section 68.42 occur at a facility within a 5-year period. *Id.* EPA is also proposing that refineries and chemical manufacturing facilities that have had one RMP-reportable accident and are located within a 1-mile radius of a similar facility to conduct a third-party audit after a single accident. *Id.* 

The States and Municipalities support EPA restoring the thirdparty auditing requirements of the Chemical Disaster Rule. For example, Massachusetts has required third-party audits to ensure compliance as part of Clean Air Act section 112(r) enforcement settlements.<sup>98</sup> However, by limiting the Chemical Disaster Rule's thirdparty audit requirement so that it only triggers after a facility's second accidental release within a 5-year period, EPA is not preventing accidental releases to the maximum extent practicable. *Air All. Houston*, 906 F.3d at 1062. It is axiomatic that a single chemical disaster can have serious consequences and workers, communities, and first responders should not have to suffer through two chemical disasters before action is taken. All facilities with Program 2 and 3 processes should be required to conduct a third-party audit after one accidental release or discovery of significant non-compliance, as was the case under the Chemical Disaster Rule.

<sup>&</sup>lt;sup>98</sup> Motion for Entry of Consent Decree, Commonwealth of Massachusetts v. C.L. Hauthaway & Sons Corp., (Jan. 20, 2021) 1:20-cv-12183-PBS (D. Mass.).

### 8. Employee Participation

EPA is proposing to add additional regulatory provisions to the employee participation requirements for owners and operators of regulated facilities with Program 2 and 3 processes. 87 Fed. Reg. at 53,588. EPA is specifically proposing to require employers to consult with employees when making decisions on implementing recommendations from process hazard analyses, compliance audits, and incident investigations; provide employees the opportunity to stop work under certain circumstances; and provide opportunities for employees to report late or unreported accidents and other areas of RMP noncompliance to EPA and other relevant authorities. *Id.* EPA is proposing these provisions so that owners and operators without strong employee participation programs will have further measures in place to ensure process safety and to prevent or minimize accidental releases of hazardous substances. *Id.* 

The States and Municipalities support EPA's proposal to improve worker participation at RMP facilities. The direct participation and involvement of workers in ensuring and advancing the safety of process operations are critical for protecting worker safety, communities, and the environment. *Id.* at 53,587. The CSB has recognized that ineffective worker participation can be a contributing factor to chemical disasters if workers and their representatives are not properly engaged in process operations to help identify and mitigate hazards and reduce risks. *Id.* 

However, EPA should further improve worker participation in several ways. For example, instead of only requiring employers to consult with employees, EPA should require employers to give employees and/or their representatives a seat at the decision-making table in developing risk management plans to ensure that employee perspectives are incorporated. Employees should also be provided with access to all documents and information pertaining to the facility's risk management plan. For example, Massachusetts has found that facilities gain substantial benefits from engaging employees in the planning process, including financial savings and improvements in health and safety.<sup>99</sup> And, as discussed in Section D above, employers that receive federal financial assistance are required to translate risk management plans and ensure safety materials are accessible to employees with limited English proficiency.

In addition, the "stop work authority"—which will require facilities to implement processes so that employees may refuse to perform a task when doing so may result in a catastrophic release—only applies to Program 3 facilities. 87 Fed. Reg. at 53,591-92. EPA should require that all Program 2 and 3 facilities implement stop work authority processes. Furthermore, EPA should require facilities and relevant agencies to provide training and resources so that workers and their representatives can fully utilize stop work authority. These improvements would help prevent accidental releases to the maximum extent practicable. *Air All. Houston*, 906 F.3d at 1062.

## 9. Proposed Modifications and Amplifications to Emergency Response Requirements

EPA is proposing to amend 40 C.F.R. § 68.90(b) by adding a requirement that an RMP facility owner/operator designate its facility as a non-responding facility. 87 Fed. Reg. at 53,596. The proposed provision would require facilities to develop and implement, as necessary, procedures for informing the public and the appropriate federal, state, and local emergency response agencies about accidental releases of RMP-regulated substances and ensure that a community notification system is in place to warn the public within the area threatened by a release. *Id*.

EPA is also proposing that these notification procedures be made available by the facility upon request to the public living in close proximity (within approximately 6 miles) to RMP facilities, to help ensure that members of the public are aware of the steps that facilities have taken to notify them when a release occurs. *Id*.

