#### UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

Accidental Release Prevention	)	Docket No. EPA-HQ-OEM-2015-0725
Requirements: Risk Management Programs	j	2010 1/00 2111 114 0211 2010 0/20
Under the Clean Air Act, Proposed Rule, 83	)	Via regulations.gov
Fed. Reg. 24,850 (May 30, 2018)	)	August 23, 2018
	)	

Comments of Air Alliance Houston, California Communities Against Toxics, Clean Air Council, Clean Wisconsin, Coalition For A Safe Environment, Colorado Latino Forum, Coming Clean, Community In-Power & Development Association, Del Amo Action Committee, Earthjustice, Environmental Integrity Project, Environmental Justice Health Alliance for Chemical Policy Reform, Louisiana Bucket Brigade, Ohio Valley Environmental Coalition, People Concerned About Chemical Safety, Sierra Club, Texas Environmental Justice Advocacy Services, Union of Concerned Scientists, Utah Physicians for a Healthy Environment, and Western Resource Advocates

#### Submitted by Earthjustice

On May 30, 2018, the U.S. Environmental Protection Agency ("EPA") published in the Federal Register a proposed rule entitled "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act," 83 Fed. Reg. 24,850 (May 30, 2018) (the "Rollback Rule"). The Rollback Rule would rescind or weaken almost all of the chemical disaster prevention and mitigation measures previously adopted by the agency in its January 2017 final rule, "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act," 82 Fed. Reg. 4594 (Jan. 13, 2017) (the "Chemical Disaster Rule"). Comments on the Rollback Rule were originally due July 30, 2018, but EPA extended this deadline to August 23, 2018, pursuant to a Notice of Data Availability. See "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act; Notification of Data Availability and Extension of Comment Period," 83 Fed. Reg. 34,967 (July 24, 2018). The undersigned groups submit the following comments to oppose EPA's proposed Rollback Rule. For reasons discussed herein and provided in the D.C. Circuit's decision vacating EPA's 2017 Delay Rule, EPA should withdraw, and not finalize, the proposed Rollback Rule. See Air Alliance Houston et al. v. EPA, No. 17-1155, Slip Op. (D.C. Cir. Aug. 17, 2018).

#### INTRODUCTION AND EXECUTIVE SUMMARY

We, the undersigned community, environmental justice, national environmental, and scientist groups, submit this comment to oppose the U.S. Environmental Protection Agency's proposal to repeal and weaken protections from chemical disasters.

A crisis of chemical disasters continues to unfold in the United States. More than 2,291 chemical fires, explosions, or toxic releases occurred from 2004 to 2013 alone. These

incidents killed, injured, and forced workers, fenceline community members, and first responders to suffer toxic exposure or shelter-in-place – with nearly half a million people affected.<sup>1</sup>

About 12,300 industrial facilities nationwide use, store, or manage highly hazardous chemicals under EPA's Risk Management Program ("RMP").<sup>2</sup> Approximately 177 million Americans are in harm's way for a worst-case scenario disaster, according to EPA data – even though they may be unaware of the threat. One in three schoolchildren attends school within the self-reported vulnerability zone of a facility regulated under EPA's Risk Management Program.<sup>3</sup> Most of these children, their parents, and their teachers are unaware of this danger.<sup>4</sup>

The Chemical Safety Board has repeatedly found chemical disasters are preventable, and has recommended EPA strengthen the Risk Management Program.<sup>5</sup> Some state and local programs, including in New Jersey, California, and Massachusetts, have shown that even complex facilities like oil refineries and chemical manufacturers can reduce or eliminate hazards and operate more safely.

EPA has recognized it had a responsibility to update its chemical facility safety rules since at least 2013. Community groups around the United States, the Coalition to Prevent Chemical Disasters, and the Environmental Justice Health Alliance had long called for improvements to the Risk Management Program for years, including in a 2012 petition to the agency.<sup>6</sup> EPA worked methodically between 2014 and 2017 to evaluate the problem, engage affected communities, consult and coordinate with other federal agencies, consider over 161,000 public comments, and finalize much-needed regulatory updates. In January 2017, EPA promulgated the Chemical Disaster Rule because it found a "regulatory need" for action. EPA determined that the specific measures the rule includes would prevent and reduce deaths, injuries, and other harm from chemical releases.<sup>7</sup>

Unfortunately, within a month of finalizing the rule, EPA's new Administrator ordered an about-face and initiated an any-means-necessary campaign to prevent the rule from going into effect. Following two delays without notice and comment, EPA completed an unlawful rulemaking to postpone the Chemical Disaster Rule's effective date until February 2019. Now, EPA is using that self-imposed deadline as an excuse to rush through a second rule that would

<sup>&</sup>lt;sup>1</sup> https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0002.

<sup>&</sup>lt;sup>2</sup> 2018 Regulatory Impact Analysis at 29 ex. 3-4 (Apr. 27, 2018), https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907.

<sup>&</sup>lt;sup>3</sup> Ctr. for Effective Govt., Kids in Danger Zones at 1 (Sept. 2014), https://www.foreffectivegov.org/sites/default/files/kids-in-danger-zones-report.pdf.

<sup>&</sup>lt;sup>4</sup> *Id*.

<sup>&</sup>lt;sup>5</sup> CSB, Investigations, <a href="https://www.csb.gov/investigations/">https://www.csb.gov/investigations/</a>.

<sup>&</sup>lt;sup>6</sup> Petition to Prevent Chemical Disasters from Rick Hind of Greenpeace, Richard Moore of Los Jardines Institute and Scott Nelson of Public Citizen (July 25, 2012), EPA-HQ-OEM-2015-0725-0249, *available at* https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0249.

<sup>&</sup>lt;sup>7</sup> 82 Fed. Reg. 4594.

rescind *all* of the prevention measures in the Chemical Disaster Rule.<sup>8</sup> EPA also proposes to cut out critical parts of the updated emergency response requirements, and deny community members the ability to access to safety information locally.

**EPA's proposed Rollback Rule perpetuates environmental injustice and disproportionately harms communities of color and low-income communities.** EPA admits that communities of color and low-income populations are disproportionately exposed to and at risk from one or more U.S. chemical facilities. Yet EPA proposes to withdraw regulatory provisions EPA designed to protect these very populations and to give them increased access to information about the disproportionate harms they face. Ignoring these impacts as EPA proposes to do contradicts the agency's environmental justice obligations, its legal duties, and its own practice of ensuring meaningful community engagement in this type of rulemaking. EPA has refused to even hold hearings in affected communities, after providing inadequate and inaccurate public notice on the sole hearing it held at its own Washington, D.C. headquarters.

EPA's rollback rulemaking process is infected with bias, and has prejudiced community members' ability to meaningfully participate pursuant to the Clean Air Act. EPA's mind has been made up to rescind the Chemical Disaster Rule since the moment Scott Pruitt was appointed to lead EPA. Mr. Pruitt, who opposed the Chemical Disaster Rule hand-in-hand with industry before he took office, recently resigned under a cloud of ethics scandal – but his involvement in delay of the Chemical Disaster Rule and this rulemaking have irrevocably infected the process with bias. EPA records show Mr. Pruitt himself directed the outcome of this rule.

Now, Peter Wright, the former general counsel for DowDuPont has been nominated to become head of EPA's Office of Land and Emergency Management and is already working within EPA. DowDuPont owns over 50 facilities regulated by the Risk Management Program and has been responsible for at least 99 RMP chemical releases. EPA should withdraw the proposed Rollback Rule because finalizing it would violate Constitutional due process and deny communities the safety protections to which they have a legal right. Finalizing the Rollback Rule would violate also violate the Clean Air Act's public participation requirements. 42 U.S.C. § 7607(d)(3)-(6), (h).

EPA may not lawfully repeal the prevention measures. After determining its pre-existing Risk Management Program regulations were insufficient to prevent disasters, EPA is now trying to ignore the problem altogether by offering unacceptable and unreasonable excuses for rescinding or delaying protections. EPA has no authority for the proposed Rollback Rule. EPA also violates the Clean Air Act because its proposal fails to meet the statutory test for rules under 42 U.S.C. § 7412(r)(7)(A), (B), which require regulations provide, to the greatest extent practicable, for the prevention and mitigation of disasters. As the D.C. Circuit held, the Act "makes clear that Congress is seeking meaningful, prompt *action* by EPA to promote accident prevention." *Air Alliance Houston*, Slip Op. at 26-27. EPA may not lawfully punt its prevention responsibility to OSHA, and repeal a rule it already finalized so it can wait for another agency to solve a problem sitting squarely on EPA's doorstep. It is also unlawful and unconstitutional for EPA to consider costs as a justification to repeal or weaken protections, based on the direction

\_

<sup>&</sup>lt;sup>8</sup> 83 Fed. Reg. 24,850.

from Executive Orders that "place greater emphasis on reducing regulatory costs and burdens" than § 7412(r)(7) allows.

EPA originally found that the Chemical Disaster Rule's requirements would reduce deaths and injuries, and would prevent communities from being forced to evacuate or shelter-in-place, as nearly a half-million Americans have been required to do already. EPA must not repeal these core, common-sense prevention measures that the record shows are greatly needed to satisfy the Act.

**EPA cannot justify its bait-and-switch on safety.** EPA already considered and rejected each of the factors that it now cites, and none provides a reasoned basis for the proposed Rollback Rule:

- EPA already found that an enforcement-only approach was insufficient; communities need both strong regulations and strong enforcement.
- EPA recognizes that, if anything, the BATF finding on the cause of the West, Texas explosion "highlighted the need for better coordination between facility staff and local emergency responders." The BATF finding does not support delaying or weakening those requirements, nor does it support rescinding any accident prevention measures. Stronger accident prevention measures help prevent and mitigate chemical disasters regardless of cause.
- EPA already consulted over 30 times with OSHA, as well as other federal agencies. EPA has an independent responsibility to protect public health and the environment and it cannot delegate those duties to OSHA. As EPA originally found, communities needed these protections in 2017 and they need them now not years from now, when and if OSHA decides to act.
- EPA previously determined that cost and regulatory burden are unacceptable bases for declining to strengthen chemical disaster protections. EPA still recognizes that the only way to find costs "likely" exceed the rule's benefits is to *ignore* significant non-monetized benefits from the Chemical Disaster Rule. 83 Fed. Reg. at 24,873. It defies even economic logic to delay safety investment, when on average chemical disasters cost at least \$274.7 million/year not even counting non-monetized harm. The RAND Corporation found that a single significant refinery disaster causes an average of \$220 million in harm. The cost of operating safely should simply be a necessary part of the cost of doing business.

Changing course without a reasoned and supported explanation – which must be more detailed, where, as here, EPA is rejecting its own prior fact-findings – is the definition of arbitrary and capricious.

<sup>&</sup>lt;sup>9</sup> Apr. 2018, RIA, p. 67: <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907</a>.

<sup>&</sup>lt;sup>10</sup> RAND, Cost-Benefit Analysis of Proposed California Oil and Gas Refinery Regulations at xiv (2016), <a href="https://www.rand.org/content/dam/rand/pubs/research\_reports/RR1400/RR1421/RAND\_RR1421.pdf">https://www.rand.org/content/dam/rand/pubs/research\_reports/RR1400/RR1421/RAND\_RR1421.pdf</a>; <a href="https://www.rand.org/pubs/research\_reports/RR1421.html">https://www.rand.org/pubs/research\_reports/RR1421.html</a>; see also 2018 Regulatory Impact Analysis at 67 (Apr. 27, 2018), <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907</a>.

The need for protection is even greater today for the Chemical Disaster Rule than it was in EPA's original record. Over five hundred new incidents have happened during the last five years, not even counting near misses and underreporting offsite harm. EPA has not demonstrated any significant decline in the accident rate. Rather, EPA admits its data are incomplete and yet *already* show over a hundred harmful accidents continuing to occur each year on average for 2014-16. <sup>11</sup> And EPA has not looked at all at 2017-18 data. Whether there is an overall decline or not, EPA cannot justify ignoring the people hurt and threatened by the substantial number of incidents per year.

The releases during the days surrounding Hurricane Harvey, alone, show a strong need for EPA to withdraw the proposed rule. The problem is getting *worse* for communities exposed to double disasters—*i.e.*, the "second storm" of toxic exposure and safety threats at chemical facilities that occur because they are not preparing adequately to prevent "natech" problems related to foreseeable natural disasters. <sup>13</sup>

Based on this record, EPA *must retain* annual emergency response coordination, public meeting, and emergency exercise requirements – and must not weaken or delay them further as it has proposed. Communities need protections immediately, as the next hurricane season has begun. EPA has cited no evidence connecting any national security threats to sharing information with first responders. Firefighters, EMTs, and first responders are trained to protect the public and required to keep sensitive information secure.

While EPA's proposal tries to use national security as a reason to weaken emergency response coordination with first responders, that EPA ignores national security entirely on the prevention side of its ledger shows how ungrounded and arbitrary its proposed action is. The ways to protect communities from terrorism and to advance national security are to reduce hazards, by requiring prevention and safer technologies alternatives analyses that would make chemical facilities safer up front, and ensuring advance preparation and planning, as the Chemical Disaster Rule requires. Then, even if an intentional act or an accident occurs

<sup>&</sup>lt;sup>11</sup> *Id.*; EPA, 2014-16 Accident Data Spreadsheet, <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0909">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0909</a>; EPA, 2004-13 Accident Data Spreadsheet, <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0002">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0002</a>; Blue Green Alliance *et al.*, A Disaster In the Making (last updated Aug. 22, 2018), <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule">https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>.

<sup>&</sup>lt;sup>12</sup> L. Olsen, After Harvey, a 'second storm' of air pollution, state reports show, Houston Chron. (Mar. 30, 2018), <a href="https://www.houstonchronicle.com/news/houston-texas/houston/article/After-Harvey-a-second-storm-of-air-12795260.php">https://www.houstonchronicle.com/news/houston-texas/houston/article/After-Harvey-a-second-storm-of-air-12795260.php</a> (quoting Juan Parras, Texas Environmental Justice Advocacy Services).

<sup>&</sup>lt;sup>13</sup> CSB Arkema Report (May 2018) at 122-25, <a href="https://www.csb.gov/csb-releases-arkema-final-report/">https://www.csb.gov/file.aspx?DocumentId=6068</a>). CSB Chairperson Vanessa Allen Sutherland statement: "Considering that extreme weather events are likely to increase in number and severity, the chemical industry must be prepared for worst case scenarios at their facilities. We cannot stop the storms, but working together, we can mitigate the damage and avoid a future catastrophic incident." More resources: <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule">https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>.

(regardless of its source), it will cause less harm, and first responders will be prepared to respond and mitigate the harm.

EPA's proposal to delete community informational access provisions is also just another attempt to allow industry to hide dangers from the public who have a right to know what hazards they're exposed to. Communities living near oil refineries and chemical facilities every day deserve, at least, to be able to request and receive basic chemical hazard information that they need to try to better protect themselves and their families in the event of a chemical release.

EPA should move forward, not backward, to protect public health and safety at chemical facilities nationwide. EPA must implement the 2017 Chemical Disaster Rule without further delay or weakening. EPA should drop the proposed rule, because it would endanger people's lives and is arbitrary and unlawful, as provided in the detailed part of these comments.

Additional information is provided in the detailed section of these comments, by contacting any of the undersigned groups, or by contacting attorneys Gordon Sommers (gsommers@earthjustice.org, (202) 797-5257) or Emma Cheuse (echeuse@earthjustice.org, (202) 745-5220), or staff scientist Michelle Mabson (mmabson@earthjustice.org, or (202) 797-5254) at Earthjustice.<sup>14</sup>

#### TABLE OF CONTENTS

INT	RODUC'	ΓΙΟΝ AND EXECUTIVE SUMMARY	1
DET	CAILED	COMMENTS ON EPA'S PROPOSED RULE	8
I.	FACTUA	AL BACKGROUND: THE PROBLEM OF CHEMICAL DISASTERS IN AMERICA	8
	A.	EPA Adopted The Chemical Disaster Rule In Response To A Series Of	
		High-Profile Chemical Disasters That Illustrated Prior Regulations Are	
		Insufficient.	8
	В.	New Evidence Shows That Chemical Releases, Fires, Explosions, and	
		Incidents Keep Happening	10
	C.	Gaps in EPA's Chemical Disaster Data Lead EPA to Underestimate the	
		Problem	11
	D.	The People Most In Harm's Way	13
	E.	The Domino Effect of Chemical Disasters Related to Chemical Facilities'	
		Inadequate Preparation and Prevention Measures for Natural Disasters	16
	F.	Harms to Public Health and Safety Caused by Chemical Disasters	21
	G.	State and Local Government Examples Show The Chemical Disaster Rule	
		Is Necessary and Feasible.	29
II.	STATUT	ORY AND LEGAL BACKGROUND	43
III.	REGULA	ATORY BACKGROUND: EPA'S ATTEMPT TO ADDRESS THE ONGOING	
	Снем	IICAL DISASTER PROBLEM	45
	A.	The 1996 Accidental Release Management Program Rule	45
	В.	Events Leading to EPA's 2017 Risk Management Program Amendments	45

<sup>&</sup>lt;sup>14</sup> Special thanks to Robyn Winz, Lisa Fuhrmann, Michael Gulston, Kristen Scherb, Noah Greenstein, and Mrudula Meghana Kuppa for technical assistance with these comments.

	C.	The Final 2017 Chemical Disaster Rule, Amending the Accidental Release	
		RMP Regulations	
	D.	Administrator Pruitt's Initial Attack on the Chemical Disaster Rule: Delay	57
IV.	THE PR	ROPOSED ROLLBACK RULE	59
	A.	Process for Rollback Rule	
	В.	Repeal of Prevention Program Improvements	59
	C.	Changes to Weaken and Delay Emergency Coordination and Information-	
		Sharing	61
	D.	Repeal of Most Community Information-Access Requirements and Delay	
		of Public Meeting Requirement	
	E.	Further Delay of All Remaining Provisions	63
	F.	EPA's Rationales for the Rollback	63
V. E		OPOSED ROLLBACK RULE IS UNLAWFUL AND ARBITRARY AND SHOULD NOT	
	BE FI	NALIZED	64
	A.	EPA's Proposal Violates the Agency's Own Principles of Environmental	
		Justice and has Manifestly Failed to Engage Communities in its Rushed	
		Attempt to Rescind the Chemical Disaster Rule	64
	В.	EPA Cannot Base Its Decision to Rescind or Weaken the Chemical	
		Disaster Rule on Cost	
	C.	EPA Must Not Rescind the Disaster Prevention Provisions	90
	D.	EPA Must Not Weaken or Further Delay Emergency Coordination and	
		Information-Sharing Provisions	132
	E.	EPA Should Not Weaken or Rescind Community Informational	
		Provisions	140
	F.	The BATF's West, Texas Finding Does Not Support Making Any	
		Changes to the Chemical Disaster Rule	145
	G.	Delaying the Compliance Dates For Provisions EPA Proposes To Retain	
		Is Unlawful And Arbitrary	
		ON	149
		A: SUMMARY OF ROLLBACKS AND CHANGES IN THE PROPOSED	
		K RULE	
		EVENTION REQUIREMENTS	
		IERGENCY RESPONSE (MITIGATION AND HARM REDUCTION)	
		MMUNITY INFORMATION REQUIREMENTS	
		MPLIANCE DATES	
		B: CHARTS AND GRAPHS RELATED TO STATE PROGRAMS	155
Сна		ENEFITS EXPERIENCED AS A RESULT OF IMPLEMENTING TURP PROJECTS IN THE	
		DD 2000-2009	
		KAMPLE BENEFITS FROM TURP	
Ехн	івіт 1: С	ONTRA COSTA COUNTY PREVENTION PROGRAM EFFECTIVENESS	158

#### DETAILED COMMENTS ON EPA'S PROPOSED RULE

## I. FACTUAL BACKGROUND: THE PROBLEM OF CHEMICAL DISASTERS IN AMERICA

A. <u>EPA Adopted The Chemical Disaster Rule In Response To A Series Of High-Profile Chemical Disasters That Illustrated Prior Regulations Are Insufficient.</u>

For decades in the United States toxic releases, fires, and explosions have occurred on EPA's watch at industrial facilities that use and store hazardous chemicals. As the D.C. Circuit explained: "The Chemical Disaster Rule is the most recent outgrowth of Congress's effort in the 1990 Amendments to ensure adequate protections against highly dangerous accidental releases of chemicals." *Air Alliance Houston*, Slip Op. at 24. EPA adopted the Chemical Disaster rule in response to this series of high-profile chemical disasters, which illustrated prior regulations are insufficient to protect public health and safety. The Chemical Disaster Rule that EPA now seeks to roll back amended EPA's regulations under 42 U.S.C. § 7412(r) for the prevention of accidental releases at facilities that use or store certain extremely dangerous chemical substances (the "Risk Management Program" or "RMP"). EPA's Chemical Disaster Rule was the first major update to the prevention requirements of EPA's chemical Risk Management Program in over 20 years, adding significant protections for vulnerable communities. 82 Fed. Reg. at 4599-600. The rule also added significant improvements to coordination and information-sharing requirements, to ensure first responders and the public could effectively prepare for catastrophes.

EPA promulgated the final Chemical Disaster Rule after concluding that under preexisting RMP regulations, "major incidents" have continued to occur and "highlight the importance of reviewing and evaluating current practices and regulatory requirements, and applying lessons learned from other incident investigations to advance process safety." 82 Fed. Reg. at 4600. EPA highlighted a number of examples of chemical releases and disasters at oil refineries and chemical manufacturing facilities, among others, as evidence supporting the need for its action:

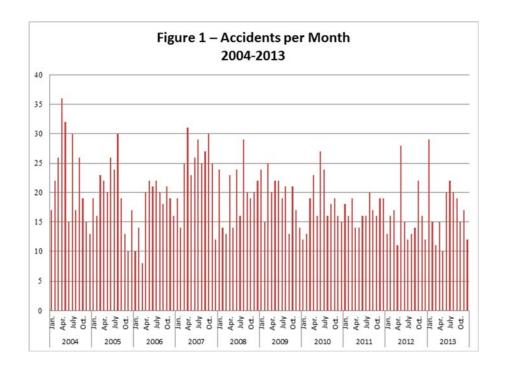
In addition to the tragedy at the West Fertilizer facility in West, Texas, on April 17, 2013, a number of other incidents have demonstrated a significant risk to the safety of American workers and communities. On March 23, 2005, explosions at the BP Refinery in Texas City, Texas, killed 15 people and injured more than 170 people. On April 2, 2010, an explosion and fire at the Tesoro Refinery in Anacortes, Washington, killed seven people. On August 6, 2012, at the Chevron Refinery in Richmond, California, a fire involving flammable fluids endangered 19 Chevron employees and created a large plume of highly hazardous chemicals that traveled across the Richmond, California, area. Nearly 15,000 residents sought medical treatment due to the release. On June 13, 2013, a fire and explosion at Williams Olefins in Geismar, Louisiana, killed two people and injured many more.

Id. at 4599 (footnotes omitted).

In developing the Chemical Disaster Rule, EPA collected extensive data on hazardous releases and their consequences, finding that during the most recent 10-year period for which the agency has complete data (2004-2013), there were 2,291 incidents at covered facilities, including 1,517 where facilities reported on or off-site harm. 2016 Chemical Disaster Rule RIA ("2016 RIA") at 80, EPA-HQ-OEM-2015-0725-0734 (Dec. 16, 2016); *see also* EPA, RMP Facility Accident Data, 2004-2013 (Feb. 2016), EPA-HQ-OEM-2015-0725-0002 ("2004-13 Accident Data Spreadsheet").

The EPA data from 2004 to 2013 show that chemical accidents happen like clockwork, on average every other day. *See* 2004-13 Accident Data Spreadsheet; 82 Fed. Reg. at 4594, 4683. No one-month period passed without at least 8 accidents. *Id.*; *see infra* Fig.1 (summarizing Accident Data). There were on average 200 reported incidents every year during this timeframe, with about 150 on average that caused reportable harm. *Id.* 

In total, approximately 12,300 facilities around the country use or store the highly hazardous chemicals covered by the Risk Management Program above the regulatory thresholds. Rollback RIA at 25-26. These include petroleum refineries, chemical manufacturers, pulp and



paper mills, and others using chemicals that can cause death, serious injury, and other serious health threats if released. Rollback RIA at 8, 66-67 ex. 6-2 (listing deaths and injuries from 10 years of chemical accidents at covered facilities), EPA-HQ-OEM-2015-0725-0907 (Apr. 27, 2018).

Surrounding these facilities, a staggering 177 million Americans live in the "worst-case scenario zones" for chemical disasters. Chemical Disaster Rule Regulatory Impact Analysis at 94 ("Amendments RIA"), EPA-HQ-OEM-2015-0725-0734. Researchers have found that near 23 million people live within just one mile of these facilities. Ctr. For Effective Gov't, *Living in* 

the Shadow of Danger at 1 (Jan. 2016), EPA-HQ-OEM-2015-0725-0913. According to one report, one in three schoolchildren go to school in vulnerable areas near such facilities. Ctr. For Effective Gov't, *Kids in Danger Zones* at 1 (Sept. 2014). Almost two-thirds of the children who live within one mile of a high-risk chemical facility in the United States are children of color. Living in the Shadow of Danger at 1.

# B. New Evidence Shows That Chemical Releases, Fires, Explosions, and Incidents Keep Happening

Although EPA promulgated the Chemical Disaster Rule to reduce the frequency and magnitude of chemical disasters and releases, the agency never let the rule take effect. As discussed below, the Trump administration immediately delayed the rule after entering office and ultimately postponed its effective date until February 2019, under Administrator Pruitt's direction. While the rule has been on hold, fires, explosions, spills, and other chemical releases have continued to occur with alarming frequency at RMP facilities.

EPA's Partial Data for 2014-16: EPA's partial data for calendar years 2014, 2015, and 2016 show that, so far, covered facilities have reported an additional 458 releases of dangerous chemicals to EPA, including 340 that caused reportable harm. EPA, RMP Facility Accident Data, 2014-2016 (reported as of Oct. 1, 2017) ("2014-16 Accident Data Spreadsheet"), EPA-HQ-OEM-2015-0725-0909<sup>16</sup>; Rollback RIA at 34 ex. 3-7 (summarizing new, but incomplete, data for 2014-16)<sup>17</sup>; see also Coal. to Prevent Chemical Disasters, Chemical Incident Counter-RMP Facilities<sup>18</sup> (sorted by date) (updated Aug. 2015) (listing 425 incidents between April 2013 and August 2015). The agency admits it is still receiving data for these years and that "accident totals for the most recent five years of data within the RMP national database increase slightly after each major five-year RMP reporting cycle occurs," i.e., in 2004, 2009, 2014, and next in 2019. EPA expects that "accident numbers for 2014-2016 may increase above those" presently reported. Rollback RIA at 33.

Reports so far from 2017-18: EPA has released no data at all from the chemical fires, explosions, and other releases at RMP facilities since 2016. This is true even though it now acknowledges that it has used some data through spring 2018 on which it relied; it is unclear why it did not pull any incident data at all from 2017 or 2018 from that database. See 83 Fed. Reg. 36,837, 36,838 (July 31, 2018). News reports have shown at least 61 additional explosions, fires, and other releases at RMP facilities have occurred since March 2017, as summarized in a report compiled by some of the undersigned Commenters. Blue Green Alliance et al., A Disaster in the Making, <a href="https://earthjustice.org/ChemicalDisasterRule">https://earthjustice.org/ChemicalDisasterRule</a>, last updated August 22, 2018. As many incidents go unreported, this is likely a severe underestimate. At the same time, public reports can identify serious incidents like fires or explosions that facilities do not report as an RMP release because no covered chemical was released – even though most such incidents would still qualify as near-misses under the Risk Management Program and still cause significant harms of

10

<sup>&</sup>lt;sup>15</sup> http://www.foreffectivegov.org/sites/default/files/kids-in-danger-zones-report.pdf.

<sup>&</sup>lt;sup>16</sup> https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0909.

<sup>&</sup>lt;sup>17</sup> https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0907.

<sup>&</sup>lt;sup>18</sup> http://preventchemicaldisasters.org/resources/158971-2/

the type that the Risk Management Program and the Chemical Disaster Rule aim to prevent.

The 2017-18 events are especially notable because of EPA's inaction to correct these problems, or ensure that facilities apply lessons learned from these incidents to prevent future problems. Instead, as chemical incidents continue during the delay, EPA has provided no evidence at all of any corrective action, enforcement or otherwise, that it has taken on any of these recent incidents. The rulemaking record contains no evidence that EPA has done anything other than delay and prepare to weaken protections, while these chemical disasters occurred during 2017 and 2018.

EPA has not provided any information about what it will do to prevent chemical disasters during the next hurricane season. A number of fires, explosions, and chemical releases that affected and harmed Commenters and their members were related to Hurricane Harvey during the 2017 hurricane season in the Gulf.<sup>19</sup> An EPA website on Hurricane Harvey includes evidence that EPA did only minimal air quality monitoring for a few days during and after the hurricane. The last data provided was October 6, 2017.<sup>20</sup> There is no evidence there or elsewhere of any enforcement action EPA took based on chemical releases, fires, spills, or explosions during the hurricane. The Inspector General of EPA has opened an investigation into EPA's response to the 2017 hurricane season, but it is unclear when the results of that report will be publicly available.<sup>21</sup>

## C. Gaps in EPA's Chemical Disaster Data Lead EPA to Underestimate the Problem

The numbers reported above – including 2,291 incidents between 2004 and 2013, and an additional 340 reported so far for 2014-2016 – actually underestimate the problem. EPA does not count incidents when the process where a release occurred was either destroyed or decommissioned. EPA also lacks data on near-misses, many of which includes fires, explosions, or other dangerous situations that cause immediate harm, in addition to nearly causing the release of an RMP chemical. Although EPA defines "accidental release" to include "an unanticipated emission of a regulated substance *or other extremely hazardous substance* into the ambient air from a stationary source," many dangerous events including fires and explosions do not meet this definition or otherwise satisfy the reporting criteria – despite exposing communities to severe increases in toxic pollution or otherwise endangering their lives. 40 C.F.R. § 68.3. As such incidents are also prevented and mitigated by the Risk Management Program, their costs must be considered.

As EPA itself explained, "[s]ome accidents that occurred at RMP facilities during the 10-year period were not reported to EPA either because the facility closed subsequent to the accident, decommissioned the process, or removed the regulated substance from the process

<sup>&</sup>lt;sup>19</sup> EPA, Hurricane Harvey 2017, Dallas, TX – Region VI, <a href="https://response.epa.gov/site/site\_profile.aspx?site\_id=12353">https://response.epa.gov/site/site\_profile.aspx?site\_id=12353</a> (last reviewed July 15, 2018). <sup>20</sup> Id.

<sup>&</sup>lt;sup>21</sup> EPA, Ofc. of Inspector General, Notification: EPA's Preparedness and Response Efforts to the 2017 Hurricanes in EPA Regions 2, 4, and 6, Project #OPE-FY18-0005 (Dec. 13, 2017), <a href="https://www.epa.gov/office-inspector-general/notification-epas-preparedness-and-response-efforts-2017-hurricanes-epa">https://www.epa.gov/office-inspector-general/notification-epas-preparedness-and-response-efforts-2017-hurricanes-epa</a> (last viewed July 15, 2018).

involved in the accident before it was required to submit a report to the RMP database." Amendments RIA at 80. EPA cited the following as examples:

For example, a Praxair facility in St. Louis, Missouri, had a fire involving propylene cylinders on June 24, 2005, that resulted in one fatality and significant offsite property damage. MFG Chemical, in Dalton, Georgia released a cloud of allyl alcohol on April 12, 2004, that led to 154 people being medically treated, 5 hospitalized for chemical exposure, and a community evacuation. Both of these facilities either closed or deregistered the affected process before the deadline for their subsequent RMP report.

Id. (citations omitted). Due to the omission of such accidents, the 10-year accident data above "may under-represent the number and magnitude of RMP chemical accidents." Id. EPA's omission of the 2013 West, TX fertilizer disaster, and its refusal to address the recent 2017 Arkema explosion, or the 2018 Husky Refinery fire (which caused harm and also was a near miss for an HF release) only prove this point. Each is a disaster at an RMP-covered facility that killed or harmed people, which did not cause a release of an RMP-covered chemical or did not cause a release of the most dangerous RMP-covered chemical, but was a "near miss" for an even worse disaster and each is an example of the type of incident that Congress enacted § 7412(r) to prevent and reduce. Such events cannot rationally be ignored.

EPA refuses to collect or consider information on most "near misses" and the harm they cause. In fact, EPA's estimates of the harm caused by chemical disasters deliberately exclude harms not "attributable to the release of a regulated substance." *Id.*; Rollback RIA at 67 (relying on same dataset); *see also* Amendments RIA at 10 ("Also not reflected in the 10-year baseline costs are the impacts of non-RMP accidents at RMP facilities and any potential impacts of rare high consequence catastrophes.").

However, a significant benefit of the Risk Management Program and Chemical Disaster Rule is the "prevention and mitigation of non-RMP accidents at RMP facilities." *Id.* Such events – which include fires, explosions, and other serious incidents that cause significant harm but are only a "near miss" for release of an RMP chemical – are a part of the chemical disaster problem that EPA's Risk Management Program addresses. EPA has recognized that RMP disaster prevention also encompasses the investigation and prevention of non-RMP releases that could reasonably lead to an RMP release. Virtually all of the Chemical Disaster Rule's prevention and coordination requirements would have also helped prevent such non-RMP incidents, as EPA recognized. *See* Amendments RIA at 74 ("Actions that prevent or reduce the severity of accidents in RMP-covered processes are also likely to prevent or mitigate non-RMP accidents at the same facilities because the same or similar actions can be taken with regard to processes and equipment not subject to the regulation, often at minimal additional cost."); *see also* Rollback RIA at [65-66] (reiterating this finding).

Near misses include runaway reactions, explosions, fires, and other harmful incidents at covered facilities. EPA explained, for example, that "a runaway reaction that is brought under control by operators is a near miss that may need to be investigated to determine why the problem occurred, even if it does not directly involve a covered process both because it may have

led to a release from a nearby covered process or because it may indicate a safety management failure that applies to a covered process at the facility." 81 Fed. Reg. 13,638, 13,651 (Mar. 14, 2016) (emphasis added). Similarly, "fires and explosions near or within a covered process, any unanticipated release of a regulated substance, and some process upsets could potentially lead to a catastrophic release" and are considered near misses. *Id*.

EPA guidance has advised investigation of near misses for years, precisely because these incidents are so dangerous and their prevention is paramount for disaster prevention. *See, e.g.*, EPA, Guidance for Conducting Risk Management Program Inspections under Clean Air Act Section 112(r) at D-24, D-33 (Jan. 2011)<sup>22</sup> (including on inspector checklist whether "the owner or operator investigated each incident which resulted in, *or could reasonably have resulted in* a catastrophic release?" (emphasis added)); EPA, Guidance for Facilities on Risk Management Programs (RMP): General RMP Guidance, Ch.7 at 7-14 (Noting "the rule requires you to investigate ... those incidents which resulted in, *or could reasonably have resulted in*, a catastrophic release," and encouraging facilities to "investigate *all* accidental releases" to help "identify problems that could result in major releases if left unaddressed." (emphasis added)).<sup>23</sup> However, as guidance was non-binding and was insufficient to assure this occurred, the Chemical Disaster Rule recognized that not all facilities properly investigate such incidents, and codified this investigation requirement into the rule. 40 C.F.R. § 68.60(a)(2), 68.81(a)(2).

EPA's failure to include data on near misses in the record thus represents another significant gap in the agency's quantification of the problem. Without such data, EPA's disaster-rate estimates are severe underestimates of the problem the Chemical Disaster Rule sought to solve. Indeed, when estimating *costs* of the Chemical Disaster Rule, EPA has assumed "one near miss for each accident." Amendments RIA at 129; Rollback RIA at 55. EPA has also recognized that some "industry publications project much higher ratios of near misses to actual releases." Amendments RIA at 129.

#### D. The People Most In Harm's Way

Although as summarized above, there are millions of people of all demographic groups in harm's way, Black, Latino, and low-income people face disproportionate threats because they are more likely to live within a danger or vulnerability zone. Envtl. Justice and Health Alliance for Chem. Policy Reform, *Who's In Danger*, EPA-HQ-OEM-2015-0725-0574. Moreover, "[f]acilities in communities of color have almost twice the rate of incidents compared to those in predominately white neighborhoods." Ctr. For Eff. Gov't, *Living in the Shadow of Danger* at 2 (Jan. 2016), EPA-HQ-OEM-2015-0725-0913. In addition to being more likely to live within a danger zone, lower income Black and Latino children face even greater disparities, as they are *more than twice* as likely to live in fenceline zones compared to white children who are living above the poverty line.<sup>24</sup> A 2004 study found that larger, more chemical-intensive facilities tend to be in counties with larger Black populations and in counties with high levels of income

13

<sup>&</sup>lt;sup>22</sup> https://www.epa.gov/sites/production/files/2013-10/documents/clean air guidance.pdf.

<sup>&</sup>lt;sup>23</sup> https://www.epa.gov/rmp/general-rmp-guidance-chapter-7-prevention-program-program-3

<sup>&</sup>lt;sup>24</sup> *Id.* at 2.

inequality.<sup>25</sup> Similarly, the study concludes that there is a greater risk of chemical accidents and spills at facilities in counties with larger Black populations.<sup>26</sup>

EPA admits that its proposed Rollback Rule "may have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples." 83 Fed. Reg. at 24,881 (citing Executive Order 12898, 59 Fed. Reg. 7629, 7629 (Feb. 16, 1994)). This is because: "Based on analysis of RMP data and other studies, EPA concludes that there is evidence that risks from RMP facilities *fall on minority and low-income populations, to a significantly greater degree* than those risks affect other populations." Rollback RIA at 79-80.

EPA has begun tribal consultation on the proposed rollback rule because some tribes have expressed particular concern about impacts, and about 260 RMP facilities are located on tribal lands. *See* EPA Presentation, Tribal Consultation Teleconference Meeting (June 25, 2018), <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0982">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0982</a> (May 23, 2018 letter attached).

The people most vulnerable to death, injury, and other harm from a chemical disaster are facility workers, first responders, and fenceline community members. *See* Amendments RIA at 9-10, 16, 59, 76, 82, 84 n.93, 86 & n.98, 88, 93. EPA explained this, in regard to the original rule and the question of "Why are changes to the RMP rule necessary? What are the impacts from accidents at RMP facilities?":

While numerous chemical plants are operating safely, in the last 10 years, RMP data show that there have been more than 1,517 reportable accidents, 473 of which had offsite impacts. The reportable accidents were responsible for 59 deaths, 17,099 people were injured or sought medical treatment, almost 500,000 people evacuated or sheltered-in-place, and over \$2 billion in property damages.

EPA's changes to the RMP rule will help protect local first responders, community members and employees from death or injury due to chemical facility accidents.

EPA Activities Under EO 13650, Risk Management Program (RMP) Final Rule, Questions & Answers at 1 (Aug. 2017) (emphasis added).<sup>27</sup> A person – most often a worker, first responder, or local community resident – is *injured* by a chemical accident every 4 days on average. *See* 2004-13 Accident Data Spreadsheet; *see also, e.g.*, Amendments RIA 9-10, 124-25; 82 Fed. Reg.

<sup>&</sup>lt;sup>25</sup> Michael R. Elliot, Yangi Wang, Robert A. Lowe, Paul R. Kleindorfer, Environmental justice: frequency and severity of US chemical industry accidents and the socioeconomic status of surrounding communities, Journal of Epidemiology and Comty. Health. 58:24–30 (2004).

 $<sup>^{26}</sup>$  *Id* 

<sup>&</sup>lt;sup>27</sup> https://www.epa.gov/sites/production/files/2017-08/documents/rmp final rule qs and as 8-02-17.pdf

at 4597; Amendments RIA 87 ex. 6-5.

Communities with oil refineries or chemical manufacturers face the highest regular threats. See, e.g., 82 Fed. Reg. at 4631, 4683. EPA has also found that "[t]hree sectors have significantly higher accidents rates as compared to other sectors: 1.08 (petroleum and coal products manufacturing), 0.66 (paper manufacturing) and 0.36 (chemical manufacturing)." 81 Fed. Reg. at 13,668; see also Amendments RIA at 32 ex. 3-9. Together, EPA concludes that the "[a]ccidents from these three sectors accounted for 49% of all RMP reportable accidents." Rollback RIA at 30.

Across all sectors, EPA's data show that a prior reported incident can both cause substantial harm and also indicates that a facility is likely to have future incidents and problems. According to EPA, "studies have ... found a history of past accidents is a strong predictor of future accidents." 83 Fed. Reg. at 24,872 (citing Paul R. Kleindorfer et al., Accident Epidemiology and the U.S. Chemical Industry: Accident History and Worst-Case Data from RMP\*Info, Risk Analysis, Vol.23, No. 5, 865-881 & tbl.IV (2003)<sup>28</sup>). Every one of the 1549 facilities that have had an incident in EPA's database between 2004 and 2016, see page 121, infra, and is still operating thus poses a significantly increased risk of future accidents, according to the trend EPA has identified. This means that approximately 12% of the total universe of 12,500 RMP facilities had incidents during the decade EPA evaluated.<sup>29</sup> Furthermore, even the American Chemistry Council ("ACC") data on which EPA relies show that the incident rate was significantly higher for STAA-covered facilities. For example, 17.6% of the chemical manufacturing facilities (NAICS code 325) in the database had at least one incident during the decade that EPA evaluated (2004-13). ACC Analysis of RMP Accident Data Presented at March 9, 2017 Meeting with EPA, EPA-HQ-OEM-2015-0725-0929.30 Neither ACC nor EPA has provided information showing that none of the other facilities have since had incidents or on how many of those were one-incident facilities. Rather, the latest albeit incomplete data that EPA placed into the docket shows additional incidents from chemical manufacturers since 2013.<sup>31</sup>

Finally, many such communities are also especially vulnerable to chemical disasters because there is no zoning and facilities are sited in the midst of residential communities. In Houston, for example, 65 percent of the city is within one mile of a facility in the toxic release

<sup>&</sup>lt;sup>28</sup> Available at https://pdfs.semanticscholar.org/f0c9/f27d670a6ea77187aeb3f78ca0ced444db8b.pdf.

<sup>&</sup>lt;sup>29</sup> EPA has not provided information on the total number of operating facilities during any given year of the data for which it provided an incident number, so the denominator allowing a per capital total or rate per year is impossible to calculate and EPA has not done so. EPA has noted in the Rollback RIA that the number of facilities has declined somewhat in recent years.

<sup>&</sup>lt;sup>30</sup> https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0929.

<sup>&</sup>lt;sup>31</sup> See 2014-16 Accident Data Spreadsheet (describing incidents, e.g., at Prvor Chemical Co., Sierra Chemical Co., Chevron Phillips Chemical Co., Westlake Petrochemical Co., Dow Chemical Co., Texas Operations, DuPont Co., JCI Jones Chemicals, Inc., Occidental Chemical Corp., Eastmen Chem. Co., Trecora Chemical, Inc.,); see also A Disaster In the Making (including, e.g., recent incidents reported at ExxonMobil Baton Rouge Chemical Plant, Dow Chemical Co.'s St. Charles plant, Belle (Chemours) Plant, Vanderbilt Chemical Plant, Eastman Chem. Co., Arkema), https://earthjustice.org/features/toxiccatastrophes-texas-national-chemical-disaster-rule.

inventory. Houston is the largest city in the country with no zoning. The percentage of the city within one mile of a refinery is 30 percent, 44 percent, and 43 percent for Austin, San Antonio, and Dallas, respectfully. Houston Chronicle, How zoning impacts your proximity to pollution, Sept. 20, 2016, https://www.chron.com/business/texanomics/article/How-zoning-impacts-your-proximity-to-pollution-9232526.php. In the Manchester community of Houston, 90% of the residents of Manchester live within 1 mile of a chemical facility. Union of Concerned Scientists, Double Jeopardy in Houston, <a href="https://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf">https://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf</a>.

A preliminary investigation of the association between hazardous air pollutants and lymphohematopoietic cancer risk among residents of Harris County Texas found a 56% increased risk of acute lymphocytic leukemia among children living within two miles of the Houston Ship Channel compared with children living more than 10 miles from the Houston Ship Channel. In addition, children who were living in areas with increased emissions of 1,3-butadiene from petrochemical industries were found to have an increased risk of developing any type of leukemia, acute lymphocytic leukemia and acute myeloid leukemia. Houston Chronicle, Study: Children near Ship Channel face more risk, Jan. 19, 2007, https://www.chron.com/news/houston-texas/article/Study-Children-near-Ship-Channel-face-more-risk-1583566.php

E. <u>The Domino Effect of Chemical Disasters Related to Chemical Facilities'</u> Inadequate Preparation and Prevention Measures for Natural Disasters.

Communities near chemical facilities that frequently face or are more prone to natural disasters, such as hurricanes, flooding, and earthquakes, have long been aware that they face more chemical releases and have an increased likelihood of future chemical releases.<sup>32</sup> This problem gained more national attention and awareness, however, during and in the wake of Hurricane Harvey when communities experienced repeated, preventable releases, fires, and explosions. The need for the 2017 Chemical Disaster Rule to be in full effect is especially great in communities threatened by *double disasters*—which happen when chemical facilities fail to prepare to prevent and reduce harm from foreseeable hurricanes, floods, earthquakes, and severe weather.

As the Chemical Safety Board's Chairperson Vanessa Sutherland highlighted in May 2018, in releasing the Arkema Investigation Report:

"Considering that extreme weather events are likely to increase in number and severity, the chemical industry must be prepared for worst case scenarios at their facilities. We cannot stop the storms, but working together, we can mitigate the damage and avoid a future catastrophic incident." 33

16

<sup>&</sup>lt;sup>32</sup> See, e.g., R. Paterson et al., Univ. of TX, Cascading Hazards: Corpus Christi Case Study (2013).

<sup>&</sup>lt;sup>33</sup> CSB Releases Arkema Final Report (May 24, 2018), <a href="https://www.csb.gov/csb-releases-arkema-final-report/">https://www.csb.gov/csb-releases-arkema-final-report/</a> (emphasis added).

This is a longstanding problem that continues to become worse for the most-exposed communities as extreme weather increases and worsens. For example, in 2013, Professor Robert Paterson at the University of Texas released a report entitled Cascading Hazards: Corpus Christi Case Study, that analyzed the problem of natural disasters on top of technological disasters through a case study on the particular vulnerabilities of one Gulf of Mexico community with over a dozen RMP-covered facilities.<sup>34</sup> As this report highlights, preparation and response to these problems are "infrequently addressed in local emergency planning committee response plans," even though natural disasters often both increase the threat of, contribute to and worsen chemical disasters at times when emergency response personnel are particularly stretched and communities are particularly vulnerable to harm. This shows the need for the Chemical Disaster Rule's strengthened prevention measures, including the STAA, incident investigation, process hazard analysis (including for root causes and near misses), annual emergency response coordination, exercises, community access to information, and other improvements to the RMP that would ensure better evaluation of threats and preparation.<sup>35</sup>

#### **CASE STUDY: HURRICANE HARVEY**

In August 2017, the CSB sounded the alarm, advising chemical facilities and refineries to prevent toxic releases and safety threats when restarting after shutting down operations due to Hurricane Harvey.<sup>36</sup> As it explained: "The startup of major processes is a hazardous phase in the operation of oil refineries and chemical plants. . . . This is a time to make sure no lives are needlessly claimed by this tragedy . . . . Facilities should pay particular attention to process safety requirements during this critical period to assure a safe and expeditious return to operation."37

As a result of reviewing these data, and investigating the Arkema chemical fire and explosions, the CSB issued an investigation report that highlighted this problem as a key issue chemical facilities must prepare to address, to avoid and reduce preventable harm. Sometimes called "natech" disasters, such incidents are often preventable or can be mitigated if facilities take additional precautions to prevent such incidents, as the CSB explained. 38

As shown in data that the Houston Area Research Center collected, in the wake of Hurricane Harvey:

• Spikes in unhealthy levels of ozone, especially for sensitive populations such as children, people with asthma, and seniors. "During and after Harvey, the Houston

<sup>&</sup>lt;sup>34</sup> R. Paterson et al., Univ. of TX, Cascading Hazards: Corpus Christi Case Study (2013).

<sup>&</sup>lt;sup>35</sup> *Id*.

<sup>&</sup>lt;sup>36</sup> CSB Urges Oil and Chemical Facilities to Take Special Safety Precautions during Startups Following Hurricane Harvey (Aug. 27, 2017), https://www.csb.gov/csb-urges-oil-and-chemical-facilities-to-takespecial-safety-precautions-during-startups-following-hurricane-harvey/.

<sup>&</sup>lt;sup>37</sup> CSB Safety Alert: AFTER HARVEY: Precautions Needed During Oil and Chemical Facility Startup (Aug. 27, 2017), https://www.csb.gov/assets/1/20/csb harvey2017 05.pdf.

<sup>&</sup>lt;sup>38</sup> CSB, Arkema Investigation Report (May 25, 2018), https://www.csb.gov/file.aspx?DocumentId=6068.

region experienced many storm-related releases and spills of VOCs. Storm-associated shutdowns and startups at refineries and petrochemical facilities have also resulted in the release of large amounts of ozone precursors such as VOCs."

- Releases of toxic pollutants that can cause cancer, neurological harm, and trouble breathing. "Elevated levels of . . . hazardous air pollutants (HAPs) [known as "BTEX," a group of volatile organic compounds (VOCs) made up of benzene, toluene, ethylbenzene, and xylenes] seen after Hurricane Harvey are likely due to storm-related spills and releases at industrial facilities, shutdowns and startups at refineries and petrochemical facilities, as well as increased numbers of small, gasoline-powered engines . . . operating in the region after the storm."
- Reported releases of contaminants into local communities. "During Hurricane Harvey, 90 incidents were reported in the greater Houston-Galveston region involving more than 700,000 gallons of pollutants released into water and on land, and more than 38,000 pounds of air pollutants. Pollutants included oil and gasoline compounds, organic toxics such as benzene, PCBs, and butadiene, nitrogen oxides, ammonia and sulfur dioxide among others." <sup>39</sup>

The Arkema disaster was just one of many serious health and safety threats at refineries and chemical facilities during Hurricane Harvey, as summarized by the Chemical Safety Board, for example:

- A light crude oil storage tank at the Valero Houston Refinery in the Manchester neighborhood failed following Hurricane Harvey, releasing benzene and other organic compounds.
- Based on National Response Center data during Hurricane Harvey, 102 reported incidents involving releases to the environment from industrial facilities were in some way caused by the hurricane.
- Large storage tanks accounted for the biggest releases to the environment because of flooding from Hurricane Harvey. 40

Consequently, *The Houston Chronicle* reported a "second storm of air pollution" that exposed community members to dangerous contaminants, reporting toxic releases around the state and finding that: "Houston had its worst ozone day of the year on Sept. 1 — in the middle of all those Harvey-related releases." <sup>41</sup>

<sup>&</sup>lt;sup>39</sup> HARC, Summarizing Hurricane Harvey's Environmental Impacts (2017), <a href="https://harcresearch.maps.arcgis.com/apps/MapSeries/index.html?appid=d6b0a3d762ec46ef8ea676f1008f7028/">https://harcresearch.maps.arcgis.com/apps/MapSeries/index.html?appid=d6b0a3d762ec46ef8ea676f1008f7028/</a> (for details cited, click on: Air – ozone and toxics, Health & Safety, and About).

<sup>&</sup>lt;sup>40</sup> CSB, Final Arkema Investigation Report at 124-25 (2018), http://www.csb.gov/file.aspx?DocumentId=6068

<sup>&</sup>lt;sup>41</sup> L. Olsen, *Second Storm*; F. Bajak & L. Olsen, Silent Spills: In Houston and Beyond, Harvey's spills leave a toxic legacy, Houston Chronicle, <a href="https://www.houstonchronicle.com/news/houston-texas/houston/article/In-Houston-and-beyond-Harvey-s-spills-leave-a-12771237.php">https://www.houstonchronicle.com/news/houston-texas/houston/article/In-Houston-and-beyond-Harvey-s-spills-leave-a-12771237.php</a>; F. Bajak & L. Olsen, Hurricane Harvey's toxic impact deeper than public told, AP & Houston Chronicle (Mar. 23,

For example, post-Harvey, on September 19, 2017, at the Valero Refinery in Port Arthur, TX which had been severely flooded by the storm, the community then faced a fire and shelter-in-place order. The New York Times reported that "more than 40 sites released hazardous pollutants" during or after Hurricane Harvey. The National Response Center data shows additional information on contemporaneous reports of hazardous air (and other) releases from chemical facilities during and after the 2017 hurricanes.

The "second storm" of pollution from chemical facilities during and after Harvey hit the most vulnerable communities the hardest. For example, chemical facilities are concentrated and emission spikes of toxic air were reported in the Manchester and Galena Park neighborhoods, which are predominantly communities of color and include a disproportionate percentage of low-income families.<sup>45</sup>

According to analysis of the data by the *Houston Chronicle*:

- "All those Harvey-related air pollution reports packed nearly a year's worth of releases into a couple of stormy weeks, based on an analysis of the total pounds of pollutants reported in 30 Texas counties that were blamed on the storm compared with the same counties' reports for all of 2016." 46
- "Statewide, six major Texas refineries, chemical plants and a huge tank farm have acknowledged releasing anywhere from 1,883 to 28,500 but pounds of benzene a known human carcinogen as part of some of the most hazardous unauthorized emissions specifically blamed on the storm." <sup>47</sup>

<sup>2018), &</sup>lt;a href="https://www.apnews.com/e0ceae76d5894734b0041210a902218d">https://www.apnews.com/e0ceae76d5894734b0041210a902218d</a>; J. Blum, Failures of floating-roof oil tanks during Harvey raise concerns, Houston Chronicle (Oct. 11, 2017), <a href="https://www.houstonchronicle.com/business/energy/article/Failures-of-floating-roof-tanks-during-Harvey-12269513.php">https://www.houstonchronicle.com/business/energy/article/Failures-of-floating-roof-tanks-during-Harvey-12269513.php</a>; J. Blum & L. Olsen, Air monitors detect cancer-causing compound as environmental concerns grow in east Harris County, Houston Chronicle (Sept. 6, 2017), <a href="https://www.chron.com/news/houston-texas/article/Air-monitors-detect-cancer-causing-compound-as-12175440.php">https://www.chron.com/news/houston-texas/article/Air-monitors-detect-cancer-causing-compound-as-12175440.php</a>.