<sup>&</sup>lt;sup>99</sup> Massey, Rachel I, Program assessment at the 20-year mark: experiences of Massachusetts companies and communities with the Toxics Use Reduction Act (TURA) program, Journal of Cleaner Production 19, 505 (Aug. 11, 2010).

EPA is also proposing to amend 40 C.F.R. §§ 68.90(b)(3) and 68.95(c) to require facilities to provide to the public and the appropriate federal, state, and local emergency response agencies initial RMP accidental release information during releases. 87 Fed. Reg. at 53,597. Specifically, EPA is proposing that whichever method is used to detect accidental releases, the facility—regardless of responding status—must ensure that the public is promptly notified by the method outlined in the facility's emergency response plan in coordination with local responders. *Id.* Facilities should do this by providing appropriate, timely data and information to local responders, and detailing the current understanding and best estimates of the nature of the release. *Id.* 

EPA is also proposing to explicitly state the required provisions of the community response plan in the RMP regulatory text. *Id.* at 53,598. EPA would expect the facility to discuss the community plan with appropriate local emergency response officials as part of the facility's coordination activities. *Id.* Only if the plan was clearly deficient would EPA consider any action against the facility for relying on it for response. *Id.* 

The States and Municipalities support requiring facilities to develop procedures to inform the public and appropriate government authorities about accidental releases and ensure that a community notification system is in place to warn the public. Current incident notification procedures are inadequate, with some community members not learning about a release until hours afterward. EPA's proposal will help hold owners and operators accountable by requiring all facilities to improve their emergency response plans.

However, EPA should require that facilities develop these procedures with community input so that the facilities can be informed about what public engagement measures would be most accessible and timely for the public. Historically, facilities have not adequately accounted for the specific access and timing needs of nearby communities and EPA's proposal seems to disregard that context. EPA should also explicitly require that facilities provide emergency response notifications in Spanish and other languages appropriate for the surrounding community. Furthermore, the States and Municipalities are concerned that the proposal's within 6-mile residency requirement creates an unnecessary obstacle to accessing information that could undermine EPA's goal to address environmental injustice. It is unclear how EPA expects fenceline communities, especially residents who do not have a trusting relationship with government authorities, a home address, or are undocumented, to demonstrate their residency.

The States and Municipalities also note that FEMA has established the Integrated Public Alert & Warning System for community notification, which provides authenticated emergency and life-saving information to the public through mobile phones using wireless emergency alerts. 87 Fed. Reg. at 53,597. It also provides alerts to radio and television via the Emergency Alert System and on the National Oceanic and Atmospheric Administration's Weather Radio. *Id.* The Emergency Alert System devices found at radio, TV and cable stations can support multiple languages and wireless emergency alerts can support both English and Spanish. *Id.* 

The States and Municipalities urge EPA to require RMP facilities and emergency responders to comply with a checklist of measures and procedures that address the needs that individuals with limited English proficiency working at and living near RMP facilities to effectively access RMP procedures and protections. The Department of Justice Civil Rights Division's Federal Coordination and Compliance Section's guide entitled *Tips and Tools for Reaching Limited English Proficient Communities in Emergency Preparedness, Response, and Recovery* provides tools that EPA should consider requiring for all RMP facilities, including:

- reviewing and translating public-facing materials to ensure vital documents remain accessible during a disaster or emergency.
- incorporating the concept of "access and functional needs," (sometimes referred to as "at-risk" or "vulnerable") populations into their disaster preparedness plans to address the access

and functional needs of persons with limited English proficiency, individuals with disabilities, those without access to transportation, children, and the elderly.

- practicing how to translate and distribute translated media alerts, issue multilingual evacuation announcements, work with interpreters, and other critical communications to reach individuals with limited English proficiency.
- coordinating with non-English media—in television, print, and radio, as well as through online platforms and social media—to assist with sharing emergency information to individuals with limited English proficiency in nearby areas.