<sup>&</sup>lt;sup>42</sup> T. DiChristopher, Fire breaks out at Valero's Port Arthur, Texas, refinery (Sept. 19, 2017), https://www.cnbc.com/2017/09/19/fire-breaks-out-at-valeros-port-arthur-texas-refinery.html.

<sup>&</sup>lt;sup>43</sup> T. Griggs *et al.*, More Than 40 Sites Released Hazardous Pollutants Because of Hurricane Harvey, NY Times (Sept. 8, 2017), <a href="https://www.nytimes.com/interactive/2017/09/08/us/houston-hurricane-harvey-hazardous-chemicals.html">https://www.nytimes.com/interactive/2017/09/08/us/houston-hurricane-harvey-hazardous-chemicals.html</a>.

<sup>&</sup>lt;sup>44</sup> 2017, 2018 reports, <a href="http://nrc.uscg.mil/">http://nrc.uscg.mil/</a>.

<sup>&</sup>lt;sup>45</sup> See HARC, Summarizing Hurricane Harvey's Environmental Impacts (2017), <a href="https://harcresearch.maps.arcgis.com/apps/MapSeries/index.html?appid=d6b0a3d762ec46ef8ea676f1008f7028/">https://harcresearch.maps.arcgis.com/apps/MapSeries/index.html?appid=d6b0a3d762ec46ef8ea676f1008f7028/</a> (for details cited, click on: Air –toxics, Health & Safety, and About); UCS & Texas Environmental Justice Advocacy Services, Double Jeopardy in Houston: Acute and Chronic Chemical Exposures Pose Disproportionate Risks for Marginalized Communities (2016), <a href="https://www.ucsusa.org/center-science-and-democracy/connecting-scientists-and-communities/double-jeopardy">https://www.ucsusa.org/center-science-and-democracy/connecting-scientists-and-communities/double-jeopardy</a>.

<sup>&</sup>lt;sup>46</sup> L. Olsen, Second Storm.

<sup>&</sup>lt;sup>47</sup> *Id*.

• "[T]he Texas Commission on Environmental Quality has released only one notice of Harvey-related enforcement action. That notice cited Valero for benzene and other air pollution releases that the company says extended for 11 days at its Houston refinery, which is surrounded by the historic residential neighborhood of Manchester." 48

The chemicals released in the week after Harvey made landfall, included benzene, 1,3-butadiene, hexane, hydrogen sulfide, sulfur dioxide, toluene and xylene. According to the Center for Biological Diversity, more than 5 million pounds of emissions were released during and after Hurricane Harvey. Texas Tribune, *In Harvey's Wake*, Sept. 4, 2017, https://www.texastribune.org/2017/09/04/harvey-causes-chemical-companies-release-1-million-pounds-extra-air-po/.

Yet, EPA still has released no information on actual enforcement, pollution reduction, or prevention actions it has required at facilities that experienced preventable and foreseeable releases linked to the 2017 hurricane season. EPA has not put any of these data into its record and appears to be ignoring the problem completely.

No governmental authority collected, analyzed, or released the information needed to evaluate community health effects from potential exposure to the Arkema incident. The CSB highlighted the lack of available air monitoring and dispersion data as the basis for its inability to reach conclusions regarding other health effects to community members due to releases from the Arkema incident, stating that: "It is impossible for the CSB to draw any meaningful conclusions on [long term health effects] in the absence of additional data based on relevant evidence in the form of air emissions from the Crosby incident."

More broadly, although EPA sent staff to the Gulf after Hurricane Harvey, it has provided minimal air monitoring data. Although EPA stated that "All measured concentrations were well below levels of health concern," it admitted that it assessed data in only brief snapshots and recognized that there was little or no air monitoring performed except in a few locations. <sup>50</sup> EPA does not appear to have assessed or reported data from any of the releases during or after Harvey. Instead of even trying to collect air monitoring data during the highest-risk release times, EPA admits:

"One of the many preparations for Hurricane Harvey included the EPA, the TCEQ, and other monitoring entities temporarily shutting down several air monitoring

<sup>&</sup>lt;sup>48</sup> *Id*.

<sup>&</sup>lt;sup>49</sup> CSB Arkema Report at 116; A. Stuckey, *For Crosby residents, a 'bitter taste' about Arkema, and little help from government*, Houston Chronicle, <a href="https://www.houstonchronicle.com/news/houston-texas/houston/article/For-Crosby-residents-a-bitter-taste-about-12771298.php">https://www.houstonchronicle.com/news/houston-texas/houston/article/For-Crosby-residents-a-bitter-taste-about-12771298.php</a>.

<sup>&</sup>lt;sup>50</sup> EPA, ASPECT Summary for Hurricane Harvey 9/4-11/2017 (Sept. 15, 2017), <a href="https://response.epa.gov/sites/12353/files/Aspect%20Summary%20September%204%20-%2011,%202017.pdf">https://response.epa.gov/sites/12353/files/Aspect%20Summary%20September%204%20-%2011,%202017.pdf</a> (describing one-flight examples in certain communities conducted on seven days, from Sept. 4-11, 2017, in which EPA found no levels of certain chemicals above Texas's short-term values of concern, without providing information regarding whether those are the best-available reference values), also available at <a href="https://response.epa.gov/site/doc">https://response.epa.gov/site/doc</a> list.aspx?site id=12353.

**stations** from the greater Houston, Corpus Christi, and Beaumont areas to protect valuable equipment from storm damage." EPA reported that it was not until Friday, Sept. 29, that it determined TCEQ's air monitoring network became 100 percent operational.<sup>51</sup>

EPA's Inspector General began an investigation into the EPA's Preparedness and Response Efforts to the 2017 Hurricanes in EPA Regions 2, 4, and 6 in December 2017, but has not yet released a report.<sup>52</sup>

Union of Concerned Scientists released a report in October 2017 highlighting examples of ways in which EPA's delay of the Chemical Disaster Rule caused harm to people in the wake of Hurricane Harvey by stalling prevention and mitigation measures, including emergency response coordination, incident investigation requirements, and safer alternatives analyses.<sup>53</sup> Communities in the Gulf are now left to brace for likely impacts from this year's hurricane season, while EPA continues to delay and attempts to repeal and further weaken the Chemical Disaster Rule.

Research by the Environmental Integrity Project has also highlighted numerous safety failures and accidental releases that followed Hurricane Harvey due to preventable problems, including during startup and shutdown periods. Environmental Integrity Project, Preparing for the Next Storm, Aug. 16, 2018, <a href="http://www.environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-Final.pdf">http://www.environmentalintegrity.org/wp-content/uploads/2018/08/Hurricane-Harvey-Report-Final.pdf</a>. This report identifies various examples of ways that the Chemical Disaster Rule's prevention and planning measures would help avoid these types of releases and the harm they cause, once implemented, and shows that EPA should not finalize the proposed Rollback Rule.

#### F. Harms to Public Health and Safety Caused by Chemical Disasters

1. Death, Injury, Health Impacts, Life Disruption and Trauma.

A chemical disaster can cause death, injury, life disruption, and other serious short- and long-term harm to public health and the environment due to exposure to hazardous substances released.<sup>54</sup>

<sup>52</sup> <u>https://www.epa.gov/sites/production/files/2017-12/documents/\_epaoig\_notificationmemo\_12-14-17\_hurricanes.pdf.</u>

<sup>&</sup>lt;sup>51</sup> https://response.epa.gov/site/site profile.aspx?site id=12353.

<sup>&</sup>lt;sup>53</sup> UCS, Community Impact: Chemical Safety, Harvey, and the Delay of the Chemical Disaster Rule (Oct. 2017), <a href="https://s3.amazonaws.com/ucs-documents/science-and-democracy/harvey-rmp-community-impact-ucs-2017.pdf">https://s3.amazonaws.com/ucs-documents/science-and-democracy/harvey-rmp-community-impact-ucs-2017.pdf</a>? ga=2.80922068.2143730017.1528804296-1091833046.1524848604.

<sup>&</sup>lt;sup>54</sup> C.R. Krishna Murti, *Biological Effects of Chemical Disasters, Human Victims*, Methods for Assessing and Reducing Injury from Chemical Accidents, 117-19 (1989), https://dge.carnegiescience.edu/SCOPE/SCOPE\_40/SCOPE\_40\_2.3\_Krishna\_Murti\_115-126.pdf; see also M.A. Duncan, et al., *Persons Injured During Acute Chemical Incidents - Hazardous Substances Emergency Events Surveillance, Nine States, 1999-2008*, Centers for Disease Control and Prevention (Apr. 10, 2015), https://www.cdc.gov/mmwr/preview/mmwrhtml/ss6402a3.htm.

EPA's data showed that from 2004-2013, chemical incidents killed 59 people, and caused injuries, hospitalizations, or medical treatment for over 17,000 people, as well as exposure to toxic chemicals, smoke and related health threats. Amendments RIA at 87 ex. 6-5. Over 450,000 people experienced evacuations or shelter-in place orders due to chemical accidents, causing serious daily life disruption and other harm during the studied timeframe. Amendments RIA at 83. In total, EPA concluded, RMP-covered facility accidents cause about \$274.7 million in quantified damages per year. 82 Fed. Reg. at 4683 tbl. 17 (Summary of Quantified Damages).

EPA's incomplete data collected so far for 2014-16 show another 458 incidents reported so far by 356 facilities. 2014-16 Accident Data Spreadsheet.<sup>55</sup> These incidents killed 12 people, caused 444 people to be injured or seek medical treatment, forced 43,207 people to shelter-inplace or evacuate, and caused \$514.8 million in property damage.<sup>56</sup> For the publicly reported incidents in 2017-18, only limited information is available, but at least some of these incidents have caused reportable harm, including, for example, thirty-six people sought medical attention, including eleven refinery and contract workers who sustained injuries, and thousands of people evacuated near the Husky Superior Refinery (WI) after the April 26, 2018 fire and explosion.<sup>57</sup>

Accidental releases and "near misses" also harm public health by contributing substantially to the air pollution burden falling on fenceline communities. A 2016 report by Union of Concerned Scientist, Air Toxics and Health in the Houston Community of Manchester, reveals that communities face daily exposure to toxic air pollutants. Over the course of a lifetime this can produce "a variety of respiratory, neurological, immune and reproductive issues." Union of Concerned Scientists, Air Toxics and Health in the Houston Community of Manchester (2016), <a href="https://www.ucsusa.org/center-science-and-democracy/connecting-scientists-and-communities/air-toxics-and-health#.W37pOthKjFQ">https://www.ucsusa.org/center-science-and-democracy/connecting-scientists-and-communities/air-toxics-and-health#.W37pOthKjFQ</a>. The report also highlights that there is no definitive research on cumulative risk from air toxics. *Id*.

In addition to immediate death, injury, and illness, the World Health Organization ("WHO") has found that chemical incidents can also cause delayed health effects, like cancer, birth defects, genetic harm, and lasting trauma or mental health impacts. Additional harm is also likely, such as economic impacts due to disruption of agriculture, loss of jobs, long-term evacuation of the area, costs for health care, litigation, rehabilitation, and lasting environmental

<sup>&</sup>lt;sup>55</sup> Available at https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0909.

<sup>&</sup>lt;sup>56</sup> *Id* 

<sup>&</sup>lt;sup>57</sup> CSB, Factual Investigative Update, April 26, 2018 Husky Superior Refinery Explosion and Fire (Aug. 2018), <a href="https://www.csb.gov/husky-energy-oil-refinery-investigation-update-2/">https://www.csb.gov/husky-energy-oil-refinery-investigation-update-2/</a> (3-mile radius evacuation; 10-mile rectangle of Superior, WI evacuated); CSB Releases Factual Update on Explosion and Fire at Husky Refinery Located in Superior, Wisconsin (Aug. 2, 2018), <a href="https://www.csb.gov/csb-releases-factual-update-on-explosion-and-fire-at-husky-refinery-located-in-superior-wisconsin/">https://www.csb.gov/csb-releases-factual-update-on-explosion-and-fire-at-husky-refinery-located-in-superior-wisconsin/</a>; see also, e.g., Douglas County, WI, Notification of Air Monitoring Reduction Plan (June 2018), <a href="https://www.douglascountywi.org/DocumentCenter/View/8827/11156937---Notification-of-Air-Monitoring-Reduction-Plan---Superior-Refinery">https://www.douglascountywi.org/DocumentCenter/View/8827/11156937---Notification-of-Air-Monitoring-Reduction-Plan---Superior-Refinery</a>; Blue Green Alliance et al., A Disaster In the Making (last updated Aug. 22, 2018), <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule">https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>.

damage.58

A systematic review relating exposure to disasters to incidences of post-traumatic stress disorder (PTSD) highlights several chemical disasters that have resulted in individuals developing PTSD.<sup>59</sup> The researchers conclude that PTSD was measured in an exposed population three to four months<sup>60</sup> or even ten years after the disaster.<sup>61</sup>

These are all types of health effects that EPA's record does not include, because EPA only collects data on the moment and immediate aftermath of an incident. It is unclear whether EPA has even attempted to assess the toxic exposure and other longer-term health and safety impacts from chemical incidents.

As one of the most well-studied examples, evidence available 20 years after the 1984 Bhopal tragedy at Union Carbide showed that the harm it caused has continued to increase. By the end of October 2003, according to the Bhopal Gas Tragedy Relief and Rehabilitation Department, compensation had been awarded to 554,895 people for injuries received and 15,310 survivors of those killed. Data now suggest that an estimated 15,000 to 20,000 people have died prematurely as a result of exposure to the Bhopal release. In addition to early impacts including premature death and illness, longer term impacts from the Bhopal disaster have included: harm to the eyes; respiratory disease and decreased lung function; reproductive harm such as increased pregnancy loss, increased infant mortality, and decreased placental/fetal weight; genetic harm such as increased chromosomal abnormalities; and neurobehavioral harm such as impaired associate learning, motor speed, and precision. Here are also lasting concerns about health impacts from toxic contamination of the environment in which people are living. Since the tragedy and the closure of the factory, for 33 years, about 336 tons of hazardous waste have been left uncontained at the site of the Union Carbide India Limited factory, and research shows contamination of local soil and water.

<sup>&</sup>lt;sup>58</sup> WHO, Manual for the Public Health Management of Chemical Incidents at 3 (2009), http://apps.who.int/iris/bitstream/10665/44127/1/9789241598149 eng.pdf.

<sup>&</sup>lt;sup>59</sup> Neria Y, Nandi A, Galea S. Post-traumatic stress disorder following disasters: a systematic review. Psychol Med 2008;38:467–80.

<sup>&</sup>lt;sup>60</sup> Freed D, Bowler R, Fleming I. Post-traumatic stress disorder as a consequence of a toxic spill in Northern California. Journal of Applied Social Psychology. 1998;28:264–281.

<sup>&</sup>lt;sup>61</sup> Hull AM, Alexander DA, Klein S. Survivors of the Piper Alpha oil platform disaster: long-term follow-up study. British Journal of Psychiatry. 2002;181:433–438

<sup>&</sup>lt;sup>62</sup> Edward Broughton, The Bhopal disaster and its aftermath: a review, 4 Environmental Health at 3 (May 10, 2005), https://ehjournal.biomedcentral.com/articles/10.1186/1476-069X-4-6.

<sup>&</sup>lt;sup>63</sup> *Id.* at 2.

<sup>&</sup>lt;sup>64</sup> *Id*.

<sup>&</sup>lt;sup>65</sup> Neeta Lal, Bhopal Gas Tragedy Still Haunts India, The Diplomat (Apr. 19, 2017), http://thediplomat.com/2017/04/bhopal-gas-tragedy-still-haunts-india/.

<sup>&</sup>lt;sup>66</sup> *Id*.

The WHO has recognized that different groups can experience health impacts resulting from different kinds of exposure. Employees and other on-site persons usually face more than one exposure pathway, often including inhalation of vapor and skin contact from splashing and clean up. Emergency services personnel and first responders are usually required to get close to the emergency and are involved in rescue, containment of chemicals, and putting out fires. Primary and secondary contamination of fire officers, ambulance officers, and other emergency staff occurs. Medical staff and other hospital patients also face secondary contamination from incomplete decontamination of causalities. Additionally, the public is exposed to released chemicals and other hazards deriving from the event via air, water, food, soil, and other pathways.<sup>67</sup> Knowledge of these risks and ongoing anxiety about the threat of a chemical disaster are additional impacts faced by those who live or work near a chemical facility. Furthermore, some exposed people may be additionally vulnerable due to factors such as: inherent genetic variability, age, gender, pre-existing disease (e.g., diabetes, asthma), inadequate diet, occupational, environmental or lifestyle factors (e.g., smoking), stress and inadequate access to health care.<sup>68</sup> Vulnerability can be reduced by, among other things, strengthening access to information and strengthening emergency coordination and response.<sup>69</sup>

## 2. Chemical Disasters Harm and Endanger Fenceline Communities

People in communities just outside the fenceline of chemical facilities face continuous threats and are some of the first to experience harm from chemical accidents that occur near their homes, schools, and workplaces. Some communities, like Wilmington and Torrance, California, and the Manchester/Harrisburg neighborhoods of Houston and the nearby city of Galena Park, Texas, are surrounded by refineries and chemical plants and live in constant fear of accidents and health threats from these facilities. The disproportionate harm to communities of color and low-income communities from chemical releases at RMP facilities is well-established in the record and admitted by EPA, as summarized above. In addition, some local and national groups have published reports on particularly exposed and affected communities, for whom EPA does not acknowledge the greater impact from simultaneous and repeated multiple facility exposure. For example, Union of Concerned Scientists has worked with the Texas Environmental Justice Advocacy Services (t.e.j.a.s.), the Environmental Justice Health Alliance, and Coming Clean to publish reports showing the much increased and disproportionate harm and threat in communities in the Houston Ship Channel and New Castle County, Delaware.<sup>70</sup>

Union of Concerned Scientists has also released a new report spotlighting the toxic exposure and other health and safety harm to fenceline communities from these incidents, much

<sup>&</sup>lt;sup>67</sup> WHO, Technical Hazard Sheet - Technological Disaster Profiles, http://www.who.int/hac/techguidance/ems/chemical\_insidents/en/ (last viewed May 17, 2017).

<sup>&</sup>lt;sup>68</sup> *Id*.

<sup>&</sup>lt;sup>69</sup> *Id*.

<sup>&</sup>lt;sup>70</sup> Union of Concerned Scientists & Texas Environmental Justice Advocacy Services, Double Jeopardy in Houston at 3 (2016), <a href="http://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf">http://www.ucsusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf</a>; UCS, EJHA, Coming Clean *et al.*, Environmental Justice for Delaware, Mitigating Toxic Pollution in New Castle County Communities (2017), <a href="https://www.ucsusa.org/our-work/center-science-and-democracy/connecting-scientists-and-communities/environmental-justice-for-delaware#.W0uRStJKiUk">https://www.ucsusa.org/our-work/center-science-and-democracy/connecting-scientists-and-communities/environmental-justice-for-delaware#.W0uRStJKiUk</a>.

of which EPA has failed to address in this proposed rulemaking. Ron White, UCS, The Impact of Chemical Facilities on Environmental Justice Communities (Aug. 2018), https://www.ucsusa.org/sites/default/files/attach/2018/08/impact-chemical-facilities-onenvironmental-justice-communities-ucs-2018.pdf.

In the rulemaking record, EPA collected data on over two thousand chemical accidents at covered facilities from 2004-2013. See 2014-13 Accident Data Spreadsheet. In addition, the data from more recent years show hundreds more. See, e.g., 2014-16 Accident Data Spreadsheet; Blue Green Alliance et al., A Disaster In the Making (2018), available at https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule.

The Chevron Richmond Refinery fire in 2012 is an illustration of the impact and potential harm that a chemical disaster can have on local communities. A pipe ruptured, releasing highly flammable gas oil which partially vaporized, and two minutes later, a fire ignited, injuring workers. Three cities were placed under shelter-in-place and community warning system alerts for a period of over 4 hours.<sup>71</sup> Following this event, 15,000 people in nearby communities sought medical attention as a result of the event for ailments including breathing problems, chest pain, shortness of breath, sore throat, and headaches, and about 20 of these people were admitted to local hospitals as inpatients for treatment.<sup>72</sup>

Accident reports from Chemical Safety Board investigations similarly provide evidence of incidents where community members have faced grave threats and harm from chemical releases in recent years. For example, in February 2015, the ExxonMobil Refinery in Torrance, California had an explosion near a tank holding modified hydrofluoric acid. Four workers were injured, serious on-site property damage occurred, and debris and "catalyst dust" was dispersed for a mile into the nearby community. 73 As the CSB described during the investigation: "had the debris struck the tank, a rupture could have been possible, resulting in a potentially catastrophic release of extremely toxic modified [hydrofluoric acid] into the neighboring community" with potential to cause serious harm to the "333,000 residents, 71 schools, and eight hospitals" within a three-mile radius.<sup>74</sup> Since that incident, the Torrance refinery was sold to PBF Holdings Company, and the refinery has experienced multiple additional safety incidents.<sup>75</sup> In releasing

<sup>&</sup>lt;sup>71</sup> CSB, Final Investigation Report: Chevron Richmond Refinery Pipe Rupture and Fire at 1-2, Report No. 2012-03-I-CA (Jan. 2015), https://www.csb.gov/assets/1/17/chevron final investigation report 2015-01-28.pdf?15397.

<sup>&</sup>lt;sup>72</sup> *Id.* at 2.

<sup>&</sup>lt;sup>73</sup> CSB, Investigation Report: ExxonMobil Torrance Refinery Electrostatic Precipitator Explosion at 23, Report No. 2015-02-I-CA (May 2017), http://www.csb.gov/assets/1/19/ExxonMobil Report FOR PUBLIC RELEASE.pdf.

<sup>&</sup>lt;sup>74</sup> CSB, U.S. Chemical Safety Board Finds Multiple Safety Deficiencies Led to February 2015 Explosion and Serious Near Miss at the Exxon Mobil Refinery in Torrance, California (Jan. 13, 2016), http://www.csb.gov/us-chemical-safety-board-finds-multiple-safety-deficiencies-led-to-february-2015explosion-and-serious-near-miss-at-the-exxon-mobil-refinery-in-torrance-california/.

<sup>&</sup>lt;sup>75</sup> South Coast Air Qual. Mgmt. Dist., News Release, SCAQMD Conducts Hearing on PBF Refinery in Torrance (Apr. 1, 2017), http://www.aqmd.gov/docs/default-source/news-archive/2017/pbf-refineryapril-1-2017.pdf; Nick Green, Why Torrance Has Come Full Circle In Its Battle Over Refinery Safety,

the final investigation report on May 3, 2017, CSB Chairperson Vanessa Allen Sutherland said: "This explosion and near miss should not have happened, and likely would not have happened, had a more robust process safety management system been in place."<sup>76</sup> A recent report by the Center for Public Integrity found that 50 U.S. refineries currently use hydrofluoric acid, putting 16 million people near those refineries at risk of a serious chemical disaster.<sup>77</sup>

In October 2016, over 140 community members and employees had to seek medical attention while thousands were directed to shelter in place due to a chemical release at MGPI Processing Plant in Atchison, Kansas.<sup>78</sup> In preliminary findings on this event, CSB Chairperson Vanessa Allen Sutherland said,

This type of accident is preventable. Our investigation demonstrates all too clearly that complacency with routine practices and procedures can result in severe consequences. A reaction that produced thousands of pounds of a hazardous chemical had the potential [to] be much more serious – the CSB's aim is to issue clear safety improvements which can be made to similar facilities across the country.<sup>79</sup>

These are just a handful of incidents that were detrimental to fenceline community members in recent years. Even accidents that may be reported as having only on-site impacts can cause disruption, fear, and harm in the surrounding communities because of smoke, increased emissions releases, and lack of communication to residents about the risks they are being exposed to. There can also be economic impacts to the community because of lost work days, time spent sheltering-in-place or evacuating, emergency response costs, and general disruption. *See*, *e.g.*, 82 Fed. Reg. 4598 & tbl.4; RAND Corp., Cost-Benefit Analysis of Proposed California Oil and Gas Regulations at xiii-xvi (2016), *available at* https://www.rand.org/pubs/research\_reports/RR1421.html.

\_

Daily Breeze (Feb. 26, 2017), http://www.dailybreeze.com/general-news/20170226/why-torrance-has-come-full-circle-in-its-battle-over-refinery-safety.

<sup>&</sup>lt;sup>76</sup> CSB, CSB Releases Final Report into 2015 Explosion at ExxonMobil Refinery in Torrance, California (May 3, 2017), http://www.csb.gov/csb-releases-final-report-into-2015-explosion-at-exxonmobil-refinery-in-torrance-california/.

<sup>&</sup>lt;sup>77</sup> Jim Morris, *Regulatory flaws, repeated violations put oil refinery workers at risk*, Ctr. for Pub. Integrity (Feb. 28, 2011), https://www.publicintegrity.org/2011/02/28/2111/regulatory-flaws-repeated-violations-put-oil-refinery-workers-risk.

<sup>&</sup>lt;sup>78</sup> CSB, MGPI Processing, Inc. Toxic Chemical Release, http://www.csb.gov/mgpi-processing-inc-toxic-chemical-release-/ (last visited May 17, 2017).

<sup>&</sup>lt;sup>79</sup> CSB, CSB Releases Preliminary Findings into Chemical Release at MGPI Industries; Investigators Note Insufficient Safety Design Features and Shortcomings in Emergency Shutdown Devices (Apr. 12, 2017), http://www.csb.gov/csb-releases-preliminary-findings-into-chemical-release-at-mgpi-industries-investigators-note-insufficient-safety-design-features-and-shortcomings-in-emergency-shutdown-devices/.

#### 3. Chemical Disasters Harm and Endanger Workers.

Workers are often the first to be exposed during chemical disasters and are the most likely to die as a result of a severe incident. For example, flames engulfed 19 refinery workers during the disaster at the Chevron Refinery in Richmond, California in 2012. On February 8, 2017, three contractors died and seven were injured in an explosion at Packaging Corporation of America in DeRidder, Louisiana. On November 22, 2016, four workers were injured when isobutane was released and caused an explosion at an oil refinery in Baton Rouge, Louisiana. On August 12, 2016, a flash fire injured seven workers in Nederland, Texas while working at Sunoco Logistics Partners. Again, in February 2015, two Exxon Mobil Refinery workers in California were injured as a result of a workplace explosion at the Torrance Refinery. In their investigation of the accident, the Chemical Safety Board found that ExxonMobil did not have safety instruments that would have detected the flammable hydrocarbons. One of the most notorious examples of worker fatalities is the disaster that occurred at the BP Texas City refinery in 2005, which killed 15 workers and injured 180 others.