The presence of state and/or local alerting authorities—with the designated authority to alert and warn the public when there is an impending natural or human-made disaster, threat, or dangerous or missing person—in all 50 states provides, in many instances, the necessary infrastructure for facilities to ensure that a community notification system is operational within any impact zones of releases that occur from their facility. 87 Fed. Reg. at 53,597. However, EPA should consider that this notification system may not be appropriate for all communities, including those that are dealing with systemic barriers to safety and justice, do not have reliable internet access, or lack English proficiency.<sup>100</sup>

<sup>&</sup>lt;sup>100</sup> For example, in February 2022, citing the deadly aftermath of Hurricane Ida in New York City, which disproportionately affected immigrants from Asia with limited English proficiency, New York Attorney General Letitia James sent a letter to the National Weather Service calling for increased language accessibility. <u>https://ag.ny.gov/sites/default/files/nyag\_james\_letter\_to\_commerce\_secretary\_natio\_nal\_weather\_service\_acting\_director\_2-23-2022.pdf</u>, In October 2022, Attorney General James sent a letter to Federal Communications Commission Chairperson Jessica Rosenworcel and President and CEO of CTIA (the Wireless Association) Meredith Attwell Baker, urging them to work together to expand language accessibility for severe weather alerts. *See* 

https://ag.ny.gov/sites/default/files/ag\_james\_letter\_to\_fcc\_and\_wireless\_industry\_re\_\_alerts\_10-26-2022.pdf.

## 10. Emergency Response Exercises

EPA is proposing to revise 40 C.F.R. § 68.96(b)(1)(i) to require all facilities with Program 2 and 3 processes and subject to the emergency response program requirements of subpart E (i.e., the responding stationary source), at a minimum, conduct field exercises involving a simulated accidental release of a regulated substance once every 10 years, unless local responders indicate that frequency is infeasible. 87 Fed. Reg. at 53,598. EPA is also proposing to amend 40 C.F.R. § 68.96(b)(3) to require that the current recommended field and tabletop exercise evaluation report components be mandatory. 87 Fed. Reg. at 53,598.

The States and Municipalities support restoring the emergency response program requirements, including requiring certain facilities to conduct field exercises. Field exercises can help reduce accident impacts by ensuring that emergency response personnel understand their roles in the event of an incident, that local responders are familiar with the hazards at a facility, and that emergency response plans are up to date. 87 Fed. Reg. at 53,598. The States and Municipalities further support requiring that the current recommended field and tabletop exercise evaluation report components be mandatory. *Id*.

## 11. Information Availability

The Chemical Disaster Rule added new information availability requirements, including the requirement for the owner or operator to provide—within 45 days of receiving a request by any member of the public—specified chemical hazard information for all RMP-regulated processes. 87 Fed. Reg. at 53,600. The provision required the owner or operator to provide ongoing notification on a company website, on social media platforms, or though other publicly accessible means such that the information is available to the public upon request, along with the information elements that may be requested and instructions for how to request the information. *Id*.

In the Rollback Rule, EPA removed these requirements supposedly because of a risk-benefit calculation, observing that much

RMP information was available through other means while widespread anonymous access to the consolidated information posed potential security risks. 84 Fed. Reg. at 69,887.

EPA is proposing to amend 40 C.F.R. § 68.210 to allow the public to request information similar to the Chemical Disaster Rule, but limits access by requiring residents to show that they reside within 6 miles of a facility. 87 Fed. Reg. at 53,599. Having received such a request, the facility would be required to provide certain chemical hazard information and access to community emergency preparedness information. *Id*.

The States and Municipalities continue to support improving access to chemical hazard information. As EPA has found, "public disclosure of risk management plan information would likely lead to a reduction in the number and severity of accidents." 87 Fed. Reg. at 53,601. Furthermore, "comparisons between facilities, processes and industries would likely lead industry to make changes and would stimulate dialogue among facilities, the public, and local officials to reduce chemical accident risks." *Id.* In addition, given the opportunity, the public would use hazard information to take action, leading to risk reduction, as demonstrated by the reduction in emissions following publicly available TRI information. *Id.* 

EPA's proposal, however, does not provide sufficient access to chemical hazard information. The proposal only allows people living within six miles of a facility to request specific information from the facility. EPA's approach assumes that community members are aware that they live near an RMP facility when that is often not the case. As EPA acknowledges elsewhere, the proposal does not resolve the serious concern that fenceline communities often have no idea that they live near RMP facilities. *Id*.

Furthermore, the proposal creates an unnecessary obstacle to obtaining information by requiring that community members affirmatively demonstrate that they live within 6 miles of a facility. As mentioned above, the States and Municipalities are concerned that the proposal's within 6-mile residency requirement creates an unnecessary obstacle to accessing information that could undermine EPA's goal to address environmental injustice. It is unclear how EPA expects fenceline communities, especially residents who do not have a trusting relationship with government authorities, a home address, or are undocumented, to demonstrate their residency. Furthermore, this information should be accessible to others who may not live within six miles of a facility including States' attorneys general and nongovernmental organizations. EPA should eliminate the proposed 6-mile residency requirement and reinstate the information availability requirements of the Chemical Disaster Rule.

In addition, EPA should create a public, multi-lingual online database where any member of the public can access pertinent information from facilities' Risk Management Plans. This would include the facilities' list of chemicals used, hazard analyses, and emergency response plans. Although EPA contemplates improving access to chemical hazard information at a prospective date, *id.* at 53,602, communities need access to information now. Currently, accessing RMP information is far too difficult. Federal reading rooms are not a realistic avenue for public access to information, nor are requests to local emergency response officials. *Id.* at 53,601.

Although EPA says the 6-mile residency requirement balances information availability to communities with security concerns, *id.* at 53,600, EPA points to no record evidence that improved disclosure of chemical hazard information will lead to security issues. Indeed, as EPA recognizes, accidental releases occur much more often than intentional events. EPA should improve information access to prevent accidental releases to the maximum extent practicable. *Air All. Houston*, 906 F.3d at 1062.

## 13. Regulatory Impact Analysis

EPA's Regulatory Impact Analysis further demonstrates the reasonableness of the Proposed Rule. The Agency estimates the total costs of the rule at \$751.8 million over ten years, or about \$75 million on an annual basis. 87 Fed. Reg. at 53,561. The agency found that accidents at RMP facilities result in damages totaling \$477.3 million per year, which include \$434 million in on-site damages and \$43.3 million in off-site damages. *Id.* at 53,562. With respect to benefits of the rule, EPA anticipates that the rule would result in a reduced frequency and magnitude of damages from releases, including quantified damages such as fatalities, injuries, property damage, hospitalizations, medical treatment, and sheltering-in-place. *Id.* In addition, the agency expects that the rule would reduce baseline damages that are not quantified, such as lost productivity, responder costs, property value reductions, and damages from catastrophes. *Id.*<sup>101</sup>

EPA is not required under the statute to demonstrate that the benefits of a rule are expected to exceed its costs (much less show that the quantified benefits of a rule will exceed its costs). Instead, Congress directed the agency to promulgate "reasonable regulations" that prevent accidents "to the greatest extent practicable." 42 U.S.C. § 7412(r)(7)(B). In light of the proposed rule's relatively low annual cost and substantial benefits to workers and fenceline communities, it easily meets these criteria.

The agency's breakeven analysis further demonstrates the reasonableness of the proposed rule. As EPA explains, the proposed rule would need to reduce annual damages by about \$76 million annually to achieve the breakeven point. RIA at 60. Alternatively, the proposed rule would need to prevent about 15 accidents a year (with an average accident conservatively valued at \$5 million) to break even. *See id.* In addition, given that one of the purposes of section 112(r) is to prevent or

<sup>&</sup>lt;sup>101</sup> See also EPA, Regulatory Impact Analysis Safer Communities by Chemical Accident Prevention Proposed Rule, 53 (Apr. 19, 2022) ("By lowering risks of accidents, the benefits of the proposed rule include reductions in the number of fatalities and injuries both onsite and offsite and residents evacuated or otherwise inconvenienced by sheltering in place; reductions in damage caused by property onsite and offsite of the facility including damages to product, equipment, and buildings; reductions in damages to the environment and ecosystems; and reductions in resources diverted to extinguish fires and clean up affected areas.").

substantially mitigate even one accident of this magnitude, the benefits generated would be dramatic." *Id.* at 61.

15. Other

## a. Compliance Deadlines

In modifications to 40 C.F.R. § 68.10, EPA is proposing to:

- Require compliance with STAA, incident investigation root cause analysis, third-party compliance audit, employee participation, emergency response public notification and exercise evaluation reports, and information availability provisions, unless otherwise stated, 3 years after the effective date of the final rule (i.e., Federal Register publication date).
- Require compliance with the revised emergency response field exercise frequency provision by March 15, 2027, or within 10 years of the date of an emergency response field exercise conducted between March 15, 2017, and August 31, 2022 in accordance with 40 C.F.R. § 68.96(b)(1)(ii).
- Allow regulated sources one additional year (i.e., four years after the effective date of the final rule) to update and resubmit risk management plans to reflect new and revised data elements.