In 2015, the Texas Tribune and Houston Chronicle published a report estimating that in the United States between 1995 and 2015, 122 refinery employees and contract workers died while on the job. Eighty-six of those deaths were from injuries caused by fires, explosions, and unintended exposure to toxic air emissions or chemicals due to malfunctioning equipment or failure to follow safety protocols. Malewitz et al., A Deadly Industry: Assembled data shows how and where refinery workers continue to die, Tribune and Houston Chronicle, (Mar. 22, 2015), https://apps.texastribune.org/blood-lessons/data/.

4. Chemical Disasters Harm and Endanger First Responders, which also Undermines Their Ability to Protect Communities and Workers.

First responders need more information about chemicals and hazards at facilities where they are responding to emergency calls. Emergency response officials urged EPA not to delay the Chemical Disaster Rule's coordination requirements, saying "[w]e want people coming home

27

<sup>&</sup>lt;sup>80</sup> See, e.g., Morris, Regulatory flaws, repeated violations put oil refinery workers at risk

<sup>&</sup>lt;sup>81</sup> Jessica Eckdish, *The Missing Voices at EPA's Hearing on Chemical Safety Rules*, Daily Kos (Apr. 18, 2017), http://www.dailykos.com/story/2017/4/18/1654005/-The-Missing-Voices-at-EPA-s-Hearing-on-Chemical-Safety-Rules.

<sup>&</sup>lt;sup>82</sup> CSB, Packaging Corporation of America Hot Work Explosion, http://www.csb.gov/packaging-corporation-of-america-hot-work-explosion-/ (last visited May 17, 2017).

<sup>&</sup>lt;sup>83</sup> CSB, Exxon Mobile Refinery Chemical Release and Fire, https://www.csb.gov/exxonmobil-refinery-chemical-release-and-fire/ (last visited Aug. 22, 2018).

<sup>&</sup>lt;sup>84</sup> CSB, Sunoco Logistics Partners Flash Fire, http://www.csb.gov/sunoco-logistics-partners-flash-fire/ (last visited May 17, 2017).

<sup>&</sup>lt;sup>85</sup> CSB, ExxonMobil Refinery Explosion, http://www.csb.gov/exxonmobil-refinery-explosion-/ (last visited May 17, 2017).

<sup>&</sup>lt;sup>86</sup> Investigation Report: ExxonMobil Torrance Refinery at 6.

<sup>&</sup>lt;sup>87</sup> 81 Fed. Reg. at 13,649.

at night." Gablehouse, Hrg. Tr. 11 ll.1-14 & 13 ll.13-17 (Apr. 19, 2017), EPA-HQ-OEM-2015-0725-0798; Comment submitted by Timothy R Gablehouse, Director, Government Relations, National Association of SARA Title III Program Officials (NASTTPO), EPA-HQ-OEM-2015-0725-0510; Comments of Int'l Ass'n of Firefighters (May 19, 2017), EPA-HQ-OEM-2015-0725-0834.

A report by the *Houston Chronicle* documented the lack of coordination with first response organizations in a major city. 88 Many first responders have died or faced injury responding to accidents that involve dangerous chemicals, and they are one of the most exposed groups to harm from chemical disasters according to the Agency for Toxic Substances and Disease Registry. 89 For example, lack of coordination between on-site responders and public first responders can result in these groups operating on different radio frequencies and being unable to communicate with one another during a disaster. 90 The International Association of Firefighters indicates that in addition to fires, serious risks at chemical accident sites can include extremely high or low temperatures; large, boiling liquid expanding vapor explosions or large unconfined vapor explosions; and large concentrations of hazardous materials among other risks. 91 First responders may also encounter widely-scattered debris or shrapnel; leaks of both toxic and corrosive materials; and chemicals that are incompatible, unstable, and that may potentially polymerize. 92

Twelve of those who died at West, Texas were first responders, and the CSB's investigation concluded that many of these deaths were likely preventable, even when taking into account the possibility of arson as a source of the disaster. *See generally* CSB, Investigation Report: West Fertilizer Company Fire and Explosion, Report No. 2013-02-I-TX (Jan. 28, 2016), http://www.csb.gov/assets/1/19/West\_Fertilizer\_FINAL\_Report\_for\_website\_0223161.pdf. Among other things, the CSB specifically identified the lack of pre-incident planning at the facility as a contributing factor to the deaths of several first responders. *Id.* at 117; *see also id.* at 107-19 (discussing how general lack of coordination between the facility and the first responder agency contributed to the deaths that occurred). As another example, the December 2004 oil and chemical tank explosion in Houston, Texas caused injuries to two firefighters who responded after a blast that was felt up to 20 miles from the plant site.<sup>93</sup> In 2017, scientists at ATSDR

<sup>88</sup> M. Collette & M. Dempsey, *A Dangerous Job Made More Dangerous*, Houston Chronicle (2017), http://www.houstonchronicle.com/chemical-breakdown/6/.

<sup>&</sup>lt;sup>89</sup> Duncan et al., Persons Injured During Acute Chemical Incidents.

<sup>&</sup>lt;sup>90</sup> Michael P. Wilson, *Refinery Safety in California: Labor, Community, and Fire Agency Views*, Center for Occupational and Environmental Health Labor Occupational Health Program at 9 (June 4, 2013), http://lohp.org/wp-content/uploads/2013/11/LOHP\_Refinery\_SafetyReport\_2nd\_Issue.pdf.

<sup>&</sup>lt;sup>91</sup> International Ass'n of Fire Fighters, *Emergency Response to Chemical Process Industries* at 12, OSHA, https://www.osha.gov/dte/grant\_materials/fy10/sh-20994-10/CPI\_Instructor\_Guide.pdf. <sup>92</sup> *Id.* 

<sup>&</sup>lt;sup>93</sup> CSB, Marcus Oil & Chemical Tank Explosion, http://www.csb.gov/marcus-oil-and-chemical-tank-explosion/ (last visited May 17, 2017).

analyzed injury incidents among first responders exposed to hazardous chemicals. <sup>94</sup> The study obtained data on chemical incidents from 2002-2009 from ATSDR's Hazardous Substances Emergency Events Surveillance (HSESS) in sixteen U.S. states. Additional data was obtained from ATSDR's National Toxic Substance Incident Program. The study found that career firefighters comprised the majority of injured responders and noted that the nine volunteer firefighters who lost their lives in the West, Texas disaster in 2013 were unaware of the explosion hazard. <sup>95</sup>

In 2003, NIOSH published a report on the health and safety risks and personal protective needs for emergency responders. The report highlighted the need for a 'hazard assessment' as an important facet to inform emergency responders with regard to the hazards they face. With that information, first responders can decide both how to approach an incident and decide which types of personal protection they should use. The report noted a need for facilities to create pre-plans, defined as "site-specific information compiled beforehand, such as information on hydrant and standpipe locations, utilities, building design and layout, hazardous material inventories, and service histories from previous calls." Having this information on hand would lead to better coordination among responders facing unknown risks. Combatting chemical releases and chemical fires often requires specific knowledge and/or specific materials. Failure to obtain those materials in advance can significantly delay the mitigation of a release or lead to further harm.

## G. <u>State and Local Government Examples Show The Chemical Disaster Rule Is Necessary and Feasible.</u>

While disasters have occurred without EPA taking sufficient action to prevent and reduce chemical incidents, a handful of states and local governments have evaluated the problem and issued measures to try to strengthen protections locally. However, many states have not taken such actions. Further, even in places like California with industry-specific regulations (e.g., for refineries), such programs do not ensure the protection of people near other types of chemical facilities. Thus, while in some places these measures help *some* to reduce the number of chemical incidents occurring, for people affected by the worst chemical incidents around the

https://www.rand.org/content/dam/rand/pubs/monograph reports/2005/MR1646.pdf.

<sup>&</sup>lt;sup>94</sup> ATSDR, *Acute Chemical Incidents with Injure First Responders*, 2002-2012 (2017) https://core.ac.uk/download/pdf/153363374.pdf.

<sup>&</sup>lt;sup>95</sup> *Id*.

<sup>&</sup>lt;sup>96</sup> NIOSH, Protecting Emergency Responders: Community Views of Safety and Health Risk and Personal Protection Needs (2003),

<sup>&</sup>lt;sup>97</sup> *Id*.

<sup>&</sup>lt;sup>98</sup> See, e.g., Rick Haase, Responding to Fires at Petrochemical Facilities, Fire Engineering (Nov. 1, 2003), <a href="https://www.fireengineering.com/articles/print/volume-156/issue-11/features/responding-to-fires-at-petrochemical-facilities.html">https://www.fireengineering.com/articles/print/volume-156/issue-11/features/responding-to-fires-at-petrochemical-facilities.html</a>; Craig H. Shelley, Storage Tank Fires: Is Your Department Prepared?, Fire Engineering (Nov. 1, 2008), <a href="https://www.fireengineering.com/articles/print/volume-161/issue-11/features/storage-tank-fires-is-your-department-prepared.html">https://www.fireengineering.com/articles/print/volume-161/issue-11/features/storage-tank-fires-is-your-department-prepared.html</a>; McKinney & Reinan, Superior refinery fire raged near chemical tanks that held deadly risk, Star Tribune (Apr. 28, 2018), <a href="https://www.startribune.com/superior-wis-evacuation-order-lifted-at-6-a-m-mayor-says/481050521/">https://www.startribune.com/superior-wis-evacuation-order-lifted-at-6-a-m-mayor-says/481050521/</a>.

U.S., these developments primarily provide evidence showing that EPA can and should also strengthen federal protections. Complementary and stronger federal protections are critical to protecting communities in these and other states.

### 1. California Refinery Safety Rules

California recently completed new regulatory updates for refineries showing the value and need for consideration of inherently safer technologies, as well as stronger emergency preparedness. Following a serious chemical release and fire at Chevron's Richmond oil refinery in August 2012, the government of California recognized the need to improve workplace emergency preparedness within such facilities. With that objective in mind, Governor Jerry Brown convened a working group to study and improve safety for workers in and communities near oil refineries within the state.<sup>99</sup> The multi-year study resulted in a set of recommendations for new processes "that safety experts and the industry itself have learned over the past two decades are essential to safe operation of a refinery."<sup>100</sup> The report recommended updates to Cal/OSHA's existing Process Safety Management ("Cal. PSM") requirements, applicable to petroleum refineries; and to Cal. EPA's Accidental Release Prevention Program ("Cal/ARP"), which, like the national RMP, applies to stationary sources with more than a threshold quantity of a regulated substance.

California then finalized requirements in the Cal. EPA regulations that include many provisions similar to those included in the original 2017 Chemical Disaster Rule. <sup>101</sup> For instance, all three sets of regulations – Cal. PSM, Cal/ARP, and the 2017 Chemical Disaster Rule – contain requirements meant to prevent or lessen the impact of disasters in the regulated industries. Methods to achieve this include analyzing processes for hazards – including assessing inherently safer technologies, performing root cause analysis to identify all factors that led to a release; a schedule for mandatory, compliance audits; and enhanced safety training, with supplemental training as needed. <sup>102</sup> The programs also emphasize the importance of coordinating with first responders in order to mitigate harm in case an incident does occur. Lastly, the 2017 Chemical Disaster Rule duplicates an aspect of Cal/ARP, requiring that reports

<sup>&</sup>lt;sup>99</sup> Cal. EPA, News Release No. 2016-72 (July 14, 2016), <a href="https://www.dir.ca.gov/DIRNews/2016/2016-72.pdf">https://www.dir.ca.gov/DIRNews/2016/2016-72.pdf</a>.

<sup>100</sup> https://www.dir.ca.gov/dosh/doshreg/Process-Safety-Management-for-Refineries/Status-Report-on-PSM-Regulatory-Oversight.April-2015.pdf at 1.

<sup>&</sup>lt;sup>101</sup> Cal. EPA, <a href="http://www.caloes.ca.gov/cal-oes-divisions/fire-rescue/hazardous-materials/california-accidental-release-prevention">http://www.caloes.ca.gov/FireRescueSite/Documents/CalARP%20Program%204%20FSOR.PDF</a>; Cal. EPA, Initial Statement of Reasons,

http://www.caloes.ca.gov/FireRescueSite/Documents/ISOR%202016.pdf.

<sup>&</sup>lt;sup>102</sup> See e.g., Cal. EPA, § 2762.13(e)(3), (f) (hierarchy of hazard control analysis requires consideration of IST for refineries); § 2762.13(b)(3), (4) (requiring incident investigation response requirements to be incorporated into the hazard control analysis); § 2755.6 (compliance audits every three years, though not required to be independent third-party); § 2762.9(i)(4) (requiring investigation report to include root cause analysis); § 2762.4 (safety training required for employees involved in processes); § 2735.5(d)(3) & § 2735.7 (coordination with first responders and access to information required);

from investigation of major incidents be made available to the public.

The success of Cal. PSM and Cal/ARP in implementing measures and preventing and reducing the impact of disasters demonstrates that stronger protections are feasible, and can and do save lives. EPA must consider and cannot ignore these significant developments in this rulemaking, as additional reason *not* to finalize the proposed Rollback Rule. Furthermore, according to economic modeling, the programs also succeed in reducing costs for industry, as the cost avoidance due to reduced likelihood and severity of a major incident far outweighs the expense of complying with the regulations, as the RAND Corporation highlighted. Preventing just one major incident can save the refinery itself on average of \$220 million, not to mention the costs and unquantifiable harm caused to workers, first responders, community members, and governmental parties who have to provide support during and after the incident. <sup>104</sup>

2. New Jersey Regulations for Facilities Using Extraordinarily Hazardous Substances

New Jersey regulations and requirements pursuant to the Toxic Catastrophic Prevention Act ("TCPA") and Domestic Security Preparedness Act ("DSPA") also demonstrate the need for and benefits of the national Chemical Disaster Rule. In 1988, New Jersey passed the TCPA in response to several devastating chemical releases. The TCPA regulates owners or operators that "generate[], store[], or handle[]" any "extraordinarily hazardous substances" ("EHS"). Since the TCPA's enactment, no offsite fatalities have occurred "as a result" of an EHS release from a regulated facility under the TCPA program.

To fulfill the broad goals of the TCPA, New Jersey's Department of Environmental Protection ("NJDEP") has developed two regulatory programs similar to those EPA is currently proposing to rescind: Emergency Response Coordination and Inherently Safer Technology. As part of a risk-management plan, NJDEP regulations require regulated facilities to develop a written emergency response program. The emergency response program must include: (1) an annual refresher emergency response training for all employees; (2) at least one EHS emergency response exercise per year; (3) a written assessment of the emergency response plan; and (4) a

 $\frac{https://www.dir.ca.gov/oshsb/documents/noticeSep2016-Process-Safety-Management-for-Petroleum-Refineriess.pdf.}{$ 

<sup>&</sup>lt;sup>103</sup> RAND Corp., Cost-Benefit Analysis of Proposed California Oil and Gas Regulations at xiii-xvi (2016), *available at* https://www.rand.org/pubs/research\_reports/RR1421.html; *see also* Cal. OSHA, Notice of Proposed Rulemaking at 4-5 (July 15, 2016),

<sup>&</sup>lt;sup>104</sup> RAND Corp, Cost-Benefit Analysis, at xiv.

<sup>&</sup>lt;sup>105</sup> N.J. Stat. Ann. § 13:1k-20 (West 1986).

<sup>&</sup>lt;sup>106</sup> *Id.* § 13:1k-22(b), (d).

 $<sup>^{107}</sup>$  Toxic Catastrophe Prevention Act Program: Inherently Safer Technology Review, 39 N.J. Reg.  $\S$  1351(a), 7, (proposed Apr. 16, 2007) ("IST Proposal").  $^{108}$  Id

<sup>&</sup>lt;sup>109</sup> N.J. Admin Code § 7:31-5.2 (West 2009).

process for reporting EHS accidents. 110

Relying on the statutory provisions focusing on "alternative processes analysis," <sup>111</sup> DEP has also developed an Inherently Safer Technology review program. <sup>112</sup> NJDEP defines IST as the "principle or techniques that can be incorporated in a covered process to minimize or eliminate the potential for an EHS release." <sup>113</sup>

Under current NJDEP regulations, adopted in 2008, new and existing Program 2 and 3 processes must undergo IST.<sup>114</sup> DEP incorporates the federal definition of Program 2 and 3 facilities under 40 C.F.R. § 68.10 with minor changes.<sup>115</sup> Existing sources were required to complete IST analysis for each covered process by September 2, 2008, and to update them at least every five years.<sup>116</sup>

Sources could alternatively comply by submitting "[a]n inherently safer technology review report completed pursuant to Best Practice Standards [under the DSPA] prior to May 5, 2008." The IST review, conducted by a "team of qualified experts," has to identify "feasible" inherently safer technology alternatives, or combinations of alternatives, that minimize the

<sup>&</sup>lt;sup>110</sup> *Id*.

<sup>&</sup>lt;sup>111</sup> N.J. Stat. Ann. § 13:1K-24 (West 1986).

<sup>&</sup>lt;sup>112</sup> N.J. Admin Code § 7:31-1.5.

<sup>&</sup>lt;sup>113</sup> *Id*.

<sup>114</sup> *Id.* § 7:31-3.4(e) ("The owner or operator [of a program 2 facility] shall complete an [IST] review . . . for each new covered process . . . ."); *Id.* § 7:31-3.6 ("[F]or each covered process at the [Program 2] stationary source, the owner or operator shall complete an [IST] review . . . ."); *Id.* § 7:31-4.2(e) ("The owner or operator [of a Program 3] source] shall complete an [IST] review . . . for each new covered process . . . ."); *Id.* § 7:31-4.12 ("For each covered process at the [Program 3] stationary source, the owner or operator shall complete an [IST] review . . . ."). The regulations containing the current IST requirements are only available in the 2008 Rule Proposal. *See* IST Proposal ("The Department is proposing to amend the [TCPA Rules] to expand the requirements relating to [ITSs] to apply to both Program 2 and 3 covered processes . . . and to make these requirements applicable to both existing and new processes . . . ."); *see also* Toxic Catastrophic Prevention Act Program: Inherently Safer Technology Review Rule Adoption, 40 N.J. Reg. § 2554(a) (May 5, 2008).

<sup>&</sup>lt;sup>115</sup> See id. § 7:31-1.1(c)3v.

<sup>\$ 7.31-4.12(</sup>a) (providing compliance dates for existing Program 2 processes); *Id.* \$ 7.31-4.12(a) (providing compliance dates for existing Program 3 processes). Newly designed and constructed sources are required to submit IST reviews "at least 90 days prior" to using new equipment or starting construction. *Id.* \$ 7:31-4.11(a)(1); (b)(1); (c)(1); (d) ("The owner or operator shall submit the inherently safer technology review report ["at least 90 days prior to "construction of the covered process," or "placing the equipment into EHS service."]).

The goal of this change was to "verify that IST [was] addressed at the design phase of a new covered process, when it is most cost-effective to do so."

<sup>&</sup>lt;sup>117</sup> *Id.* § 7:31-3.6(a) (providing exception for existing Program 2 processes); *Id.* § 7.31-4.12(a) (providing exception for existing Program 3 processes).

potential for an EHS release.<sup>118</sup> After conducting the review, the owner is required to submit a report listing: (1) alternatives already present in the covered process, (2) additional safer technologies, (3) infeasible alternatives, and (4) justifications for the infeasibility determination.<sup>119</sup> Although operators must complete these reports, they are not required to implement the alternatives.<sup>120</sup>

When NJDEP adopted the new IST requirements, it found that IST review would have several economic benefits. First, IST reduces a source's potential liability in the case of a hazardous chemical spill. Second, IST might identify an alternative technology with lower operating costs, and third, safer technology eliminates the risk of business losses from a production shutdown because of a release. 123

As of August 2008, approximately five years after NJDEP promulgated the initial IST review, 48 of 85 facilities required to undergo review had collectively implemented or were implementing 143 IST measures. Of these 48, 41 were in the chemical sector and had adopted 177 additional IST technologies. This demonstrates the feasibility and availability of ISTs, particularly in the chemical sector.

Some of the IST measures included a facility that significantly reduced its use of acetylene, and another facility that significantly reduced its use of chlorine <sup>126</sup> – both of which are extremely hazardous substances. <sup>127</sup> Additionally, wastewater treatment facilities adopted 15 IST measures, which included two facilities that eliminated their use of EHS. <sup>128</sup> To put all these

<sup>&</sup>lt;sup>118</sup> *Id.* § 7:31-4.12(a)–(d).

<sup>&</sup>lt;sup>119</sup> *Id.* § 7.31-4.12(f).

<sup>&</sup>lt;sup>120</sup> CSB, Investigation Report: Catastrophic Rupture Of Heat Exchanger, Tesoro Anacortes Refinery, at 112–13 (May 2014); *see also* EPA-HQ-OEM-2015-2075-0888, Attachment # 108: Iclal Atay, N.J. Dep't of Envtl. Prot., Accidental Release Prevention Requirements Request for Information at 13 (Oct. 1, 2014).

<sup>&</sup>lt;sup>121</sup> IST Proposal.

<sup>&</sup>lt;sup>122</sup> *Id*.

<sup>&</sup>lt;sup>123</sup> *Id*.

<sup>&</sup>lt;sup>124</sup> See EPA-HQ-OEM-2015-0725-0888, Attachment # 51: Mark N. Mauriello, Acting Comm'r, Dep't of Envtl. Prot., Inherently Safer Technologies Implementation Summary at 2 (Jan. 15, 2010). The 143 IST measures includes every IST report submitted to DEP from 2003 to 2008, *id.*, not all of which were completed under the TCPA.

<sup>&</sup>lt;sup>125</sup> *Id*.

<sup>&</sup>lt;sup>126</sup> *Id.* at 2–3.

<sup>&</sup>lt;sup>127</sup> N.J. Admin. Code § 7:31-6.3 (West 2009).

<sup>&</sup>lt;sup>128</sup> Mauriello Attachment 51, at 3; *see also* EPA-HQ-OEM-20150-0725-0575, Coal. to Prevent Chemical Disasters, Comments to docket OEM-2014-0328 dated October 29, 2014 at 46 (providing a full summary of all the facilities that adopted safer technologies because of the IST process); EPA-HQ-OEM-2015-0725-0888, Attachment # 128: N.J. Work Env't. Council, Comments at 5–6 (Oct. 20, 2014), http://www.nj.gov/dep/rules/proposals/20070416a.pdf ("Some of these IST changes included over 300)

numbers in perspective, since the TCPA's adoption in 1988, the number of sites storing threshold extraordinarily hazardous substances has decreased 80% in New Jersey. 129

Contrary to testimony by the Corn Refiners' Association at the public hearing in June, the raw incident numbers since NJDEP implemented the IST program in 2008 do not show that there has been no decline in incidents. Those comments do not include the number of facilities as a denominator, and do not track the incidents among facilities that had actually fulfilled the IST requirements. Regardless, EPA already addressed this and explicitly rejected similar arguments that adoption of IST in NJ or other states is insufficient to show its value, stating that: "Because the requirements involve prevention of accidents before they occur, it is difficult to provide a quantitative assessment that the requirement would reduce a certain number of accidents." Response to Comments on the 2016 Proposed Rule Amending EPA's Risk Management Program Regulations at 131, EPA-HQ-OEM-2015-0725-0729 ("Amendments RTC").

NJDEP has also pointed out that "[m]ost of the facilities that use extraordinarily hazardous substances could become less attractive terrorist targets by converting to alternative chemicals or processes identified through periodic IST reviews if feasible and practicable." The history of the IST program illustrates the program's national security benefits. In addition to the TCPA, New Jersey passed the Domestic Security Preparedness Act ("DSPA") to "reinforce and expand the State's existing anti-terrorism efforts" through preparedness efforts. The DSPA created a Task Force to "provide [s]tatewide coordination and supervision of all activities related to domestic preparedness for a terrorist attack." The Task Force delegated NJDEP the authority to implement Best Practice Standards for Chemical Sector Facilities.

Accordingly, in 2005, NJDEP released mandatory Best Practice Standards ("BPS") that required 43 chemical facilities with security risks to consider IST. The BPS required facilities

wastewater treatment facilities that switched from chlorine, an extraordinarily hazardous substance, to safer processing methods using UV, radiation, ozone or sodium hypochlorite.").

<sup>&</sup>lt;sup>129</sup> Air Toxic Reductions in NJ, N.J. Dep't of Envtl. Prot. (Mar. 9, 2018), https://www.nj.gov/dep/airtoxics/njatp.htm.

<sup>&</sup>lt;sup>130</sup> See EPA-HQ-OEM-2015-0725-0844, James Belke, Corn Refiners Ass'n, Comments on the Environmental Protection Agency's Proposed Delay of Effective Date of the Final Risk Management Program Rule, 12 (May 19, 2017) ("In New Jersey, which has required facilities to conduct an IST analysis since 2008, a review of EPA's ten-year accident history data shows that the number of reportable incidents has not decreased since the implementation of the IST requirement-in fact, there have been more reportable incidents . . . .").

<sup>&</sup>lt;sup>131</sup> Mauriello Attachment 51, at 5.

<sup>&</sup>lt;sup>132</sup> N.J. Stat. Ann. § App. A:9-65 (West 2001).

<sup>&</sup>lt;sup>133</sup> *Id.* § App. A:9-67.

<sup>&</sup>lt;sup>134</sup> William Banks et. al., *Chemical Security in New Jersey: An Overview of Planning, Information Sharing, and Response* at 45 (June 11, 2007), http://insct.syr.edu/wp-content/uploads/2013/02/Chemical-Security-in-New-Jersey.pdf.

<sup>&</sup>lt;sup>135</sup> *Id.* at 19.

to consider (1) reducing their use of toxic or noxious chemicals, (2) using materials in the least hazardous forms possible, and (3) revamping the processes employed to minimize the possibility of accident."<sup>136</sup> The current IST program under the TCPA, promulgated in 2008, incorporates the BPS Standards. NJDEP even allows facilities to comply with the 2008 IST program by submitting IST reports they completed pursuant to the BPS Standards under the DSPA. <sup>138</sup>

New Jersey's program illustrates that the IST review also provides national security benefits. New Jersey's Emergency Response Coordination and IST requirements under the TCPA and the Domestic Security Preparedness Act demonstrate some of the benefits that the Chemical Disaster Rule's similar IST and emergency response requirements would create nationally, if fully implemented.

#### 3. Massachusetts Toxic Use Reduction Act

In 1989, Massachusetts passed the Toxic Use Reduction Act ("TURA") with the aggressive goal of reducing the state's generation of toxic or hazardous byproducts materials by 50% from 1987 levels by 1997.<sup>139</sup> By requiring companies to consider alternative technologies, <sup>140</sup> not only did Massachusetts achieve its goal of a 50% reduction within ten years, <sup>141</sup> but as of 2018, the state had reduced toxic byproduct generation by 66%. <sup>142</sup>

TURA primarily regulates "large quantity toxic users." A large quantity toxic user "manufactures, processes, or otherwise uses" toxic or hazardous substances in threshold amounts and "is classified in SIC Codes 10–14, 20–40, 44–51, 72–76, or the corresponding NAICS codes. 144

<sup>&</sup>lt;sup>136</sup> *Id*.

<sup>&</sup>lt;sup>137</sup> See IST Proposal ("The Best Practice Standards define IST in much the same way as it is defined in the TCPA rules . . . .").

<sup>&</sup>lt;sup>138</sup> *Id*.

<sup>&</sup>lt;sup>139</sup> Mass. Gen. Laws ch. 21I, § 13(A) (1989); History and Accomplishments, Toxics Use Reduction Inst. (Mar. 9, 2018),

https://www.turi.org/Our Work/Policy/Toxics Use Reduction Act/History Accomplishments2.

<sup>&</sup>lt;sup>140</sup> Mass. Gen. Laws ch. 21I, § 11.

<sup>&</sup>lt;sup>141</sup> Exec. Office of Energy and Envtl. Affairs, Dep't of Envtl. Prot., Reporting Year 2012: Toxic Use Reduction Information Release at 3, 8 (June 2014),

https://www.mass.gov/files/documents/2016/08/nj/12relfin.pdf ("2012 TURI Report").

<sup>&</sup>lt;sup>142</sup> Toxic Use Reduction Planning, Toxic Use Reduction Inst. (June 22, 2018) <a href="https://www.turi.org/Our\_Work/Training/Toxics">https://www.turi.org/Our\_Work/Training/Toxics</a> Use Reduction Planning.

<sup>&</sup>lt;sup>143</sup> Mass. Gen. Laws ch. 21I, § 11(A)(1). The statute also references small quantity toxics users as "any toxics user who is not a large quantity user," *id.* § 2, and gives the Massachusetts Department of Environmental Protection ("MDEP") the discretion to regulate these users in some circumstances, *id.* § 11(G); *see also* 310 Mass. Code § 50.41(3) (describing when small quantity toxic users are subject to regulation under TURA).

<sup>&</sup>lt;sup>144</sup> Mass. Gen. Laws ch. 21I, § 2; *Id.* § 9A(A)-(B) (thresholds).

TURA requires large quantity toxic users to submit both an annual toxic use report and a bi-annual toxic use reduction plan. By July 1 of each year, <sup>145</sup> large quantity toxic users must submit an annual toxic use report to the Massachusetts Department of Environmental Protection ("MDEP") for each regulated toxic or hazardous substance. <sup>146</sup> By July 1 of each even-number calendar year, large quantity toxic users must also submit a Toxics Use Reduction Plan ("TURP"). <sup>147</sup> TURA defines toxics use reduction as "in-plant changes in production processes or raw materials that *reduce*, *avoid*, *or eliminate the use of toxic or hazardous substances* ... so as to reduce risks to the health of workers, consumers, or the environment, without shifting risks between workers, consumers, or parts of the environment." <sup>148</sup> Each TURP must include "a comprehensive economic and technical evaluation of appropriate technologies, procedures and training programs for potentially achieving toxic use reduction." <sup>149</sup> (This provision is similar to the STAA review in the Chemical Disaster Rule that EPA is now proposing to repeal; it also applies to more sectors.)

MDEP – the agency charged with "specify[ing] criteria for acceptable toxic use reduction plans"<sup>150</sup> – further specifies in regulations that each plan must provide "an initial list that considers all available technologies, procedures, and training programs ["TPT"] for toxic use reduction."<sup>151</sup> Each user must then consider whether the listed technologies are both technically and economically feasible.<sup>152</sup> The technical evaluation requires users to evaluate whether implementing the technology would result in a toxics use reduction.<sup>153</sup> For each technically feasible TPT, <sup>154</sup> the user must complete an economic evaluation.<sup>155</sup> Although users are not required to implement available TPT, they must make a "good faith effort to identify and evaluate potential safer alternatives."<sup>156</sup> For each technology users implement, they must

<sup>&</sup>lt;sup>145</sup> 310 Mass. Code § 50.32(1). The statute initially required facilities in SIC Codes 20–39 to submit annual reports starting before July 1, 1991 while facilities in SIC Code 10–14, 40, 44–51, 72, 73, 75–76 were not required to submit annual reports until July 1, 1992. Mass Gen. Laws ch. 21I, § 10; *see also* 310 Mass. Code § 50.31(1)–(2). Since both groups are required to submit annual reports, this initial distinction is no longer relevant. 310 Mass. Code § 50.32(1).

<sup>&</sup>lt;sup>146</sup> Mass Gen. Laws ch. 21I, § 10.

<sup>&</sup>lt;sup>147</sup> Mass Gen. Laws. ch. 21I, § 11(A)(1); 310 Mass. Code § 50.41(1). However, facilities are not required to submit a toxics use report if the even-numbered calendar year falls on the same year they first file a toxic use report. 310 Mass. Code § 50.41(1).

<sup>&</sup>lt;sup>148</sup> Mass Gen. Laws ch. 21I, § 2 (emphasis added).

<sup>&</sup>lt;sup>149</sup> *Id.* § 11(A)(1)(3)(a)–(f).

<sup>&</sup>lt;sup>150</sup> *Id.* § 10(A)(1).

<sup>&</sup>lt;sup>151</sup> 310 Mass. Code § 50.45(1)–(2).

<sup>&</sup>lt;sup>152</sup> Id. §§ 50.46; 50.46a.

<sup>&</sup>lt;sup>153</sup> *Id.* § 50.46(1)(a)–(b).

<sup>&</sup>lt;sup>154</sup> See id. § 50.46(2)(a) ("Toxic users need not complete the evaluation of a particular technology . . . [if] the technique is clearly technically infeasible . . . .").

<sup>&</sup>lt;sup>155</sup> *Id.* § 50.46A(1).

<sup>&</sup>lt;sup>156</sup> *Id.*§ 50.42(11); *see also* Toxics Use Reduction Inst., Comments on Accidental Release Prevention Requirements at 2, 5 (Oct. 27, 2014), EPA-HQ-OEM-2014-0328 ("Institute, Comments").

identify (1) the anticipated costs and savings of implementation of each; (2) the expected toxics use reductions; and (3) a schedule for implementation. Users must also explain why they decided not to implement a TPT. 158

TURA demonstrates the benefits of requiring companies to consider safer alternative technologies, as EPA's Chemical Disaster rule does for three major sectors with the worst accident records. As mentioned above, as a result of TURP, Massachusetts reduced its toxic waste generation 66% below 1987 levels. Every year since 1995, MDEP has produced an annual report highlighting how a "core group" facilities has reduced their use of toxics. These reports have measured toxic use reduction over two main periods: 1990–2002 and 2000–2012. From 1990–2002, this core group reduced toxic chemical use by 40%, toxic byproduct generation by 58%, toxics shipped in product by 47%, on-site releases by 90%, and transfers of toxic waste off-site for further waste-management by 36%. From 2000–2012, this core group reduced toxic chemical use by 23%, toxic by product generation by 42%, toxics shipped in product by 21%, on-site releases of toxics by 73%, and transfers of toxics off-site for further waste-management by 29%. The product by 29%. The product by 29%. The product by 29%.

The Toxic Use Reduction Institute ("TURI") further highlighted the benefits of toxic use reduction planning in comments they submitted as part of EPA's 2016 Rulemaking updating the Clean Air Act's Risk Management Program. <sup>165</sup> TURA established TURI at the University of Massachusetts Lowell to "reduce the use of toxic substances … by promoting comprehensive environmental management practices, inherently safer products and materials, and the efficient

<sup>&</sup>lt;sup>157</sup> Mass. Gen. Laws Ch. 21I, § 11(A)(3)(e)–(f); 310 Mass. Code § 50.46(4)(a)–(d).

<sup>&</sup>lt;sup>158</sup> 310 Mass. Code § 50.46(3).

<sup>&</sup>lt;sup>159</sup> Toxic Use Reduction Planning, Toxic Use Reduction Inst. (June 22, 2018), <a href="https://www.turi.org/Our\_Work/Training/Toxics\_Use\_Reduction\_Planning">https://www.turi.org/Our\_Work/Training/Toxics\_Use\_Reduction\_Planning</a>.

<sup>&</sup>lt;sup>160</sup> MDEP measures reduction in toxic use based upon a core group of facilities that have been regulated under TURA since 1989 and whose Standard Industrial Classification codes are 20–39. 2012 TURI Report at 3. MDEP measures all toxics these companies use from the 1990 reporting list that have not since been delisted. *Id.* 

<sup>&</sup>lt;sup>161</sup> MassDEP Toxics Use Reduction Act (TURA) Data & Results, Mass. Dep't of Envtl. Prot., https://www.mass.gov/lists/massdep-toxics-use-reduction-act-tura-data-results (last visited July 16, 2018).

<sup>&</sup>lt;sup>162</sup> 2012 TURI Report at 4 (measuring "Core Group Toxics Use Reduction Progress from 2000 to 2012"); Mass. Dep't of Envtl. Prot., 2002 Toxics Use Reduction Information Release at 8 (June 2002), https://www.mass.gov/lists/massdep-toxics-use-reduction-act-tura-data-results ("2002 TURA Report") (measuring "Core Group Toxics Use Reduction Progress From 1990–2002").

<sup>&</sup>lt;sup>163</sup> 2002 TURA Report at 2.

<sup>&</sup>lt;sup>164</sup> 2012 TURI Report at 4. To calculate these reductions, TURI relied on production-adjusted ratios so they could measure against a stable baseline despite the overall increase in the use of toxics since 1989. *Id.* at 10.

<sup>&</sup>lt;sup>165</sup> Toxics Use Reduction Inst., Comments on Accidental Release Prevention Requirements at 2 (Oct. 27, 2014), EPA-HQ-OEM-2014-0328.

use of resources."<sup>166</sup> In the comments they submitted, TURI emphasized that, in addition to the drastic reduction in the use of toxics and on-site releases, TURP provided numerous *benefits* to companies that implemented safer technologies. <sup>167</sup> For example, they cite a 2009 study finding that 51% of business reported that TURP led to improved worker health and safety and 41% found that TURP created financial savings. <sup>168</sup> Additionally, almost a third of businesses found that TURP created production efficiency, and 21% found that TURP improved product marketing. <sup>169</sup> Chart A in Appendix B provides a summary of all the benefits the study identified.

TURI provides several concrete examples of companies that implemented safer technology and *reduced* business expenses. <sup>170</sup> A mid-size chemical manufacturer company reduced its use of volatile organic compounds and saved \$215,000 in chemical purchases, regulatory fees, and disposal costs over 8 years. <sup>171</sup> A lens manufacturer also reduced its use of volatile organic compounds by 70%, saving \$15,000 a year. <sup>172</sup> Another manufacturing company eliminated its use of trichloroethylene, resulting in yearly saving of \$750,000. <sup>173</sup> Appendix C provides several more examples.

Massachusetts's TURA provides clear evidence that requiring companies to consider safer technologies can significantly reduce the amount of toxic chemical that companies use and release on-site while also providing businesses with numerous benefits, including economic savings.

### 4. Local Chemical Facility Safety Regulations

Some local governments have strengthened or are working to strengthen protections beyond EPA's RMP, as well. Contra Costa County, and the City of Richmond, California have a model program on industrial safety that similarly shows the necessity, value, and feasibility of the national Chemical Disaster Rule requirements.

<sup>&</sup>lt;sup>166</sup> Mass. Gen. Laws 21I, § 6 (2011).

<sup>&</sup>lt;sup>167</sup> Institute Comments at 10.

<sup>&</sup>lt;sup>168</sup> Toxic Use Reduction Inst., Toxics Use Reduction Act Program Assessment, Executive Summary at 6 (June 2009).

<sup>&</sup>lt;sup>169</sup> *Id*.

<sup>&</sup>lt;sup>170</sup> 25<sup>th</sup> Anniversary Leaders, Toxics Use Reduction Inst. (Nov. 1, 2016), https://www.turi.org/Our\_Work/Policy/Toxics\_Use\_Reduction\_Act/Success\_Stories/25th\_Anniversary\_Leaders.

<sup>&</sup>lt;sup>171</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Solvent Recovery and Recycling Case Study at 1–3 (2013).

<sup>&</sup>lt;sup>172</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Ophir Optics: Toxic Use Reduction through Lean Manufacturing and Six Sigma at 1–4 (Mar. 2015).

<sup>&</sup>lt;sup>173</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Innovative Solutions to Conservation: New Approach to High Purity Water Treatment at 2.

In response to incidents at "industrial chemical, petrochemical, and oil industry facilities," Contra Costa County and the City of Richmond passed Industrial Safety Ordinances<sup>174</sup> ("ISO") to "supplement existing Federal and State safety programs" with the goal of protecting "public health and safety" from the threat of accidental chemical releases.<sup>175</sup> Contra Costa County is located in Northern California and as of 2017, had a population of 1.1 million, <sup>176</sup> making it the ninth most populous county in California.<sup>177</sup> Richmond, with a population of 100,000 people, <sup>178</sup> is one of 19 cities located inside Contra Costa County. <sup>179</sup>

Under these ordinances, each regulated facility is required to submit a Safety Plan to Contra Costa Health Services. Similar to EPA's 2017 Chemical Disaster Rule, the Safety Plan requires sources, among other things, to perform a process hazard analysis, conduct employee training, complete root cause analysis and incident investigation, coordinate emergency response, and implement inherently safer systems. 181

The Contra Costa County and Richmond ISO present a compelling narrative: over the last 20 years, chemicals spills and accidents in Contra Costa County have significantly decreased. Contra Costa Health Services, the agency that administers both the Richmond and Contra Costa County ISOs, has repeatedly concluded in its annual reports that the ISO have played a critical role in preventing chemical spills accidents. Research

<sup>&</sup>lt;sup>174</sup> Abbreviated "ISO."

<sup>&</sup>lt;sup>175</sup> Contra Costa County, Cal., Ordinances ch. 450 § 8.002(a); City of Richmond, Cal., Mun. Code ch. 6.43 § 020(a). The Contra Costa County Ordinance became effective January 15, 1999 and the Richmond Ordinance became effective January 17, 2002. Contra Costa County Health Servs., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performances Review and Evaluation Report 6, 21 (Dec. 9, 2008), https://cchealth.org/hazmat/pdf/iso\_report\_2008\_web\_version.pdf ("2008 Contra Costa Co. Annual Report").

<sup>&</sup>lt;sup>176</sup> Contra Costa County, CA, DATAUSA, https://datausa.io/profile/geo/contra-costa-county-ca/ (last visited July, 6, 2018).

<sup>&</sup>lt;sup>177</sup> Our Community, Cal. Contra Costa Cty., http://www.co.contra-costa.ca.us/31/Community (last visited July 6, 2018).

<sup>&</sup>lt;sup>178</sup> Planning & Building Service Department, City of Richmond, City Facts (Jan. 17, 2018), https://www.ci.richmond.ca.us/DocumentCenter/View/8348/COR-Fact-Sheet?bidId=.

<sup>&</sup>lt;sup>179</sup> Cities of Contra Costa, Cal. Contra Costa Cty., http://ca-contracostacounty2.civicplus.com/1243/Cities-of-Contra-Costa (last visited July 6, 2018).

 $<sup>^{180}</sup>$  Contra Costa County, Cal., Ordinances ch. 450  $\S$  8.016; City of Richmond, Cal., Mun. Code ch. 6.43  $\S$  090.

<sup>&</sup>lt;sup>181</sup> *Id*.

<sup>&</sup>lt;sup>182</sup> See EPA-HQ-OEM-2015-0725-0888, Attachment # 139, Randall L. Sawyer, Chief Envtl. Health and Hazardous Material Officer, Contra Costa Health Servs., Comments at 1 (Oct. 28, 2014) ("The number of serious accidents at chemical facilities and petroleum refineries has decreased significantly since the implementation of the Industrial Safety Ordinance.").

<sup>&</sup>lt;sup>183</sup> 2018 Contra Costa Co. Annual Report, at 3 ("Over the last 18-year period, there were Community Warning System (CWS) Level II and CWS Level III incidents that caused some concern; however, there is an overall observable trend of fewer and less severe incidents in the County."); Contra Costa Health

The data clearly supports this conclusion. Contra Costa Health Services tracks the number of Major Chemical Accidents or Releases ("MCAR") events that occur each year. <sup>184</sup> Contra Costa Health Services assigns a Severity Level, between I and III, to each MCAR. <sup>185</sup> A Severity Level I MCAR causes at most minor injury, damage, or impact to the community. <sup>186</sup> A Severity Level II MCAR either causes a slight impact to the community, is reoccurring, or could have been major in "slightly different" circumstances. <sup>187</sup> Finally, a Severity Level III incident results in an at least one fatality, serious injury, or major on-site and/or offsite damage. <sup>188</sup>

Servs., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performance Review & Evaluation 3 (Dec. 9, 2017) ("2017 Contra Costa Co. Annual Report") ("Over a 17-year period, there has been a trend of fewer and less severe Major Chemical Accidents or Releases (MCAR) incidents in the County since the adoption of the Ordinance and no MCAR incidents at an Industrial Safety Ordinance facility this year."); Contra Costa Health Servs., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performance Review & Evaluation at 3 (Apr. 28, 2015),

https://cchealth.org/hazmat/pdf/iso/iso/report\_richmond.pdf ("2014 Contra Costa Co. Annual Report")

https://cchealth.org/hazmat/pdf/iso/iso\_report\_richmond.pdf ("2014 Contra Costa Co. Annual Report") ("Over a 15-year period, there has been a trend of fewer and less severe Major Chemical Accidents or Releases (MCAR) incidents in the County since the adoption of the Ordinance and no MCAR incidents at an Industrial Safety Ordinance facility this year."); Contra Costa Health Servs., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performance Review and Evaluation Report at 3 (Feb. 12, 2013), http://www.ci.richmond.ca.us/DocumentCenter/View/26375/iso\_report\_feb-2013 ("2013 Contra Costa Co. Annual Report") ("There has been over a 10-year period a trend of fewer and less severe Major Chemical Accidents or Releases (MCAR) incidents in the County since the adoption of the Ordinance."); Contra Costa County Health Servs., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performances Review and Evaluation Report at 13 (Dec. 6, 2011),

http://64.166.146.245/docs/2011/BOS/20111206 173/9585 2011%20ISO%20Annual%20Report.pdf ("2011 Contra Costa Co. Annual Report") ("This is the 11th year that there has not been a severity level III Major Chemical Accident or Release in Contra Costa since the adoption of the County's Industrial Safety Ordinance."); 2010 Contra Costa Co. Annual Report at 4 ("The number and severity of Major Chemical Accidents or Releases have been in a generally declining trend since the implementation of Industrial Safety Ordinance."); Contra Costa County Health Serv., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performances Review & Evaluation Report at 3 (Nov. 10, 2009), https://cchealth.org/hazmat/pdf/iso/iso report 2009.pdf ("2009 Contra Costa Co. Annual Report") ("The trend since the adoption of the Industrial County Ordinance has been fewer and fewer Major Chemical Accidents or Releases each year. This is an indication of the success of the County's Industrial Safety Ordinance . . . . "); 2008 Contra Costa Co. Annual Report at 5 ("Since the last report to the Board there has been no Major Chemical Accidents or Releases at a business regulated by the County or City of Richmond Industrial Safety Ordinance Contra . . . . "); Costa County Health Serv., Hazardous Materials Programs, Industrial Safety Ordinance: Annual Performances Review & Evaluation Report at 6 (Dec. 4, 2007), https://cchealth.org/hazmat/pdf/iso/iso report 2007.pdf ("2007 Contra Costa Co. Annual Report") ("The number and severity of the Major Chemical Accidents or Releases have been decreasing since the implementation of Industrial Safety Ordinance.").

<sup>&</sup>lt;sup>184</sup> 2018 Contra Costa Co. Annual Report at 17 (providing a definition of MCAR).

<sup>&</sup>lt;sup>185</sup> 2018 Contra Costa Co. Annual Report at 17.

<sup>&</sup>lt;sup>186</sup> *Id*.

<sup>&</sup>lt;sup>187</sup> *Id*.

<sup>&</sup>lt;sup>188</sup> *Id*.

In the 1990s, a Severity Level III accident occurred, on average, every year in Contra Costa County. But once the ISO became effective in 2000 and 2003, the number of Severity Level III incidents decreased. In fact, from 2000–2011, no Severity Level III accidents occurred at the nine stationary sources regulated under the ISO.

Level I and II accidents also decreased over this period (see Exhibit 1 in Appendix B). From 2000–2002, with the Contra Costa Ordinance becoming effective in 2000 and regulating six sources, there were, on average, 9 Level I and II accidents every year. But, from 2003–2005, with the Richmond ISO becoming effective in 2002, and regulating two additional sources, this average dropped to 5.3. During the 2006–2008 period, this number further dropped to 2, and in 2009–2011, the average was just 1.3 accidents per year. From 2006–2011, as Level I and II accidents decreased, 9 sources voluntary implemented *at least* 378 inherently safer systems ("ISS"). Inherently safer systems ("ISS").

Despite this significant progress, in 2012, chemical safety in Contra Costa County suffered a setback: a Chevron refinery exploded in Richmond, which resulted in the first Level III incident in the County in over 20 years. A pipe rupture at the refinery released a flammable, high-temperature light gas oil that partially vaporized into a large, opaque cloud. A report by the Rand Corporation estimated that the accident caused \$1.7 billion in damage to California's economy. Chevron also lost \$900 million in production value and \$63 million in profit because of the accident. Two Level II and one Level I accident also occurred in 2012.

<sup>&</sup>lt;sup>189</sup> *Id*.

<sup>&</sup>lt;sup>190</sup> 2018 Contra Costa Co. Annual Report at 4-6, 24.

<sup>&</sup>lt;sup>191</sup> *Id.* at 18; Sawyer at 1.

<sup>&</sup>lt;sup>192</sup> *Id*.

<sup>&</sup>lt;sup>193</sup> 2010 Contra Costa Co. Annual Report at 5.

<sup>&</sup>lt;sup>194</sup> 2018 Contra Costa Co. Annual Report at 17; see also App. C.

<sup>&</sup>lt;sup>195</sup> 2018 Contra Costa Co. Annual Report at 17; see also App. C.

<sup>&</sup>lt;sup>196</sup> See App. C, at n.1. During this period, neither the Richmond nor the Contra Costa County ISO required sources to "select and implement" each feasible inherently safer technology. Chevron Interim Report at 46. Instead, both ordinances only required sources to "consider the use of inherently safer systems." *Id.* (quoting Contra Costa County, Cal. Ordinance ch. 450 § 8.016(d)(3)(2013); City of Richmond, Cal., Mun. Code ch. 6.43 § 090(d)(3)(2013)).

<sup>&</sup>lt;sup>197</sup> CSB, Final Investigation Report: Chevron Richmond Refinery Pipe Rupture and Fire at 1, Report No. 2012-03-I-CA (Jan. 2015), <a href="https://www.csb.gov/chevron-refinery-fire/">https://www.csb.gov/chevron-refinery-fire/</a> ("Chevron Final Report").

<sup>198</sup> Id.

<sup>&</sup>lt;sup>199</sup> RAND Corp., Cost-Benefit Analysis of Proposed California Oil and Gas Regulations at 79 (2016), *available at* https://www.rand.org/pubs/research\_reports/RR1421.html.

<sup>&</sup>lt;sup>200</sup> Chevron Final Report at 55.

<sup>&</sup>lt;sup>201</sup> 2018 Contra Costa Co. Annual Report at 18.

In response to these incidents, Contra Costa County and Richmond amended their ISO.<sup>202</sup> Following the Chevron incident, EPA's Chemical Safety Board conducted an investigation concluding that the use of inherently safer technology could have prevented the explosion from occurring.<sup>203</sup> Accordingly, in June/July 2014, in response to CSB recommendations,<sup>204</sup> the City of Richmond and Contra Costa County amended their ISO from requiring facilities to *consider* ISS to requiring facilities to *implement* ISS.<sup>205</sup> Between 2014 and 2017, the eight sources regulated under the ISOs implemented *at least* 254 ISS, including 102 by the Chevron Refinery alone.<sup>206</sup> Since 2012, no other Level III accidents – and a total of three Level I and II incidents – have occurred in Contra Costa County.<sup>207</sup>

The decrease in the number of incidents that has occurred in Contra Costa County over the last 20 years corresponds to the passage and implementation of the Contra Costa County and Richmond ISO. While data is not available for the whole 20-year-period, from 2006–2017 alone, as required under the ISO, nine sources updated their safety plans 20 times, <sup>208</sup> and implemented *at least* 740 ISS. <sup>209</sup> The numbers and data are clear: chemical release prevention programs, like the one EPA is currently proposing to rescind, do effectively prevent and reduce harm from chemical disasters.

<sup>&</sup>lt;sup>202</sup> 2018 Contra Costa Co. Annual Report at 6.

<sup>&</sup>lt;sup>203</sup> Chevron Final Report at 17 ("Using inherently safer design concepts to eliminate the hazard . . . will prevent future similar failures in refineries." (emphasis added)); CSB, Interim Investigation Report: Chevron Richmond Refinery Fire at 45 (Aug. 2012), https://www.csb.gov/chevron-refinery-fire/ ("Chevron Interim Report") ("Chevron and other process plant's implementation of inherently safer systems to the greatest extent feasible would provide a higher degree of protection from incidents like the one that occurred on August 6, 2012.").

<sup>&</sup>lt;sup>204</sup> Chevron Final Report at 2 (recommending that Contra Costa County and the City of Richmond "[r]equire the documented use of inherently safer systems analysis . . . to the greatest extent feasible . . ."); Chevron Interim Report at 54 (recommending that Contra Costa County and Richmond "[r]evise the Industrial Safety Ordinance (ISO) to require the documented use of inherently safer systems analysis . . . to the greatest extent feasible . . ."); Contra Cost Health Services, Industrial Safety Ordinance: Annual Performance Review & Evaluation at 7, 22–23 (Dec. 2017);

<sup>&</sup>lt;sup>205</sup> Compare Contra Costa County, Cal., Ordinances ch. 450 § 8016(i)(3)(2014); City of Richmond, Cal., Mun. Code ch. 6.43 § 090(i)(3)(2014) ("The stationary source shall select and implement each inherently safer system identified in an ISSA report to the greatest extent feasible and as soon as administratively possible." (emphasis added)), Costa County, Cal. Ordinance ch. 450 § 8.016(d)(3)(2013); City of Richmond, Cal., Mun. Code ch. 6.43 § 090(d)(3)(2013)), available in Chevron Interim Report at 46 ("For all covered process, the stationary source shall consider the use of inherently safer systems . . . ."); see also EPA-HQ-OEM-2015-0725-0860, Comment Submitted by Center for Science and Democracy (SCD) and Democracy at the Union of Concerned Scientists (May 19, 2017) ("[I]n the case of Contra Costa County, [chemical facilities] must implement safer alternatives to the maximum extent feasible and as soon as administratively possible.").

<sup>&</sup>lt;sup>206</sup> *See* App. D.

<sup>&</sup>lt;sup>207</sup> 2018 Contra Costa Co. Annual Report at 17; see also App. C.

<sup>&</sup>lt;sup>208</sup> 2018 Contra Costa Co. Annual Report at 8, 24.

<sup>&</sup>lt;sup>209</sup> *See* App. D.