87 Fed. Reg. at 53,606.

Section 112(r)(7) of the Clean Air Act authorizes EPA to set an effective date solely for purposes of "assuring compliance *as expeditiously as practicable*" with a rule's standards "for the prevention and detection of accidental releases of regulated substances and for response to such releases." 42 U.S.C. § 7412(r)(7)(A), (B) (emphasis added). The statutory language reflects Congress's intent that EPA ensure adequate safeguards are promptly put in place to protect workers and surrounding communities from releases of dangerous chemicals. The Senate Report makes this clear, noting that "requirements for new facilities may be applicable to facilities which begin construction at any time after the requirement is first proposed" and that "requirements which only mandate changes in procedure can be implemented by new and existing facilities almost immediately." S. Rep. No. 101-228, at 245 (101st Cong., 1st Sess. 1989-1990).

Here, as EPA recognizes, the Proposed Rule is not as extensive as developing a full RMP program under the 1996 rule. 87 Fed. Reg. at 53,606. Therefore, the Proposed Rule should contain shorter compliance deadlines as compared to the 1996 Rule. However, the Proposed Rule sets the same 3-year compliance period as the 1996 rule. Id. To assure compliance as expeditiously as practicable, and given that many of the Proposed Rule provisions "only mandate changes in procedure," the compliance period under the Proposed Rule must be shortened to two years for at least the emergency response public notification and exercise evaluation reports, employee participation, and information availability provisions. Cf. Union Elec. Co. v. EPA, 427 U.S. 246, 264 n.13 (1976) ("as expeditiously as practicable" entails consideration of "whether it is economically or technologically possible" to meet standard with "more rapid progress"); Ashton v. Pierce, 541 F. Supp. 635, 641 (D.D.C. 1982) (a rule "assur[es] compliance as expeditiously as practicable" when it directs regulated entities to comply with the rule as soon as those entities are able to "put into practice" their obligations).

## b. Adding Regulated Chemicals

Section 112(r)(3) of the Clean Air Act requires EPA to review the RMP-regulated substance list at least every five years. 87 Fed. Reg. at 53,607. EPA promulgated its initial list in 1994 and amended the list in 1998.<sup>102</sup> EPA acknowledges the need for reviewing the list of RMP-regulated substances but does not undertake such review in the Proposed Rule. *Id.* EPA states only that a priority chemical for EPA's upcoming review will be ammonium nitrate. *Id.* 

<sup>&</sup>lt;sup>102</sup> EPA, Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, 16 (Apr. 19, 2022).

Section 112(r)(3) and (4) of the Clean Air Act required EPA to develop a list of at least 100 substances that pose the greatest risk of death, injury, or serious adverse effect to human health and the environment in the event of an accidental release. Section 112(r)(3) of the Clean Air Act also provides that "[t]he list may be revised from time to time by the Administrator on the Administrator's own motion or by petition and shall be reviewed at least every 5 years."

As EPA recognizes, in the years since issuing the list rule and the amendments, incidents involving reactive chemicals and explosions and fires involving ammonium nitrate have led to continued questions about regulatory coverage of these chemicals. For the reasons set forth in Harris County's previous testimony, the States and Municipalities request that EPA expand the list of regulated substances to include reactive hazards, including ammonium nitrate.<sup>103</sup> As EPA recognizes, incidents involving ammonium nitrate are among the most severe and highest-profile accidental releases both in the United States and around the world.<sup>104</sup>

## c. Expanding Fenceline Monitoring

As EPA recognizes, the agency has the authority to require fenceline air monitoring.<sup>105</sup> In Clean Air Act section 112(r)(7)(A), EPA is specifically given authority "to promulgate release prevention, *detection*, *and correction* requirements which may include *monitoring*" (emphases added). Meanwhile, in section 112(r)(7)(B)(i), EPA is given authority to issue "reasonable regulations" for the "prevention and detection of accidental releases" and for the responses to such releases by owners and operators of stationary sources. Although EPA acknowledges the need for considering expanding fenceline monitoring at RMP-regulated

<sup>&</sup>lt;sup>103</sup> Testimony of Sarah Jane Utley, Environmental Division Director, Office of the Harris County Attorney Christian D. Menefee (July 30, 2021), <u>https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0312-0080</u>.