#### II. STATUTORY AND LEGAL BACKGROUND

A. EPA's Obligations Under The Clean Air Act, 42 U.S.C. § 7412(r)

Congress enacted 42 U.S.C. § 7412(r) as part of the Clean Air Act Amendments of 1990, "in response to a number of catastrophic chemical accidents occurring worldwide that had resulted in public and worker fatalities and injuries, environmental damage, and other community impacts." 82 Fed. Reg. at 4599. Congress aimed to prevent the type of "catastrophic failure" and "tragedy of unimaginable dimension" that occurred when a chemical facility released a cloud of methyl isocyanate into Bhopal, India in 1984, killing and injuring thousands of people. S. Rep. No. 101-228, at 115 (1989), reprinted in 1990 U.S.C.C.A.N. 3385, 3519 (also citing accidental release at Union Carbide in West Virginia that sent hundreds of workers and residents to seek medical care), EPA-HQ-OEM-2015-0725-0645. As the Conference Report states, "[t]he purpose of [§ 7412(r)] is to prevent accidents like that which occurred at Bhopal and require preparation to mitigate the effects of those accidents that do occur." 136 Cong. Rec. S16,985, S16,926-27 (Oct. 27, 1990), 1990 WL 164490; see also S. Rep. No. 101-228, at 134, 1990 U.S.C.C.A.N. 3528 ("Sudden, catastrophic events that result in the release of extremely hazardous substances are a significant (and perhaps, increasing) threat to public health and safety in the United States.").

Recognizing the grave danger posed by certain chemicals used at facilities like these, Congress enacted § 7412(r) (sometimes called the "Bhopal Provision"), and directed EPA to list particularly dangerous substances which, "in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment." 42 U.S.C. § 7412(r)(3); see 40 C.F.R. § 68.130 (listing chemicals such as hydrogen fluoride). Section 112(r) directs EPA to regulate facilities that use or store extremely dangerous chemical substances to prevent explosions, fires, plumes of poisonous gases, and other "accidental releases" that can cause catastrophic harm to human health and the environment. 42 U.S.C. § 7412(r).

Section 7412(r) establishes that "[i]t shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance." 42 U.S.C. § 7412(r)(1). Accidental release means "an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source." *Id.* § 7412(r)(2)(A).

This provision lists certain substances, and directs EPA to add substances which, "in the case of an accidental release, are known to cause or may reasonably be anticipated to cause death, injury, or serious adverse effects to human health or the environment." 42 U.S.C. § 7412(r)(3); *id.* § 7412(r)(5) (describing regulation of chemicals by threshold quantity); *see* 40 C.F.R. § 68.130 (current list, including, e.g., methyl isocyanate, chlorine, anhydrous ammonia, hydrogen fluoride, hydrogen cyanide, hydrogen sulfide). EPA is then tasked with preventing release of these substances through § 7412(r)'s rulemaking authority.

The Act requires EPA to promulgate regulations that provide, "to the greatest extent practicable, for the prevention and detection of accidental releases ... and for response to such

releases" and assure compliance within three years. *Id.* § 7412(r)(7)(B). Section 7412(r) also authorizes and directs EPA to set regulatory requirements to prevent, detect, correct, and respond to accidental releases of hazardous substances and avoid and reduce harm to public health and the environment. *Id.* § 7412(r)(7)(A). Such regulations must have an effective date "assuring compliance as expeditiously as practicable." *Id.* The Act also creates an independent U.S. Chemical Safety Board ("CSB") and directs EPA to respond to its regulatory recommendations within 180 days. *Id.* § 7412(r)(6)(I).

Section 112(r) directs EPA, first and foremost, to set requirements designed to prevent accidental releases. The title of subsection (r) is "Prevention of accidental releases." 42 U.S.C. § 7412(r).<sup>210</sup> Prevention is also a central part of this provision's stated purpose. Specifically, subsection (r) directs: "It shall be the objective of the regulations and programs authorized under this subsection *to prevent the accidental release* and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other extremely hazardous substance." *Id.* § 7412(r)(1) (emphasis added). Elaborating on this purpose, the Senate Report accompanying this provision's enactment made clear both that prevention is an essential part of EPA action under § 7412(r), and that preventive measures actually take priority, i.e., "are preferable," to post-release measures.<sup>211</sup>

In granting EPA broad rulemaking authority to implement this objective, the Act further emphasizes prevention, stating: "In order to prevent accidental releases of regulated substances, the Administrator 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." Id. § 7412(r)(7)(A) (emphasis added).

Furthermore, the provision governing the risk management program (RMP) and related regulations, subsection 7412(r)(7)(B)(i), also explicitly requires prevention as one of three key factors, stating that: "the Administrator shall promulgate reasonable regulations and appropriate guidance to *provide*, to the greatest extent practicable, *for the prevention and detection of accidental releases* of regulated substances and for response to such releases by the owners or operators of the sources of such releases." *Id.* § 7412(r)(7)(B)(i) (emphasis added).

Finally, § 7412(r)(1) states that it "shall be the objective of the regulations and programs authorized under this subsection to prevent the accidental release and to minimize the consequences of any such release of any substance listed pursuant to paragraph (3) or any other

^

<sup>&</sup>lt;sup>210</sup> For purposes of § 112(r), an "accidental release" is defined as "an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source." 42 U.S.C. § 7412(r)(2)(A).

<sup>&</sup>lt;sup>211</sup> S. Rep. No. 101-228, at 209, 1990 U.S.C.C.A.N. 3385, 3594 ("The objectives of the proposed section ... include both the prevention of accidental releases and the minimization of the consequences which may result. Systems and measures which are effective in preventing accidents are preferable to those which are intended to minimize the consequences of a release. Measures which entirely eliminate the presence of potential hazards (through substitution of less harmful substances or by minimizing the quantity of an extremely hazardous substance present at any one time), as opposed to those which merely provide additional containment, are the most preferred.").

extremely hazardous substance." *Id.* § 7412(r)(1). Regulatory actions under § 7412 must further these goals by helping prevent accidental releases or minimize consequences. *Id.* 

### B. <u>Interagency statutory duties and authorities</u>

Congress granted more than one agency with authority and directed more than one agency to perform obligations to ensure timely initial and ongoing regulation that would prevent and reduce chemical disasters. The unusual statutory scheme enacted as § 7412(r) reflects a clear Congressional intent to ensure an "all hands on deck" serious and prompt approach to the grave problem of chemical disasters and a determination that it was necessary to direct multiple agencies to act independently from one another to address the problem.

Thus, in addition to the obligations it directs to EPA, the Act also created an independent U.S. Chemical Safety Board, granting the CSB certain authorities and obligations, including to investigate certain chemical incidents. *Id.* § 7412(r)(6). The Act directs EPA to respond to the CSB's regulatory recommendations within 180 days. *Id.* § 7412(r)(6)(I). Legislative history makes clear that Congressional intent in setting these timelines was to assure a "timely regulatory response" by EPA to "high priority" problems, over time, and showed the objective to "overcome . . . regulatory inertia" by ensuring EPA would have to listen to an independent expert agency. S. Rep. 101-228, at 238, 1990 U.S.C.C.A.N. 3385, 3622.

The Act directs EPA to "utilize the expertise of" the Secretary of Labor (as well as the Secretary of Transportation) "in promulgating regulations under § 7412(r)(7)(B). *Id.* § 7412(r)(7)(B)(i). The Act also states that: "In carrying out the authority of this paragraph, the Administrator shall consult with the Secretary of Labor and the Secretary of Transportation, and shall coordinate any requirements under this paragraph with any requirements established for comparable purposes by the Occupational Safety and Health Administration or the Department of Transportation." *Id.* § 7412(r)(7)(D).

## III. REGULATORY BACKGROUND: EPA'S ATTEMPT TO ADDRESS THE ONGOING CHEMICAL DISASTER PROBLEM

### A. The 1996 Accidental Release Management Program Rule

EPA first promulgated regulations in 1996 to establish its Risk Management Program ("RMP") pursuant to § 7412(r)(7)(B). 61 Fed. Reg. at 31,668 (June 20, 1996). This program regulates facilities that use, store, and manage highly hazardous chemicals capable of causing death, injury, or other serious adverse effects upon release. 82 Fed. Reg. at 4596 tbl.1. EPA modified small aspects of the Risk Management Program over time, but had not undertaken any significant revisions until finalizing the 2017 Chemical Disaster Rule. *See generally* 81 Fed. Reg. at 13,645 (describing history of revisions to the Risk Management Program).

### B. Events Leading to EPA's 2017 Risk Management Program Amendments.

1. As Disasters Continued, Communities and Workers Called for Federal Action.

Despite the Risk Management Program's existence, extreme fires and explosions

continue to occur around the United States. See generally Part I, III.B, supra (describing past and ongoing harms from chemical disasters). In light of these problems, community groups, labor groups, environmental groups, first responders, health and safety experts, and the Chemical Safety Board urged EPA to improve its disaster prevention and mitigation program.

In 2012, a coalition of over fifty labor, environmental, health, and safety groups filed a petition urging EPA to require chemical facilities to recognize and adopt reasonably available inherently safer technologies. Pet. to EPA to Exercise Its Authority Under Section 112(r) to Prevent Chemical Facility Disasters (July 25, 2012), EPA-HQ-OEM-2015-0725-0249 ("2012 Pet."). On March 14, 2012, the National Environmental Justice Advisory Council ("NEJAC") reiterated these concerns and recommended to the EPA Administrator that the agency act to strengthen chemical disaster protections, including through the use of inherently safer technologies. Letter from NEJAC Chair Elizabeth C. Yeampierre to Administrator Lisa P. Jackson (Mar. 14, 2012), https://www.epa.gov/sites/production/files/2015-02/documents/2012preventing-chemical-plant-disasters.pdf.

Former EPA Administrator Christine Todd Whitman also helped bring attention to the need for improved disaster prevention regulations, and in August 2012, she acknowledged that EPA had begun a process to strengthen chemical disaster measures and lauded the effort. Noting that such improvements could reduce harm from any kind of chemical incident, including a potential terrorist attack, she called for support from the President for EPA's action. Christine Todd Whitman, The Chemical Threat to America, NY Times (Aug. 29, 2012), http://www.nytimes.com/2012/08/30/opinion/the-epa-can-fix-the-chemical-flaw.html ("I am encouraged, because the E.P.A., under its current administrator, Lisa P. Jackson, is once again seriously considering addressing chemical facility security .... This is the right thing to do ....").

A year later, in 2013, President Obama issued Executive Order 13,650, Improving Chemical Facility Safety & Security, 78 Fed. Reg. 48,029, 48,029 (Aug. 7, 2013), directing federal agencies including EPA to improve chemical facility safety and security in coordination with owners and operators. That began an interagency process to study the issues and resulted in a report on the need for action from various agencies. <sup>212</sup> Pursuant to this order, EPA, OSHA, and other agencies began a coordinated effort to improve their chemical disaster prevention programs.

#### 2. Chemical Safety Board Recommendations and Investigation Reports.

Throughout, the Chemical Safety Board has been calling for improvements to chemical disaster prevention for years. Every time a major incident occurs, CSB fulfills its legal duty to investigate chemical incidents and issue reports and recommendations to attempt to prevent or

https://www.osha.gov/chemicalexecutiveorder/final chemical eo status report.pdf.

<sup>&</sup>lt;sup>212</sup> Exec. Order 13650: Actions to Improve Chemical Facility Safety and Security – A Shared Commitment, Report for the President (May 2014).

mitigate such catastrophes in the future, pursuant to 42 U.S.C. § 7412(r)(6).<sup>213</sup>

Inherently safer technologies as an effective way to prevent chemical incidents, and remove and reduce hazards to prevent harm. CSB recommendations have especially highlighted the consideration of inherently safer technologies and alternatives as an effective preventative measure, stating that: "the CSB has investigated numerous major process safety incidents over the years, including the Chevron and Tesoro incidents, where the implementation of inherently safer design and materials of construction could have prevented the incident."<sup>214</sup>

In May 2014, the Chemical Safety Board made a formal recommendation to EPA to "[r]evise the Chemical Accident Prevention Provisions under 40 CFR Part 68 to require the documented use of inherently safer systems analysis and the hierarchy of controls to the greatest extent feasible when facilities are establishing safeguards for identified process hazards." CSB, Tesoro Refinery Investigation Report (May 2014), available at <a href="https://www.csb.gov/tesoro-refinery-fatal-explosion-and-fire/">https://www.csb.gov/tesoro-refinery-fatal-explosion-and-fire/</a>. Over the years, CSB had made additional recommendations to EPA as well. See generally CSB, List of Recommendations <a href="https://www.csb.gov/recommendations/?F\_RecipientId=4846">https://www.csb.gov/recommendations/?F\_RecipientId=4846</a>; see also, e.g., Testimony of Rafael Moure-Eraso, Chairperson, CSB (June 27, 2013), EPA-HQ-OEM-2015-0725-0272 (discussing fatal April 2013 West, TX fertilizer plant explosion and June 2013 Olefins plant fire in Geismar, LA); CSB Final Investigation Report-Chevron Richmond Refinery Pipe Rupture and Fire, Aug. 6, 2012.

Incident Investigation, Root Cause Analysis and Other Preventative Measures. CSB reports have also provided evidence of the need for additional improvements to the RMP, including requirements for more effective root cause analysis, investigation and follow-up after prior incidents to prevent future problems.

For example, the CSB repeatedly identified "preventive maintenance" as a "Driver[] of Critical Chemical Safety Change," finding that: "[n]on-existent or poor preventive maintenance programs has been a recurring root cause in CSB investigations." Examples of these primary root causes include: inadequate mechanical integrity programs; delayed or deferred preventive maintenance; and ageing infrastructure of equipment at chemical facilities. <sup>216</sup>

<sup>&</sup>lt;sup>213</sup> The CSB's resources are limited, and action by EPA is needed to prevent major disasters from occurring in the first place. The CSB is meant to supplement EPA's duties under the Clean Air Act to prevent disasters, not displace EPA's role. 42 U.S.C. § 7412(r). Meanwhile President Trump's Administration has been attacking the CSB and attempting to reduce its budget. *See, e.g.*, <a href="https://www.ishn.com/articles/108068-csb-on-the-budget-chopping-block">https://www.ishn.com/articles/108068-csb-on-the-budget-chopping-block</a>; *see also* William G. Schulz, Trump Keeps Trying to Kill the Agency that Investigates Chemical Plant Disasters, *Mother Jones* (Aug. 20, 2018), <a href="https://www.epa.gov/sites/production/files/2018-06/documents/">https://www.epa.gov/sites/production/files/2018-06/documents/</a> epaoig 20180604-18-n-0208.pdf.

<sup>&</sup>lt;sup>214</sup> CSB, Investigation Report: Catastrophic Rupture Of Heat Exchanger at 113, Report No. 2010-08-I-WA (May 1, 2014), https://www.csb.gov/tesoro-refinery-fatal-explosion-and-fire/.

<sup>&</sup>lt;sup>215</sup> CSB, Preventative Maintenance, http://www.csb.gov/recommendations/preventive-maintenance-/ (last updated Feb. 6, 2017).

<sup>&</sup>lt;sup>216</sup> *Id*.

# Recent CSB Investigations and Recommendations Involving A Lack of Preventive Maintenance As a Root Cause:

2012 – Chevron Refinery Fire

2011 - Carbide Industries Fire and Explosion

2011 - Hoeganaes Corporation Fatal Flash Fire

2010 - Tesoro Refinery Fatal Explosion and Fire

2009 – Silver Eagle Refinery Flash Fire and Explosion and Catastrophic Pipe Explosion

2008 - Allied Terminals Fertilizer Tank Collapse

2008 – DuPont Corporation Toxic Chemical Releases (Belle)

2007 – Valero Refinery Propane Fire

2005 - BP America Refinery Explosion

2002 – DPC Enterprises Festus Chlorine Release

2001 - Marcus Oil and Chemical Tank Explosion

2001 – Motiva Enterprises Sulfuric Acid Tank Explosion.<sup>217</sup>

For example, an investigation of the Chevron fire showed that for 10 years prior to the incident, Chevron workers had "recommended on several occasions" that inspections or upgrades occur on the very piping that failed on August 6, 2012, after those recommendations "were not implemented effectively." For years before the April 2010 Tesoro refinery fire that killed seven workers, equipment "frequently leaked flammable hydrocarbons during startup, sometimes resulting in fires. Tesoro management had been complacent about these hazardous leaks and did not always investigate the cause of the leaks." <sup>219</sup>

The CSB has also evaluated and found that there are safer methods to engage in "hot work practices" that can both save workers' lives and prevent incidents that "have the potential to result in a major catastrophic accident," highlighting root causes linked to hot work that would prevent future similar incidents.<sup>220</sup>

### CSB Investigations and Deployments involving Hot Work:

2016 – Sunoco Logistics Partners

2014 – Omega Protein

2012 - Long Brothers Oil Company

2009 – ConAgra Foods

2009 – TEPPCO Partners

<sup>218</sup> CSB, Final Investigation Report: Chevron Richmond Refinery Pipe Rupture and Fire at 7-8, Report No. 2012-03-I-CA (Jan. 2015),

https://www.csb.gov/assets/1/17/chevron final investigation report 2015-01-28.pdf?15397...

<sup>&</sup>lt;sup>217</sup> *Id*.

<sup>&</sup>lt;sup>219</sup> CSB, Investigation Report: Catastrophic Rupture Of Heat Exchanger at 6.

<sup>&</sup>lt;sup>220</sup> CSB, Safe Hot Work Practices, http://www.csb.gov/recommendations/hot-work/ (last visited May 17, 2017).

2009 - A.V. Thomas Produce

2009 – E.I. DuPont de Nemours & Co Inc. Fatal Hot Work Explosion

2008 – MAR Oil

2008 – EMC Used Oil

2008 – Packaging Corporation of America (PCA)

2006 - Bethune Point Wastewater Plant Explosion

2006 - Partridge Raleigh Oilfield Explosion and Fire

2001 – Motiva Enterprises Sulfuric Acid Tank Explosion.<sup>221</sup>

Emergency Response Coordination and Information-Sharing. Additionally, the CSB has found that "[i]nadequate or poor emergency planning or response has been a recurring finding in the [CSB's] investigations." There are 14 CSB investigations that have found deficiencies in a community's, facility's, or emergency responder's response to an incident at a chemical facility, and "information sharing between facilities, emergency responders and the community" is one of the key recommendations the CSB made to address this. 223

### CSB Investigations and Recommendations involving emergency response and planning:

2013 – West Fertilizer Explosion and Fire

2011 – Hoeganaes Corporation Fatal Flash Fires

2009 - CITGO Refinery Hydrofluoric Acid Release and Fire

2008 – Bayer CropScience Pesticide Waste Tank Explosion

2007 – Little Propane General Store

2006 - EQ Hazardous Waste Plant

2006 – Universal Form Clamp Co. Explosion and Fire

2004 - MFG Chemical Inc. Toxic Gas Release

2003 – Honeywell Chemical Incidents

2003 – DPC Enterprises Glendale Chlorine Release

2002 - Georgia-Pacific Corp. Hydrogen Sulfide Poisoning

2002 – DPC Enterprises Festus Chlorine Release

2002 - First Chemical Cops. Reactive Chemical Explosion

1998 – Herrig Brothers Farm Propane Tank Explosion. 224

### 3. EPA's Request for Information

In 2014, in response to all of the above directives and recommendations, EPA requested information from the public on whether to update chemical facility safety regulations. EPA ultimately evaluated data from over 100,000 public submissions. 79 Fed. Reg. 44,604 (July 31, 2014), EPA-HQ-OEM-2014-0328-0001 (also incorporated into this docket via EPA-HQ-OEM-

<sup>&</sup>lt;sup>221</sup> *Id*.

<sup>&</sup>lt;sup>222</sup> CSB, Emergency Planning & Response, http://www.csb.gov/recommendations/emergency-response-/ (last updated Feb. 6, 2017).

<sup>&</sup>lt;sup>223</sup> Id.

<sup>&</sup>lt;sup>224</sup> *Id*.

2015-0725-0888).

The Chemical Safety Board submitted a 50-page letter in response to EPA's request for comments, containing recommendations to strengthen safety measures at chemical facilities. CSB Letter (Oct. 29, 2014), EPA-HQ-OEM-2014-0328-0689. EPA also received significant comments on the above issues and data showing that chemical disasters and the harm they cause can and should be prevented and reduced. *See, e.g.*, Comment submitted by Steve Taylor on behalf of Coalition to Prevent Chemical Disasters (Oct. 29, 2014), EPA-HQ-OEM-2014-0328-0644; Comment submitted by Michele Roberts, Environmental Justice and Health Alliance (Oct. 29, 2014), EPA-HQ-OEM-2014-0328-0683; Petition to Prevent Chemical Disasters from Rick Hind of Greenpeace, Richard Moore of Los Jardines Institute and Scott Nelson of Public Citizen (July 25, 2012), EPA-HQ-OEM-2015-0725-0249; Comment submitted by Kim Nibarger, USW H&S Specialist, United Steel Workers (USW), EPA-HQ-OEM-2014-0328-0547.

### 4. EPA's Proposal of the Chemical Disaster Rule

In March 2016, based on input and consultation with the CSB, Occupational Safety and Health Administration, Department of Homeland Security, and Bureau of Alcohol, Tobacco, Firearms, and Explosives ("Bureau" or "BATF"), EPA published proposed regulatory amendments whose purpose was "to improve safety." 81 Fed. Reg. at 13,640, 13,646. EPA attended at least 32 meetings to consult with OSHA for "coordination on RMP Modernization Rule." Amendments RTC at 254 (App. A) (documenting meetings from calendars of EPA staff, and contemporaneous notes and emails of staff and managers at EPA).

EPA received over 61,000 comments on its proposed rule from a variety of stakeholders, including former EPA Administrator Christine Todd Whitman, in support of stronger requirements. 82 Fed. Reg. at 4599; Comments of Christine Whitman, EPA-HQ-OEM-2015-0725-0518. The CSB, Steelworkers and Community Petitioners, fire fighters, national security experts, and others urged EPA to strengthen protections promptly. *See, e.g.*, Comment submitted by Vanessa Allen Sutherland, Chairperson and Member et al., U.S. Chemical Safety and Hazard Investigation Board (CSB), EPA-HQ-OEM-2015-0725-0428; Comment submitted by Harold A. Schaitberger, General President, International Association of Fire Fighters (IAFF), EPA-HQ-OEM-2015-0725-0834; Comment submitted by Lt. Gen. Russel L. Honor, US Army (Ret) et al., EPA-HQ-OEM-2015-0725-0778; Amendments RIA at 125-26 (discussing eight public listening sessions held during development of the Chemical Disaster Rule).

# C. The Final 2017 Chemical Disaster Rule, Amending the Accidental Release RMP Regulations

On December 21, 2016, EPA signed the Chemical Disaster Rule, amending the Risk Management Program. 82 Fed. Reg. at 4594. The Chemical Disaster Rule was "the first time [EPA] had issued post-1996 amendments that were significant," as measured by costs of implementation. 83 Fed. Reg. at 24,864. EPA explained its conclusion that "major incidents" that were continuing to occur under the existing Risk Management Program demonstrated "the importance of reviewing and evaluating current practices and regulatory requirements, and applying lessons learned from other incident investigations to advance process safety." 82 Fed. Reg. at 4600; see also 2004-13 Accident Data Spreadsheet. EPA determined that the long,

ongoing pattern of chemical disasters demonstrated "the regulatory need" that the Chemical Disaster Rule was "addressing." Amendments RIA at 17. EPA issued the final rule because it found the prior regulations of industrial chemical facilities to be insufficient to resolve the ongoing problem of chemical disasters in the United States. *See infra* Parts V.C.1, V.C.3, V.C.4, V.D.3, V.E.2.

EPA issued the Chemical Disaster Rule pursuant to its § 7412(r)(7) authority to reduce "the frequency and magnitude" of chemical accidents and the deaths, injuries, and other severe harm they cause and to provide benefits including "prevention of major catastrophes." 82 Fed. Reg. at 4597-98, 4600, 4683-84 & tbl.4 (listing as benefits: reduced fatalities, reduced injuries, reduced property damage, fewer people sheltered in place, fewer evacuations, avoided lost productivity, avoided property value impacts, avoided environmental impacts, and avoided costs due to "accident prevention and mitigation"); Amendments RTC at 17-18; 81 Fed. Reg. at 13,640-41, 13,643; *see also* Amendments RIA at 10-11 & ex. C (finding that "reducing the probability of chemical accidents and the severity of their impacts, and improving information disclosure by chemical facilities ... would provide benefits to potentially affected members of society.").

Specific features of the Chemical Disaster Rule, which was published in the Federal Register on January 13, 2017, are described below. EPA identified a number of shortcomings in the pre-existing regulatory framework, and promulgated the following updates to fix them. *See*, *e.g.*, 81 Fed. Reg. at 13,648, 13,655, 13,663, 13,671, 13,673, 13,675, 13,677-78; *see also id.* at 13,648-49, 13,655-56, 13,671-72, 13,674-75, 13,678 (listing examples where prior regulations had failed to prevent accidents or minimize their consequences); *see also* Rollback RIA at 63-64 ex. 6-1 (list of benefits from Chemical Disaster Rule); Amendments RIA 10-11, 74-76 & ex. 6-1, 93 & ex. 6-7 (same). Through strengthening safety measures at regulated facilities and addressing and reducing "near miss" or nearly catastrophic releases, EPA also determined the rule would result in "accident prevention and mitigation" for releases of both RMP chemicals and non-RMP chemicals at covered facilities, and would prevent and reduce the likelihood of severe catastrophes in the United States. 82 Fed. Reg. at 4598 tbl.4; Amendments RIA 10-11, 74-76 & ex. 6-1, 93 & ex. 6-7.

### 1. Prevention

The Chemical Disaster Rule included several updates to the Risk Management Program's prevention framework. To end repetitive patterns of similar accidents, EPA expanded incident investigation requirements to cover any incident which "could reasonably have resulted in a catastrophic release" (i.e., near misses). As discussed above, near misses include fires, explosions, runaway reactions, and other incidents that harm workers, fenceline communities, and the public. EPA's "experiences with RMP facility inspections and incident investigations" showed "there have been incidents that were not investigated, even though under slightly different circumstances, the incident could have resulted in a catastrophic release." 81 Fed. Reg. at 13,651.

Codifying this requirement, which formerly existed only in guidance, would create a legally enforceable obligation to investigate and learn from such incidents in order to prevent future disasters. *See, e.g., Nat'l Mining Ass'n v. McCarthy*, 758 F.3d 243, 252 (D.C. Cir. 2014)

(guidance document did not impose legal obligations; could not serve as the basis for enforcement actions; and could be ignored by state implementing agencies). Furthermore, as discussed above, near misses themselves cause considerable harm – in addition to creating conditions that could lead to catastrophic releases of RMP chemicals. Preventing them is an essential part of any disaster-prevention program.

EPA additionally required that investigations be conducted even when a process is decommissioned or destroyed (i.e., because of the chemical incident itself). 40 C.F.R. §§ 68.60(a)(1), 68.81(a)(1). As discussed above, this represents a significant gap in current RMP accident reporting data. Amendments RIA at 80. It is likewise a source of missed opportunities to improve safety, because such incidents are not currently covered by the investigation requirements. 81 Fed. Reg. at 13,650-51.