<sup>&</sup>lt;sup>104</sup> EPA, Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, at 17 (Apr. 19, 2022).

 $<sup>^{105}</sup>$  Id. at 25.

facilities, EPA did not require fenceline monitoring in the Proposed Rule. 87 Fed. Reg. at 53,607. Instead, EPA states that it is considering fenceline monitoring for a future action. *Id*.

EPA should require real-time fenceline air monitoring for air toxics at the most dangerous RMP facilities. Doing so will help fulfill EPA's mandate to prevent and mitigate accident consequences. Fenceline monitoring may assist in identifying an accidental release and in the event of an accidental release give the community immediate notice of the emergency and any necessary mitigation responses they should employ (shelter in place, close windows, evacuate, etc.), which would assist in limiting the consequences of a release. Fenceline air monitoring can also help communities advocate for vigorous enforcement of regulatory requirements; push companies to use safer chemicals; alert and educate friends, family members, and community members; and encourage the media to report on polluting facilities in their areas.<sup>106</sup> Also, as Harris County previously testified, not only would this data benefit communities, it would assist emergency response organizations when making emergency response decisions such as evacuations and shelter-in-place orders.<sup>107</sup> Furthermore, facilities can also use fenceline air monitoring information to take the initiative to improve safety at their operations.

The current monitoring of air toxics is inadequate and can readily be improved as recognized in a 2020 Government Accountability Office report.<sup>108</sup> According to a Reuters 2020 report, the government network of 3,900 monitoring devices nationwide has routinely missed major toxic

<sup>&</sup>lt;sup>106</sup> See, e.g., Union of Concerned Scientists, Environmental Justice for Delaware, at 18-19 (2017), <u>https://www.ucsusa.org/sites/default/files/attach/2017/10/ej-for-de-report-ucs-</u>2017.pdf.

<sup>&</sup>lt;sup>107</sup> Testimony of Sarah Jane Utley, Environmental Division Director, Office of the Harris County Attorney Christian D. Menefee (July 30, 2021), https://www.regulations.gov/comment/EPA-HQ-OLEM-2021-0312-0080.

<sup>&</sup>lt;sup>108</sup> Government Accountability Office, *Air Pollution: Opportunities to Better Sustain and Modernize the National Air Quality Monitoring System* (Nov. 12, 2020), <u>https://www.gao.gov/products/gao-21-38</u>.

releases and day-to-day pollution dangers.<sup>109</sup> In fact, Reuters reported that the network identified no risks from ten of the biggest refinery explosions over the past decade, including the Philadelphia refinery explosion.<sup>110</sup> Significantly, air monitoring is even worse during natural disasters and a 2019 EPA Office of Inspector General report called for EPA to improve its natural disaster air monitoring.<sup>111</sup>

As EPA recognizes, real-time fenceline monitoring has already been implemented in various jurisdictions and at various facilities.<sup>112</sup> For example, California adopted a refinery air monitoring statute, requiring local air districts and refineries to develop and implement air monitoring requirements at the fenceline of refineries and within adjacent communities by January 2020. (Assembly Bill 1647 (2017); Cal. Health & Safety Code section 42705.6). In the years that proceeded, the local air districts that have refineries in their jurisdictions each adopted rules implementing the air monitoring requirements. California's Office of Environmental Health Hazard Assessment (OEHHA) issued a report in 2019 on refinery chemical emissions that recommended which chemicals should be monitored. Of the 188 chemicals identified as emitted from California refineries, OEHAA identified 18 chemicals, many of which are RMP-regulated chemicals, as the top candidates for air monitoring based on their

<sup>&</sup>lt;sup>109</sup> Reuters, Special Report: U.S. Air Monitors Routinely Miss Pollution - Even Refinery Explosions (Dec. 2020), <u>https://www.reuters.com/article/usa-pollution-</u> <u>airmonitors-specialreport/special-report-u-s-air-monitors-routinely-miss-pollution-</u> <u>even-refinery-explosions-idUSKBN28B4RT</u>.