EPA also expanded the incident investigation requirement to include an underlying "root cause" analysis, required a team to be formed which includes personnel with knowledge of the particular process, set a 1-year report deadline, and required facilities to consider these results in its Hazard Review or Process Hazard Analysis. 40 C.F.R. § 68.3; § 68.60(a), (c), (d), (d)(7); § 68.81(a), (d); § 68.50(a)(2); § 68.67(c)(2). These enhancements would help ensure that lessons are learned (in a timely manner) from incidents that do occur, in order to help prevent future incidents. *See* 81 Fed. Reg. at 13,646-54 (explaining need). EPA cited examples where root causes had not been identified and opportunities to improve process safety were missed in the past. 81 Fed. Reg. at 13,648-49. As EPA put it, the "ineffective investigation of previous incidents resulted in a failure to identify, or act upon, lessons from incidents and near-misses." 81 Fed. Reg. at 13,649.

EPA also expanded the compliance auditing requirements to ensure facilities audit and certify compliance for "each covered process." 40 C.F.R. § 68.58(a), 68.79(a). Currently, many facilities audit only a sample of covered processes during their triennial compliance audits, leaving substantial opportunity to miss safety problems. *See, e.g.*, CSAG, Pet. for Recons. at 10 (Mar. 13, 2017), EPA-HQ-OEM-2015-0725-0766 (calling requirement a "dramatic expansion" of current practices).

EPA also added a third-party audit provision and adding recordkeeping requirements, to improve compliance and enforcement of the program. 40 C.F.R. §§ 68.58, 68.79, 68.200; 82 Fed. Reg. at 4675; Amendments RTC 246. EPA found this necessary because, despite prior self-auditing requirements, "[i]ncident investigations often reveal that these facilities have deficiencies in some prevention program requirements." 81 Fed. Reg. at 13,654-62 (providing examples and noting "CSB identified a lack of rigorous compliance audits as a contributing factor behind the March 23, 2005[,] explosion and fire at the BP Texas City Refinery"). Third party auditing, when triggered, would be requiring during the next scheduled compliance audit. Only facilities that had previously experienced an RMP release would be required to use a third party for their audit, unless the local implementing agency required one "due to conditions at the stationary source that could lead to an accidental release of a regulated substance, or when a previous third-party audit failed to meet the competency or independence criteria of § 68.59(c)." 40 C.F.R. §§ 68.58(f), 68.79(f).

Additionally, EPA expanded training requirements to apply to all employees "involved"

in operating a hazardous process, including supervisors. 40 C.F.R. § 68.54, § 68.71(d); 82 Fed. Reg. at 4675; Amendments RTC at 214 (training to include process engineers and maintenance technicians). EPA also added a requirement to keep process safety information up to date. 40 C.F.R. § 68.65(a); 82 Fed. Reg. at 4675; 81 Fed. Reg. at 13,686 (explaining updates are needed to help facilities "to better comply" and because "necessary" for process hazard analysis).

For industry sectors with the highest accident rates – petroleum refineries, chemical manufacturers, and pulp and paper mills – the Chemical Disaster Rule requires facilities to evaluate "safer technology and alternative risk management measures applicable to eliminating or reducing risk from process hazards" that are practicable and determine whether to implement them. 40 C.F.R. § 68.67(c)(8); 82 Fed. Reg. at 4632. EPA found "there is a benefit in requiring that some facilities evaluate whether they can improve risk management of current hazards through potential implementation of [inherently safer technologies] or risk management measures that are more robust and reliable." 81 Fed. Reg. at 13,663-68; see also 82 Fed. Reg. at 4629; Amendments RTC at 132-33 (describing National Academy of Sciences' finding after examining the 2008 BayerCropScience accident in West Virginia "that inherently safer process assessments can be valuable").

EPA found, in part based on CSB investigation evidence, that many of even the most severe chemical incidents are preventable or that harm from such incidents can be reduced or mitigated. These findings led to EPA finalizing specific measures in the Chemical Disaster Rule in 2017.

For example, when a worker was injured at the Delaware City Refinery on November 29, 2015, the CSB investigated and found that safety steps could be implemented to prevent accidents and protect health, and on May 18, 2017, the CSB released a Safety Bulletin to prevent similar accidents.<sup>225</sup> There is significant evidence showing that inherently safer technologies, practices, and chemicals are available to reduce threats from oil refineries and other facilities, ranging from alternatives to HF (as discussed *infra*), to the use of methods like back-up power or anonymous worker reporting.<sup>226</sup>

\_

<sup>&</sup>lt;sup>225</sup> CSB, CSB Releases Safety Bulletin into 2015 Chemical Release and Flash Fire at the Delaware City Refining Company (May 18, 2017), http://www.csb.gov/csb-releases-safety-bulletin-into-2015-chemical-release-and-flash-fire-at-the-delaware-city-refining-company/; CSB, Safety Bulletin, Key Lessons for Preventing Incidents When Preparing Process Equipment for Maintenance, Flash Fire at the Delaware City Refinery, Incident Date: Nov. 29, 2015 (pub. May 2017), https://www.csb.gov/delaware-city-refining-company/.

<sup>&</sup>lt;sup>226</sup> See, e.g., Hydrocarbon Publishing Co., Refinery Power Outage Mitigations (2014); USPIRG, Needless Risk 2005); see also Center for Chemical Process Safety (The American Institute of Chemical Engineers), Final Report: Definition for Inherently Safer Technology in Production, Transportation, Storage, and Use at Exec-1 (2010), https://www.aiche.org/sites/default/files/docs/embedded-pdf/ist\_final\_definition\_report.pdf; Amyotte et al., An Analysis of CSB Investigation Reports for Inherent Safety Learnings, 7th Global Congress on Process Safety. Additionally, anonymous near-miss reporting for workers at covered facilities is a best practice could help prevent serious problems, just as it has in the aviation industry and for firefighter safety generally. See, e.g., Aviation Safety Reporting System, https://asrs.arc.nasa.gov/index.html; NASA, Aviation Safety Reporting System Program Briefing (2016),

The Chemical Disaster Rule would require refineries and chemical plants to consider the practicability of implementing safer technologies that would prevent these types of accidents. Furthermore, it would require better emergency planning and coordination with first responders that could save workers' lives, and more information sharing and transparency that will benefit people on the front-lines of a chemical disaster, and help workers advocate more effectively for their safety. Many recent chemical disasters have been ruled preventable by the CSB, as discussed above and in reports provided in the docket. For example, when discussing the 2015 explosion at the ExxonMobil refinery in Torrance, California, CSB stated "[t]his incident was preventable" and noted that "[e]ffective safeguards were not established to prevent the incident." CSB, Final Report: ExxonMobil Torrance Refinery Electrostatic Precipitator Explosion, No. 2015-02-I-CA (May 2017).<sup>227</sup> Something as a simple as a gas leak detection system, which would have minimal cost, could have stopped that disaster from occurring. *See id.* at 56 ("The piping and equipment between the regenerator and ESP were not configured with instrumentation to detect hydrocarbons.").

EPA extensively documented the need for and value of the Final Rule's measures to prevent chemical releases and reduce the consequences they can cause in the preambles to the Proposed and Final Rules, the Regulatory Impact Analysis, and the supporting materials in the docket. There is overwhelming evidence in support of EPA's findings that the Rule is needed to protect people from the harm chemical disasters can cause. For example, over and over again, chemical accidents and near misses happen, as discussed in Part I, above, and investigations show that they could have been prevented through the use of safer measures or by applying the result of root cause analyses, such as those the Rule will require (and which EPA's record shows the need for). EPA's original record showed a strong need for the improvements in the Chemical Disaster Rule, just as the D.C. Circuit found. *Air Alliance Houston*, Slip Op. at 29, 33-36. EPA's Rule includes common-sense measures that would address the kinds of problems that have caused death, injury, property damage, and other harms in communities for years. It is time for these protections to take effect. EPA cannot ignore the record evidence showing the need for protections the Rule contains, and it must not finalize the proposed Rollback Rule.

https://asrs.arc.nasa.gov/docs/ASRS\_ProgramBriefing2016.pdf; Near Miss, http://www.firefighternearmiss.com/About; Elsevier Public Safety, Nat'l Fire Fighter Near-Miss Reporting System, Annual Report 2008 (2009) (sponsored by Int'l Ass'n of Fire Chiefs), http://firereports.nationalnearmiss.org/DesktopModules/Bring2mind/DMX/Download.aspx?EntryId=29&Command=Core Download&language=en-US&PortalId=2&TabId=348.

<sup>&</sup>lt;sup>227</sup> Available at https://www.csb.gov/exxonmobil-refinery-explosion-/.

<sup>&</sup>lt;sup>228</sup> EPA's Response to Comments on the Chemical Disaster Rule's proposal includes numerous findings that the Chemical Disaster Rule's provisions are needed. *See* Amendments RTC at 1, 1-18 (STAA), 19-21 (community information, public meetings), 23 (STAA), 25-26 (community information), 31 (root cause), 33-34 (incident investigations in hazard review), 35-37 (need to require investigation where destroyed or decommissioned process), 39 (near miss), 40-45 (need for incident investigation teams), 47-48 (need for root cause analysis which is "vital"), 50-51, 54-55, 57-61, 73, 80-83, 88, 90-92, 95-96 (need for third-party audits and certifications by senior officials because "it is critical ... to implement corrective actions to address findings from compliance audits"); 99-104, 107-109, 115-17, 127 (STAA), 132-34 (CSB, NAS on STAA), 143, 163, 190-91, 194-96, 199-200, 202-03, 214-18, 220, 225 (STAA), 235-38, 244-46, 251.

### 2. Emergency Response

The Chemical Disaster Rule adds a requirement for covered facilities to coordinate annually with local first responders and emergency planning committees. To strengthen preparation and to protect communities in the event of releases, the rule also sought to ensure first responders have the information they need by letting them request information "relevant to local emergency response planning." 40 C.F.R. § 68.93.

As EPA found, providing first responders with "easier access to appropriate facility chemical hazard information ... can significantly improve emergency preparedness and their understanding of how the facility is addressing potential risks." 82 Fed. Reg. at 4596; see also 81 Fed. Reg. 13,640-41, 13,671-80 (listing examples of poor coordination and finding "recent feedback ... indicate that many regulated sources have not provided for an adequate emergency response"); id. at 13,678 (finding "[p]oor communication between facility personnel and first responders, as well as poor communication between facility personnel and communities, has been shown to contribute to the severity of chemical accidents"); see also, e.g., Amendments RTC at 155-56, 165-67, 173-74, 178-81, 192, 241.

The Chemical Disaster Rule expanded emergency response program requirements to include core safety requirements for public notification and equipment testing, medical treatment, and training, and to require annual updates based on lessons learned from incident investigations and emergency response coordination. 40 C.F.R. § 68.95. The Chemical Disaster Rule added requirements for a facility to implement regular table-top and field exercises, and annual public notification exercises to boost safety preparation for emergencies. 82 Fed. Reg. at 4678-79; 40 C.F.R. §§ 68.90(b)(5), 68.96; 82 Fed. Reg. at 4595; 81 Fed. Reg. at 13,641; Amendments RTC at 163.

EPA's rulemaking record contains ample evidence of the need for improved coordination and information sharing with first responders and the public. A few of the examples provided by EPA follow:

Poor communication between facility personnel and first responders, as well as poor communication between facility personnel and communities, has been shown to contribute to the severity of chemical accidents. One example is the Bayer CropScience explosion that occurred in Institute, West Virginia, in 2008. According to the CSB,

The Bayer fire brigade was at the scene in minutes, but Bayer management withheld information from the county emergency response agencies that were desperate for information about what happened, what chemicals were possibly involved ... The Bayer incident commander, inside the plant, recommended a shelter in place; but this was never communicated to 911 operators. After a few hours of being refused critical information, local authorities ordered a

### shelter in place, as a precaution.

Improper communication between the facility and the first responders during the accident led to a delay in implementing a public shelter-in-place order for the local community, and may have resulted in toxic exposure to on scene public emergency responders. After a release of [hydrogen fluoride] from the Citgo Refinery in Corpus Christi, Texas, in July 2009, nearby residents complained of headaches, nausea, and respiratory issues, though Citgo claimed that the toxic cloud stopped at the plant fence line. According to reports, neighbors could see the flames and smoke coming from the refinery, but they were unable to get information on the accident and potential risks to their community.

81 Fed. Reg. at 13,678 (quoting CSB, CSB Issues Report on 2008 Bayer CropScience Explosion (Jan. 20, 2011), http://www.csb.gov/csb-issues-report-on-2008-bayer-cropscience-explosion-finds-multiple-deficiencies-led-to-runaway-chemical-reaction-recommends-state-create-chemical-plant-oversight-regulation); see also 81 Fed. Reg. at 13,655 ("The CSB also found numerous auditing deficiencies following the January 2008 explosion at Bayer CropScience, LP, in Institute, West Virginia" (citing CSB, Investigation Report: Pesticide Chemical Runaway Reaction Pressure Vessel Explosion, Report No. 2008-08-I-WV (Jan. 2011), http://www.csb.gov/assets/1/19/Bayer\_Report\_Final.pdf)).

### 3. Community Information Access

Finally, the Chemical Disaster Rule requires facilities to provide chemical hazard, emergency response, and safety information to interested community members, and to hold a public meeting within 90 days of an accident. *See, e.g.*, 40 C.F.R. §§ 68.210(b), (e); 82 Fed. Reg. at 4596. These provisions help community members assure themselves "that the facility is adequately prepared to properly handle a chemical emergency," to "improve their awareness of risks[,] ... and to be prepared to protect themselves in the event of an accidental release." 81 Fed. Reg. at 13,680-82; 82 Fed. Reg. at 4668-70; *see also, e.g.*, Amendments RTC at 201, 207, 209, 241.

### 4. Effective and Compliance Dates in the Chemical Disaster Rule: 2017-2022

The Chemical Disaster Rule's effective date was initially set to 60 days after promulgation – March 14, 2017. EPA set compliance deadlines for each provision based on the time it found necessary for facilities to come into compliance after the rule was promulgated. *See* 82 Fed. Reg. at 4594, 4676-78 & tbl.6 (setting compliance dates based on what EPA found "practicable").

For certain requirements, e.g., expanded training, process safety information, compliance audits for each covered process, investigations of near misses, and improved process hazard analysis and incident investigation and reporting requirements, the Chemical Disaster Rule would have assured immediate compliance upon effectiveness of the rule. 40 C.F.R.

§ 68.10(a)(4) (requiring compliance no later than "the effective date of the final rule that revises this part" for any revisions); *see*, *e.g.*, *id.* §§ 68.54, 68.71(d), 68.65(a), 68.60(a), (c), (d)(1)-(6), (8), (g), 68.81(a), (d)(1)-(6), (8), 68.50(a)(2), 68.67(c)(2), 68.58(a), 68.79(a), 68.200.

For the expanded emergency response coordination requirements, EPA found compliance was practicable within one year and set a deadline of March 14, 2018 for 40 C.F.R. § 68.93; *id.* § 68.10(b). EPA determined that more time was necessary to achieve full compliance with the remaining requirements, and so set a three-year deadline for developing an emergency response program in accordance with § 68.95, and four-year deadlines for the third-party audit, root cause analysis, safer technology and alternatives analysis, and informational provisions. *Id.* § 68.10(c), (d)(1)-(5); 82 FR 4676-78 & tbl.6 (also requiring updated Risk Management Plans within five years).

### D. Administrator Pruitt's Initial Attack on the Chemical Disaster Rule: Delay

### 1. Petitions for Reconsideration of the Chemical Disaster Rule

Former Administrator Scott Pruitt opposed the Chemical Disaster Rule since at least July 2016. In his tenure as Attorney General of Oklahoma, Mr. Pruitt signed comments opposing the Chemical Disaster Rule that ultimately formed the basis for the rule's reconsideration. Comment submitted by Scott Pruitt, Office of Attorney General, State of Oklahoma et al., EPA-HQ-OEM-2015-0725-0624 (July 27, 2016).<sup>229</sup>

After the Chemical Disaster Rule was promulgated, EPA received petitions for administrative reconsideration from two sets of industry trade groups and from a set of states opposed to the rule. 82 Fed. Reg. 16,146, 16,148 (Apr. 3, 2017). One of the state petitioners was then-Administrator Pruitt's former client – the State of Oklahoma. EPA-HQ-OEM-2015-0725-0762 (Apr. 3, 2017). Oklahoma filed the petition soon after Mr. Pruitt took office as EPA Administrator, but the arguments for reconsideration follow up on arguments he included in his prior comments. Moreover, since Administrator Pruitt served as Attorney General through February 17, 2017, it is quite likely he or his staff worked on this petition, as well, during his tenure. These petitions primarily raised objections EPA had previously considered and rejected, including the fact that the Bureau had released its West, Texas statement two days before the comment period closed for the Chemical Disaster Rule. *Cf.* Amendments RTC at 247-48.

### 2. Delay of the Chemical Disaster Rule

Upon entering office, then-Administrator Pruitt almost immediately granted reconsideration and convened a reconsideration proceeding pursuant to 42 U.S.C. § 7607(d)(7)(B) based on the determination that the Bureau's finding and other unspecified

\_

<sup>&</sup>lt;sup>229</sup> All three petitions for reconsideration cited to these comments and referenced Administrator Pruitt's participation and position with respect to the rule. Pet. on behalf of the States of La., Ariz., Ark., Fla., Kans., Tex., Okla., S.C., Wis., W. Va., and Ky. at 1 (Mar. 14, 2017), EPA-HQ-OEM-2015-0725-0762; Pet. of Chemical Safety Advocacy Grp. at 6-7 (Mar. 13, 2017), EPA-HQ-OEM-2015-0725-0766; Pet. of RMP Coalition at 18 n.55 (Feb. 28, 2017), EPA-HQ-OEM-2015-0725-0759.

issues warranted another round of public comment. 82 Fed. Reg. 27,133, 27,134 (June 14, 2017); Letter, EPA-HQ-OEM-2015-0725-0763. Initially, he also delayed the effective date of the Chemical Disaster Rule for a period of three months based on that reconsideration, citing § 7607(d)(7)(B). 82 Fed. Reg. at 13,968, 13,969 (Mar. 16, 2017). During those next three months, EPA then proposed and finalized an additional twenty-month delay of the Chemical Disaster Rule, through February 19, 2019 (the "Delay Rule"), based on EPA's reconsideration proceeding. 82 Fed. Reg. at 27,133. EPA received another 54,117 public comments on the proposed Delay Rule – the vast majority opposing delay. *Id.* at 27,135.

EPA issued the additional delay to assure that "[c]ompliance with all of the [Chemical Disaster Rule's provisions is not required" during reconsideration. 82 Fed. Reg. at 27,142; Response to Comments on Delay Rule at 35-36 (June 8, 2017), EPA-HQ-OEM-2015-0725-0881 ("Delay RTC"). Although EPA said it was "not proposing any action on any compliance dates," 82 Fed. Reg. at 16,149, EPA simultaneously stated its delay would "impact" those dates "triggered prior to February 2019." 82 Fed. Reg. at 27,137. EPA made no new finding, nor explained any new policy, though EPA conceded the delay has an "effect" on all the requirements in the Chemical Disaster Rule. Id. at 27,140; see also id. at 27,136, 27,139-40, 27,143-44 & n.23; Delay RTC at 21. EPA did not decide at that point that any of the reconsideration petitioners' allegations regarding the Chemical Disaster Rule have merit, or that any substantive defect exists in the delayed rule. *Id.* at 27,133, 27,135, 27,139-42. The purpose of the Delay Rule was "to conduct a reconsideration on the issues identified in [EPA's] letter" and "to solicit comment on any other matter that will benefit from additional comment." 82 Fed. Reg. at 27,136. In other words, EPA delayed the rule because EPA might decide later to change it (via the current rulemaking). 82 Fed. Reg. at 27,140. The length of the delay is an estimate of how long EPA needed to complete this reconsideration process, "consider other issues that may benefit from additional comment," and "take further regulatory action" that may or may not be required. Id. at 27,140 (quoting 82 Fed. Reg. at 16,148-49); see also Delay RTC at 17-18, 28. Now, it has become a self-imposed deadline that EPA is using as an excuse to rush its substantive revision process. See Documentation of Teleconference Meeting between EPA and Earthjustice Regarding Public Hearings for Proposed RMP Reconsideration Rule (July 5, 2018) (declining to hold more public hearings because "EPA intends to complete the rulemaking process before February 2019"), EPA-HQ-OEM-2015-0725-0984.

On August 17, 2018, the D.C. Circuit ordered the Delay Rule be vacated because it was both unlawful and arbitrary and capricious. *Air Alliance Houston*, Slip Op. at 5, 32; *see generally* Comment submitted by Earthjustice on behalf of Air Alliance Houston *et al.*, EPA-HQ-OEM-2015-0725-0861 (May 19, 2017); Comment submitted by Holly R. Hart, Assistant to the International President, Legislative Director, United Steelworkers (USW) (May 19, 2017), EPA-HQ-OEM-2015-0725-0859. Despite this major decision, which implicates and shows unlawful and arbitrary the core foundations of the proposed Rollback Rule, right before the close of comment on EPA's proposed Rollback Rule, EPA has refused to extend the comment period even briefly to allow the public to fully consider the impact of the Court's decision on EPA's proposal.

\_

<sup>&</sup>lt;sup>230</sup> That date had initially been extended by one week, citing the presidential transition. 82 FR 8499, 8499 (Jan. 26, 2017).

### IV. THE PROPOSED ROLLBACK RULE

On May 30, 2018, EPA published in the Federal Register a proposed rule entitled "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act," 83 Fed. Reg. 24,850 (May 30, 2018) (the "Rollback Rule"). The Rollback Rule represents EPA's proposed action on reconsideration of the Chemical Disaster Rule. EPA proposes to rescind all accident prevention provisions that were included in the Chemical Disaster Rule, while weakening most remaining provisions and delaying their implementation. The specific changes EPA proposes are summarized below.

### A. <u>Process for Rollback Rule</u>

EPA's process on the rollback rule proposal has included one public hearing which EPA set without input from affected community members. EPA held this hearing on June 14, 2018, after two weeks' published notice, at its own headquarters in Washington, D.C. Community groups submitted a request to EPA to hold at least one other public hearing in an affected community, but EPA denied that request.

In the June 14 hearing, many people who testified raised the concern that EPA was not making it possible for people to speak on the proposal without traveling to Washington, D.C. *See* Hearing Transcript, EPA-HQ-OEM-2015-0725-0985. To date, EPA has held no other public hearings or public meetings anywhere in the United States where chemical incidents have occurred, including any of the places where EPA previously held such meetings during the initial development of the Chemical Disaster Rule. *See*, *e.g.*, Amendments RIA at 125-26, EPA-HQ-OEM-2015-0725-0734; EO 13650 Improving Chemical Facility Safety and Security Listening Sessions, DHS-2013-0075.<sup>231</sup>

After the public hearing, community groups realized that EPA was relying on a 2017 database that it had not placed into the public docket. EPA placed that information in the public docket on July 11, 2018 (less than 30 days before the comment deadline). EPA then extended the comment deadline through August 23, 2018, but did not allow for the full time it originally recognized was needed (60 days) to comment with these data available. Moreover, EPA has now acknowledged that it is also relying on a 2018 RMP database that *still* has not been placed into the docket. 83 Fed. Reg. 36,837, 36,838 (July 31, 2018). EPA has given no basis for refusing to provide additional time to comment in view of these data that were missing from the docket for nearly the full original 60 days after publication of the proposed rule.

### B. Repeal of Prevention Program Improvements

In the Rollback Rule, "EPA proposes to rescind almost all the requirements added to the accident prevention provisions." 83 Fed. Reg. at 24,852. In particular, EPA is proposing to rescind all of the following:

<sup>&</sup>lt;sup>231</sup> Docket available at https://www.regulations.gov/docket?D=DHS-2013-0075.

- The safer technologies and alternatives assessment ("STAA") applicable to facilities in the refining, chemical manufacturing, or pulp and paper milling industries. 40 C.F.R. § 68.67(c)(8); 83 Fed. Reg. at 24,857-58
- The third-party audit requirement applicable to facilities triggering certain conditions. 40 C.F.R. §§ 68.59, 68.80; 83 Fed. Reg. at 24,857.
- Codification of the requirement to audit "each covered process" and not just a sample of processes. 40 C.F.R. §§ 68.58(a), 68.79(a); 83 Fed. Reg. at 24,858.
- Revisions to the hazard review and analysis processes to require consideration of findings from incident investigations. 40 C.F.R. §§ 68.50(a)(2), 68.67(c)(2); 83 Fed. Reg. at 24,858.
- Requirement to conduct a "root cause analysis" as part of all incident investigations, to ensure sources identified all facts that led to the release. 40 C.F.R. §§ 68.60(d)(7), 68.81(d)(7); 83 Fed. Reg. at 24,858.
- Requirement to investigate accidents where the affected process was decommissioned or destroyed during a disaster. 40 C.F.R. §§ 68.60(a)(1), 68.81(a)(1); 83 Fed. Reg. at 24,858.
- Requirement to investigate "near misses," including fires, explosions, or other dangerous situations that could reasonably have led to release of a listed chemical. 40 C.F.R. §§ 68.60(a)(2), 68.81(a)(2); 83 Fed. Reg. at 24,858.
- Expansion of safety training requirements to include supervisors and all others involved in operation of process. 40 C.F.R. §§ 68.54, 68.71; 83 Fed. Reg. at 24,858. EPA also seeks comment on the alternative of not rescinding this. 83 Fed. Reg. at 24,858-59.
- Requirement to keep process safety information up to date. 40 C.F.R. § 68.65(a); 83 Fed. Reg. at 24,858.
- Requirement that incident investigations include at least one person knowledgeable about the process; are completed within a 12-month deadline; and produce a report of findings and a schedule for addressing any recommendations. 40 C.F.R. §§ 68.60(c)-(d), 68.81(d); 83 Fed. Reg. at 24,858. For program 2 processes, EPA also proposes to rescind the requirement to maintain these records for 5 years in 40 C.F.R. § 68.60(g); 83 Fed. Reg. at 24,857-58. EPA also seeks comment on the alternative of not rescinding these requirements, or of retaining a minimal requirement to produce some "report" (for high-risk processes in Program 3) or a "summary" (for other processes) of investigation findings. 83 Fed. Reg. at 24,858-59.

EPA seeks comment on a few alternative possibilities. For example, EPA "requests public comment on whether a third-party audit or root-cause analysis should be required under certain well-defined regulatory criteria." 83 Fed. Reg. at 24,872. This could include "requiring audits following multiple RMP-reportable accidents, or multiple regulatory violations of a particular gravity." *Id.* Root-cause analyses could be required "following incidents exceeding specified severity levels," for example. *Id.* EPA also seeks comment on a few alternative versions of third-party auditing, asking:

Should EPA consider limiting third party audits to relatively simple or common processes where experts could apply transferable expertise more easily than in more complex processes? Are there other ways to more narrowly tailor applicability to appropriate RMP facilities without broadly burdening the RMP-

regulated universe with a third-party audit requirement? Should third party audits only be mandated for facilities with multiple incidents? ... Should the agency consider modifying the independence criteria in any future third-party audit provision? ...

Id.

EPA also notes that, "by burdening whole sectors rather than facilities that have multiple accidents, the RMP Amendments missed an opportunity to better target the burdens of STAA to the specific facilities that are responsible for nearly half of the accidents associated with regulated substances at stationary sources subject to the RMP rule." *Id.* EPA thus appears to seek comment on retaining STAA, while limiting its applicability to facilities that have had past RMP releases.