 $<sup>^{110}</sup>$  Id.

<sup>&</sup>lt;sup>111</sup> EPA Office of Inspector General, *EPA Needs to Improve Its Emergency Planning to Better Address Air Quality Concerns During Future Disasters* (Dec. 16, 2019), <u>https://www.epa.gov/office-inspector-general/report-epa-needs-improve-its-emergency-planning-better-address-air-quality</u>.

<sup>&</sup>lt;sup>112</sup> EPA, Technical Background Document for Notice of Proposed Rulemaking: Risk Management Programs Under the Clean Air Act, Section 112(r)(7) Safer Communities by Chemical Accident Prevention, 27 (Apr. 19, 2022).

toxicity, average levels of emissions from refineries statewide, and involvement in multiple refinery processes and incidences.<sup>113</sup>

The vast majority of refineries in California are located within three air districts: the Los Angeles region (South Coast Air Quality Management District), the Bay Area region (Bay Area Air Quality Management District), and the Central Valley region (San Joaquin Valley Air Pollution Control District, SJVAPCD). The refinery air monitoring statute adopted in 2017 directs the air districts to establish regulations implementing fenceline and community air monitoring at and around the state's refineries. The fenceline monitoring must include equipment that can detect or estimate the quantity of fugitive emissions, gas leaks, and other air emissions from refineries, and this data must be provided to the public as quickly as possible.<sup>114</sup> (Health & Saf. Code, § 42705.6, subds. (a)(2), (d).) Each district has imposed its own monitoring requirements, but there is some overlap in their approaches. Community groups represented by Earthjustice and the California Attorney General successfully sued SJVAPCD in 2020 regarding its adoption of refinery air monitoring rules that illegally exempted several refineries within its jurisdiction from complying with any of the air monitoring requirements prescribed by the refinery air monitoring statute. SJVAPCD adopted regulations in October 2022 without those exemptions as a result of the litigation.<sup>115</sup>

Recently, Earthjustice issued a report discussing some of the implementation challenges of the California refinery fenceline monitoring program and providing recommendations to fix these

<sup>113</sup> OEHHA, Analysis of Refinery Chemical Emissions and Health Effects at vi (Mar. 2019), https://oehha.ca.gov/media/downloads/faqs/refinerychemicalsreport032019.pdf.

<sup>114</sup> The community monitoring must be capable of measuring and recording "air pollutant concentrations in the ambient at or near sensitive receptor locations near a petroleum refinery, and that may be useful for estimating associated pollutant exposures and health risks and in determining trends in air pollutant levels over time." (Health & Saf. Code, § 42705.6, subd. (a)(1).)

<sup>&</sup>lt;sup>115</sup> <u>https://ww2.valleyair.org/air-quality-information/air-</u> monitoring/petroleum-refinery-air-monitoring/.

problems and strengthen the program.<sup>116</sup> EPA can look to California's program (and its critiques) and other programs to expeditiously develop real-time fenceline air monitoring requirements.

## Conclusion

The States and Municipalities support EPA's proposed restoration of important safeguards that were unjustifiably repealed in 2019. We also laud EPA's efforts in the rulemaking to directly address climate change threats and tackle environmental injustice. As detailed above, we urge EPA to finalize a strong rule that maintains these protections and also takes further steps to strengthen the proposal, consistent with the agency's statutory authority to prevent and mitigate chemical accidents "to the greatest extent practicable."

## Attachments

Attachment 1 – Legislative History Excerpts
Attachment 2 – States and Municipalities' Supplemental Comments
Attachment 3 – States and Municipalities' Petition for Reconsideration
Attachment 4 – State Laws and Regulations Concerning Natural
Hazards
Attachment 5 – CSB Torrance Refinery Investigation Report
Attachment 6 – CSB PES Investigation Report
Attachment 7 – Alkylation Technology Study
Attachment 8 – SCAQMD Status Update (December 2020)
Attachment 9 – SCAQMD Status Update (March 2022)

<sup>&</sup>lt;sup>116</sup> Earthjustice, Crossing the Fenceline: Critical Reforms to California's Petroleum Refinery Emissions Monitoring Law (2022), https://earthjustice.org/sites/default/files/files/fenceline\_2022.pdf#page=4.

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