Additionally, EPA seeks comment on whether there are "any data from chemical accident or toxic use reduction programs that demonstrates a substantially lower accident rate at existing facilities that already had successful accident prevention programs in place and then conducted Inherently Safer Technology or Design (IST/ISD) reviews or otherwise conducted chemical substitution to lower chemical hazards?" *Id.* at 24,875.

For third party audits, EPA notes that, in response to public comment, "EPA revised the applicability criteria for third-party audits required by implementing agencies from noncompliance to conditions that could lead to an accidental release of a regulated substance." *Id.* at 24,877. EPA "believed that having the implementing agency evaluate whether conditions exist at a stationary source that could lead to an accidental release better addressed the types of situations where a third-party audit would be most effective, and would minimize the potential for inconsistent or arbitrary decisions made by implementing agencies." *Id.*; Amendments RTC at 50-51, 54-55, 61. EPA says that "the public did not have a chance to comment on the new language" because it was added in response to public comments and was not part of the original proposal. 83 Fed. Reg. at 24,877. Such language was a logical outgrowth of the proposal and there is no basis to undermine or weaken this provision based on industry's comment.

### C. Changes to Weaken and Delay Emergency Coordination and Information-Sharing

EPA proposes to retain the requirement for facilities to coordinate at least once yearly with local emergency response groups. 40 C.F.R. § 68.93(a); 83 Fed. Reg. 24,859-60. However, EPA proposes weakening the provision requiring enhanced information sharing with first responders. 40 C.F.R. § 68.93(b); 83 Fed. Reg. 24,860. EPA proposes either to delete this provision entirely, or to reduce the scope of information sharing by changing the language to match EPCRA ("other information necessary for developing and implementing the local emergency response plan."). 83 Fed. Reg. at 24,852-53, 24,860. EPA has also proposed additions to 40 C.F.R. § 68.93 to restrict sharing of Confidential Business Information ("CBI") and classified information. *Id*.

Additionally, EPA proposes to weaken or eliminate the tabletop and field exercise requirements in the Chemical Disaster Rule. *Id.* at 24,860-61. If these are kept, EPA proposes to remove the minimum frequency and scoping requirements – i.e., would make them essentially

voluntary and unenforceable. *Id.* at 24,853, 24,861. EPA would retain the notification exercise requirement in 40 C.F.R. § 68.96(a). *Id.* at 24,853, 24,861. EPA also requests comment on "whether information on upcoming exercises should still be required to be provided to members of the public upon request" under information-sharing provisions discussed below. *Id.* at 24,874.

EPA also asks specifically whether, "[i]f EPA were to fully rescind the exercise provisions, would the remaining requirements of the [Chemical Disaster Rule] ... be sufficient to address the emergency response planning and coordination gaps highlighted by the West Fertilizer incident and other incidents noted by EPA in the proposed RMP Amendments rule ...?" *Id.* at 24,875.

Finally, EPA also seeks comment on "Petitioners' claims that the coordination and emergency response provisions of the final rule constitute unfunded mandates." *Id.* at 24,877.

# D. Repeal of Most Community Information-Access Requirements and Delay of Public Meeting Requirement

With respect to the community information-availability provisions, EPA proposes to rescind fully the requirement for facilities to make certain information available directly to interested community members. 40 C.F.R. § 68.210(b)-(d); 83 Fed. Reg. at 24,859. A discussion of EPA's security-based rationale for this change is in the subsequent section addressing EPA's crosscutting rationales.

EPA proposes to keep the requirement to hold a public meeting after a chemical incident occurs. 40 C.F.R. § 68.210(e); 83 Fed. Reg. at 24,868-69. EPA "believes that having a public meeting so that community members may learn more about the causes of an accident that resulted in such impacts, and the facility's plans to address those causes is [still] warranted." 83 Fed. Reg. at 24,868. Based on security concerns discussed below, EPA is proposing to reduce the scope of information available at public meetings held after incidents. *See id.* (proposing to rescind requirement to share "other relevant chemical hazard information, such as that described in [§ 68.210(b)]" during public meetings). EPA requests comment on the appropriate timeframe for such meetings. EPA also seeks comment on "whether the Agency should further limit the public meeting requirement to apply only after accidents that meet certain criteria, such as accidents with offsite impacts specified in § 68.42(a) (i.e., known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage)." *Id.* at 24,868-69. Finally, EPA seeks comment on whether "the public meeting provision [should] require providing information on all accidents in a facility's five-year accident history." *Id.* at 24,869.

EPA also specifically proposes to change the requirement in § 68.180(a)(1) to include "the name, organizational affiliation, phone number, and email address of local emergency planning and response organizations with which the stationary source last coordinated emergency response efforts" in its Risk Management Plan. *Id.* at 24,868. This is related to EPA's efforts to reduce the information that could become available to the public. EPA's propose change "would clarify that the Agency is only requiring organization-level information about local emergency planning and response organizations, and that facilities are not required to provide information about individual local emergency responders in order to reduce the amount

of personally identifiable information available in facility RMPs."

### E. Further Delay of All Remaining Provisions

Finally, EPA proposes to delay all the compliance dates in the Chemical Disaster Rule so that no compliance efforts would have been required during this period of delay. Starting in February 2019 when a final rule is released, facilities will get the full amount (or more) to prepare for and comply with any provisions of the rule that are not rescinded. EPA would give facilities one additional year to perform their first notification drill beyond the four-year compliance timeline already in place (i.e., first drill by 2024), up to three additional years for their first tabletop exercise, and no deadline at all for their first field exercise.

If EPA keeps any prevention provisions, it asks whether it should extend their compliance dates even further into the future. For example, EPA asks "extend the STAA compliance date to 5 years or some longer interval, so that all facilities subject to it would have the opportunity to incorporate the STAA into their PHA during their regular PHA revalidation cycle?" 83 Fed. Reg. at 24,875.

On the other hand, "EPA is proposing a different compliance date for public meetings than that established under the final Amendments rule because with the proposed rescission of the other information availability requirements of the final Amendments rule, EPA believes that sources would not require four years to prepare to conduct post-accident public meetings." *Id.* EPA proposes to accelerate the compliance deadline for this provision, if modified as proposed.

### F. EPA's Rationales for the Rollback

EPA's proposed Rollback Rule identifies six categories of rationales for its proposed changes. With some exceptions, EPA does not tie these rationales to the specific regulatory proposals and offers them as generalized rationales for the entire proposal. *See* 83 Fed. Reg. at 24,857 ("Because many of the changes are being proposed for the same reason, presenting the rationale separately eliminates redundant discussion and allows rationale discussion to be organized by topic (i.e. OSHA coordination, security risks, cost reduction)."). The six categories of rationale as labelled by EPA are: (1) "Maintain consistency in accident prevention requirements" with the Occupational Health and Safety Administration's (OSHA) Process Safety Management (PSM) program; (2) "Address security concerns;" (3) "Address BATF finding on West Fertilizer incident;" (4) "Reduce unnecessary regulations and regulatory costs;" (5) "Revise compliance dates to provide necessary time for program changes;" and (6) "Other issues raised by petitioners." *See Id.* at 24,851 (listing rationale categories in table of contents).

As discussed later in connection with each set of proposed changes, none of the rationales demonstrates the legal or rational justification needed for EPA to be able to finalize the proposal, or satisfies the Act's statutory requirements to prevent and reduce chemical releases. Moreover, EPA may not rely on any generalized justification without explaining how or why the rationale provides a reasoned explanation for each of EPA's specific proposed action, based on the record.

### V. EPA'S PROPOSED ROLLBACK RULE IS UNLAWFUL AND ARBITRARY AND SHOULD NOT BE FINALIZED.

A. <u>EPA's Proposal Violates the Agency's Own Principles of Environmental Justice</u> and has Manifestly Failed to Engage Communities in its Rushed Attempt to Rescind the Chemical Disaster Rule.

Executive Order 12898 directs EPA and other agencies to "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations" to the "greatest extent practicable and permitted by law." EO 12898 § 1-101, 59 Fed. Reg. 7629 (Feb. 11, 1994). In particular, the Executive Order provides each federal agency will "conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin." *Id.* § 2-2.

While the Executive Order does not mandate any particular outcome in rulemakings, it does require EPA to give due consideration to environmental justice – especially in the decisions about the *process* it uses during rulemakings – to the extent permitted by law. EPA has implemented this order and created a practice it follows through implementing policies pursuant to its governing statutes, including the Clean Air Act, such as guidance on considering environmental justice in rulemaking, and through its strategic plan, EJ2020.<sup>232</sup> For example, EPA defines meaningful involvement to include: "1) potentially affected populations have an appropriate opportunity to participate in decisions about a proposed activity [i.e., rulemaking] that will affect their environment and/or health; 2) the population's contribution can influence [the EPA's] rulemaking decisions; 3) the concerns of all participants involved will be considered in the decision-making process; and 4) [the EPA will] seek out and facilitate the involvement of population's potentially affected by EPA's rulemaking process." EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis 9 (June 2016).<sup>233</sup>

In its proposed Rollback Rule, EPA admits this action "may have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898." 83 Fed. Reg. at 24,881. Yet EPA fails to satisfy each aspect of meaningful involvement. EPA has failed to give affected populations an appropriate opportunity to participate; the contributions of the public who have been able to participate are likely to be ignored by decision makers, because the Administrator himself directed the outcome of this rulemaking (in part based on unlawful executive orders) and new conflicted staff, such as Peter Wright and others, have now taken over key positions in the agency with control over this rulemaking, *see supra* Part III; and EPA has made no effort to seek out or facilitate the meaningful involvement of community members. For

64

<sup>&</sup>lt;sup>232</sup> See, e.g., EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis (June 2016); EPA, Environmental Justice 2020 Action Agenda (Oct. 2016).

<sup>&</sup>lt;sup>233</sup> https://www.epa.gov/sites/production/files/2016-06/documents/ejtg 5 6 16 v5.1.pdf.

example, see the EPA-OMB communication during this rulemaking making clear that "the Administrator directed the proposal" to rescind prevention and weaken other requirements. Interagency Review Communications Between OMB and EPA - Email from Gerain Cogliano of EPA to OMB (attached summary document) (Mar. 15, 2018), EPA-HQ-OEM-2015-0725-0892.

Instead, EPA has chosen to propose the rule despite its disproportionate impacts, has made no attempt to mitigate these disproportionate impacts, and has roundly failed to engage affected communities in its decision-making process.

1. EPA Violated Notice-and-Comment and Rulemaking Requirements to Assure Meaningful Public Participation.

EPA's proposed repeal of the Chemical Disaster Rule will contribute to environmental injustice in communities EPA admits are disproportionately affected by chemical disasters, toxic releases, fires, and explosions. When developing the Chemical Disaster Rule, EPA recognized the importance of seeking community input. EPA held two rounds of public comment, and held eight public listening sessions in seven communities including in California, New Jersey, Texas, and Illinois. *See* Amendments RIA at 125-26 (listing twenty local or community-based groups with whom EPA consulted in person at these meetings), EPA-HQ-OEM-2015-0725-0734. That prior process ensured that EPA staff would meet with and hear from at least some affected community members in their own communities, rather than asking affected community members to travel to Washington to be heard, or remain silent because they are unable to travel. EPA provided for a "reasonable" public participation opportunity on that rule.

In stark contrast, EPA has provided little opportunity for meaningful involvement in this rule. The only scheduled public hearing on its proposal was inaccessible to many affected community members, most of whom are located outside of the D.C. area. This contradicts Executive Order 12898 on environmental justice, as well as EPA's own prior practice in this and similar rulemakings. It additionally contravenes core principles of equal protection that ground the Executive Order, for EPA to know that there is disproportionate harm based on race, but choose to proceed regardless, without even providing meaningful procedural opportunities for public input.

Notably, EPA states that "[b]ecause this proposed rule does not impose any additional costs on affected communities, EPA did not conduct additional engagement activities associated with this proposed rulemaking." Rollback RIA at 81. Yet, as EPA admits, its proposal *will* repeal certain provisions with benefits that would have prevented and reduced *disproportionate* harm to certain communities. *E.g.*, Rollback RIA at 63, 80. The Rollback Rule will disproportionately harm fenceline communities, who are disproportionately people of color and low-income. EPA's statement that its proposal "does not impose any additional costs on affected communities" is therefore incorrect and arbitrary. Rollback RIA at 81. EPA's own record highlights the costs for fenceline communities in the form of deaths, injuries, toxic exposure, and other harm related to shelter-in-place and evacuation orders, as well as property value and other economic harms. Thus, EPA's justification for not performing *any* additional engagement activities, and not providing any community-based public hearings or listening

<sup>&</sup>lt;sup>234</sup> The Rollback Rule also disproportionately harms workers and first responders.

sessions contravenes the statutory requirement for a "reasonable period for public participation," and is arbitrary and capricious. 42 U.S.C. § 7607(h). For vulnerable and low-income communities, EPA must at least consider what additional steps are needed to create the mandatory "reasonable period for public participation." *Id.* 

The Clean Air Act provides specific and important rulemaking requirements that EPA must follow for this rule to protect the affected public's ability to comment, and has failed to do so, as required by 42 U.S.C. § 7607(d).<sup>235</sup> The Act makes clear that: "It is the intent of Congress that, consistent with the policy of subchapter II of chapter 5 of title 5, the Administrator, in promulgating any regulation under this chapter . . . shall ensure a reasonable period for public participation of at least 30 days...." *Id.* § 7607(h). EPA's failure to satisfy these requirements, as described below, has been especially burdensome on the communities of color and low-income communities that EPA admits are disproportionately impacted by its proposed rescission of chemical disaster prevention and mitigation measures.

### a. Violations of Public Participation Requirement

The Clean Air Act directs that EPA "shall give interested persons and opportunity for the oral presentation of data, views, or arguments, in addition to an opportunity to make written submissions." 42 U.S.C. § 7607(d)(5). The Act simultaneously requires EPA to "ensure a reasonable period for public participation of at least 30 days." *Id.* § 7607(h).

Yet, EPA did not provide 30 days' notice of the public hearing scheduled for June 14, 2018. 83 Fed. Reg. at 24,850. EPA published notice of the hearing on May 30, 2018, which was only two weeks before the sole hearing EPA held in Washington, D.C. EPA also stated that "[t]he last day to preregister in advance to speak at the hearing is June 8, 2018," implying participants should register to ensure they could participate in that hearing and giving communities only 9 days to do so. *Id.* EPA provided no opportunity for telephone presentation, and required people wishing to present oral testimony to come to its Headquarters in Washington, D.C. to do so.

A long list of organizations urged EPA to hold at least one public hearing in a community affected by chemical disasters, to do so with at least 30 days' public notice, and to allow for remote telephone participation for people who could not travel or who would have difficulty traveling to Washington, D.C. for the hearing.<sup>236</sup> EPA was told that affected members of the

2

<sup>&</sup>lt;sup>235</sup> Section 7607(d) applies to this rulemaking through § 7412(r)(7)(E), which treats § 7412(r) rules as § 7412(d) standards. 42 U.S.C. § 7607(d)(1)(C). EPA has admitted this, Delay RTC at 11, EPA-HQ-OEM-2015-0725-0881, and also has relied on § 7607(d)(7)(B)'s three-month authorization to delay the Chemical Disaster Rule's effective date pending reconsideration. *See, e.g.*, EPA, Delay, 82 Fed. Reg. 13,968 (Mar. 16, 2017), EPA-HQ-OEM-2015-0725-0757.

<sup>&</sup>lt;sup>236</sup> See Request for EPA to Hold Public Hearings in Communities Hurt by Chemical Disasters and Exposed to Chemical Facilities (May 30, 2018), submitted to EPA by Earthjustice, on behalf of Air Alliance Houston, California Communities Against Toxics, Clean Air Council, Coalition For A Safe Environment, Colorado Latino Forum, Coming Clean, Community In-Power & Development Association, Del Amo Action Committee, Environmental Justice Health Alliance, Louisiana Bucket

public would not be able to participate on such short notice at the single hearing EPA was providing in DC. Yet EPA refused to hold public hearings elsewhere or to provide a second public hearing, citing its desire to complete the Rollback rulemaking before its Delay Rule expires in February, 2019. Documentation of Teleconference Meeting between EPA and Earthjustice Regarding Public Hearings for Proposed RMP Reconsideration Rule (July 5, 2018), EPA-HQ-OEM-2015-0725-0984.

At the last minute before the hearing, EPA acknowledged that affected members of the public could not attend and agreed to provide a "listen-only phone line" so they could listen but not speak. EPA reiterated that "[o]nly participants that physically attend the hearing will have the opportunity to provide oral comments."<sup>237</sup> Commenters appreciate that EPA made it possible for some people to listen to the hearing, but listening is not the same as participating. No one who listened remotely was able to present "data, views, or argument" to EPA during the hearing, nor did the listen-only phone line provide the requisite "reasonable" participation opportunity for oral testimony. Additionally, only communities that had been in contact with EPA or were checking the EPA website were made aware of this line because EPA gave no public notice of the listen-only phone line.

In its effort to rapidly rescind the Chemical Disaster Rule, EPA has failed to provide for meaningful participation by members of the public disproportionately impacted by its proposed rule. When developing the Chemical Disaster Rule, EPA held two rounds of public comment and included eight public listening sessions in the first round of participation. Amendments RIA at 125-26 (discussing eight public listening sessions held during development of the Chemical Disaster Rule). Now EPA is proposing to rescind almost all protections in that rule and has provided only a single comment period and one hearing, in Washington, D.C. Members of communities most affected by the rule have been unable to participate in this process. EPA's decision to hold only a single public hearing (in D.C.) makes this rulemaking process inadequate and its proposed action arbitrary as it is contrary to EPA's original practice on this rule and its own recognition previously that it is necessary and important to consider input from the most-affected and most-exposed community members who live and work near RMP facilities.

EPA also refused to give the minimum of 30 days' accurate notice even though information it had provided in its initial notice was incorrect. EPA's notice (published May 30) listed outdated REAL ID Act requirements that stated that if a participant had a driver's license from one of a long list of states or territories, that they would be required to present an additional form of identification, listing some examples and stating that people would not be able to attend if they could not meet these requirements. 83 Fed. Reg. at 24,850. The list was: Alaska, American Samoa, Arizona, Kentucky, Louisiana, Maine, Massachusetts, Minnesota, Montana, New York, Oklahoma, and Washington. *Id.* However, after potential hearing participants asked questions of EPA to try to understand the REAL ID requirements to determine what ID they

\_

Brigade, Ohio Valley Environmental Coalition, Texas Environmental Justice Advocacy Services (t.e.j.a.s.), Union of Concerned Scientists, and Utah Physicians for a Healthy Environment.

<sup>&</sup>lt;sup>237</sup> See EPA, Public Hearing on the Proposed Changes to the Risk Management Program (RMP) Rule (updated June 13, 2018), https://www.epa.gov/rmp/public-hearing-proposed-changes-risk-management-program-rmp-rule.

would need to bring, and how to meet the requirements, and after the public hearing registration deadline passed, EPA admitted its public notice was incorrect. EPA then published on its website, but not in the federal register, the information that no state residents, and only American Samoa residents, would be required to provide an additional form of ID.<sup>238</sup> EPA's failure to provide public notice of this error and to delay its hearing or hold a second hearing in response renders its process unlawful and arbitrary.

REAL ID Act requirements pose an additional and disproportionate barrier to individuals who do not speak English as their first language. In communities like Manchester (in Houston, Texas), 62.6% of the campus at the local elementary school JR Harris Elementary is an English Language Learner. Texas Ed. Agency,

https://rptsvr1.tea.texas.gov/cgi/sas/broker? service=marykay&year4=2016&year2=16& debug =0&single=N&title=2016+School+Report+Card& program=perfrept.perfmast.sas&prgopt=201 6%2Fsrc%2Fsrc spec.sas&ptype=H&batch=N&level=campus&level=campus&search=campna me&namenum=harris&campus=101912166. Such communities are silenced when REAL ID and lack of adequate notice by EPA make it impossible for them to participate.

At the hearing, EPA heard from about fifteen individuals or community advocates from or representing people affected who lived outside of Washington, D.C. (including one state attorney general's office representative); the remainder who spoke all appear to be Washington, D.C.-based individuals, or national, industry or organizational representatives.<sup>239</sup> EPA's hearing included periods of breaks and silence, because, even though it had received over 161,000 written comments or submissions of information in advance of the Chemical Disaster Rule, and another over 54,117 public comments on the delay of that rule (a total of over 215,000 comments showing significant public interest and concern), most of the affected public was either unaware or unable to participate in the public hearing held in Washington, D.C.

As the transcript showed, regardless, there is serious concern from communities around the United States that after years of work to update the RMP, EPA is now proposing to roll back the Chemical Disaster Rule.<sup>240</sup> As EPA staff questions raised repeatedly to individual people

<sup>&</sup>lt;sup>238</sup> *Id*.

<sup>&</sup>lt;sup>239</sup> EPA, Written Transcript of Public Hearing on Risk Management Program (RMP) Reconsideration Proposed Rule (38 Speakers) (June 14, 2018) (posted July 6, 2018), EPA-HQ-OEM-2015-0725-0985.

<sup>&</sup>lt;sup>240</sup> Id. (see, e.g., testimony of: KATHY CURTIS, Clean and Healthy NY; JESSE MARQUEZ, Coalition for A Safe Environment; MILDRED McCLAIN, Harambee House; SAY YANG, Center for Earth, Energy and Democracy; OCTAVIA DRYDEN, Delaware Concerned Residents for Environmental Justice; KEN DRYDEN, Minority Workforce Development Coalition; ELIZABETH SPIKE, Houston Sierra Club; STEPHANIE THOMAS, Public Citizen (Austin); BANI HUDSON-HINES, Rubbertown Emergency Action (REACT); MICHELE ROBERTS, Environmental Justice Health Alliance for Chemical Policy Reform; MAYA NYE, People Concerned About Chemical Safety, West Virginia & Ohio Valley Environmental Coalition; MALIN MOENCH, Utah Physicians for a Healthy Environment; EAN TAFOYA, Colorado Latino Forum; YVETTE ARELIANO, Texas Environmental Justice Advocacy Services; NICKY SHEATS, NJ Environmental Justice Alliance); see also id. (e.g., testimony of: JORDAN BARAB, former OSHA official; CHARISE JOHNSON, Union of Concerned Scientists; PAUL

who testified showed, there was value both in individual community members having a chance to speak, and there was a need for EPA to hear from these and additional community members. *See, e.g.*, Written Transcript of Public Hearing (July 6, 2018), EPA-HQ-OEM-2015-0725-0985.<sup>241</sup> EPA also asked questions of the Washington, D.C. staff and representatives who were present. *Id.* at 27, 32-33, 36, 44-45, 48, 61-62, 68-69, 73-74, 75, 76, 81, 107-08, 112-13, 157, 175-76, 182, 183, 207, 214-15. People who were unable to attend the hearing did not have a chance to speak to EPA, nor to receive questions from EPA staff regarding their testimony or other comments from people testifying. By refusing to provide the required opportunity for public participation on this rule, including at a hearing or listening session, EPA has prejudiced the ability of community members around the U.S. to participate meaningfully in this rule. EPA has violated the procedural requirements of the Clean Air Act, the environmental justice principles and practices that EPA previously followed as part of its rulemaking process, and the underlying principles of due process and equal protection that those aim to implement.

### b. Violations of Notice-and-Comment

EPA additionally failed to provide a meaningful opportunity for public participation in this rulemaking by omitting key documents from the public docket. In so doing, EPA failed to give proper public notice and ensure at least a 30-day comment period for public review and comment on the proposed rule and its supporting materials. The Clean Air Act requires that: "All data, information, and documents referred to in this paragraph on which the proposed rule relies shall be included in the docket on the date of publication of the proposed rule." 42 U.S.C. § 7607(d)(3)(C) (emphasis added). Further, the Act requires at least a 30-day period for public comment on these materials. *Id.* § 7607(h). EPA has failed to provide that opportunity to communities in this rulemaking – although EPA published notice of the proposed rule on May 30, 2018, it did not place all data on which the agency was relying into the docket as of the date of publication.

In particular, EPA omitted its 2018 Risk Management Plan database on which it relied, and which would include accident history reports filed in 2017. EPA cites this database in its Regulatory Impact Analysis for the proposed rule, and confirmed its reliance on this database in a technical correction published on July 31, 2018. Rollback RIA at 33 n.32; 83 Fed. Reg. at 34,968 (citing database); 83 Fed. Reg. 36,837, 36,838 (July 31, 2018). Without this database, commenters have incomplete data on recent accident reports. Given EPA's reliance on the allegedly "low and declining accident rate" in recent years, data on recent accidents is especially important to being able to understand and comment effectively on EPA's rationale for the rollback. See 83 Fed. Reg. at 24,873.

Initially, EPA also omitted the 2017 database on which it relies. EPA cites and relies on this database specifically and data that EPA pulled from this database, including in the 2018 Draft Regulatory Impact Analysis, and EPA's proposed rule cites and relies heavily on this in the RIA. *See*, *e.g.*, Rollback RIA at 24-26 (stating that "EPA compared the February 2015 RMP database to the most recent RMP database from November 2017..." and discussing EPA's

-

ORUM, Individual; LAURA MIRMAN-HESLIN, NYS Office of the Attorney General; GORDON SOMMERS, Earthjustice; MICHAEL WILSON and ALANA BYRD, BlueGreen Alliance).

<sup>&</sup>lt;sup>241</sup> Available at https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0985.

consideration and reliance on what it found based on these data, including a section entitled "2017 versus 2015 RMP Data"); *id.* at 32-34 (describing and relying in part on "tentative" decline in incidents using 2014-2016 data from the 2017 database that "are now available"); *see also* 83 Fed. Reg. at 24,873 & n.54 (referring to "the low and declining accident rate" and relying on this same section of the RIA for that point).

The agency eventually put that database (but not the 2018 one) into the docket, but has still not shared the specific queries it used or other details that would explain how it reached the results it did in the RIA.<sup>242</sup> EPA granted only an additional 30 days to comment when posting the database, too, despite its complexity and despite originally finding 60 days was an appropriate period of comment for this rule. EPA also has still not explained how it used this database clearly, or shared the queries it ran or the output they produced. While relational databases can be a tremendous tool to experts, simply sharing them with the public without providing the specific queries used or their output spreadsheets (e.g., lists of facilities) makes it very hard for non-experts to engage with EPA's data. EPA implicitly recognized this when it shared its accident spreadsheets for 2004–2013 and for 2014–2016. Relational databases require significant expertise and specialized software to work with; that's why spreadsheets like these have value, even if the full database is technically available.

EPA has responded to some requests for information from parties trying to understand how to use these databases, but its failure to provide the specific queries it used or user-friendly spreadsheets showing the output of these queries hinders the ability of Commenters and other affected members of the public to comment. For example, EPA has said it used queries to generate its counts of 2017 facilities, lists of responding and non-responding facilities, and other lists of facilities. *See*, *e.g.*, Rollback RIA at 24-34 (referring to various lists, and providing a number of exhibits, including facility numbers by sector, program level, NAICS code, facilities and processes subject to the STAA provision by sector). Yet EPA still has not released these lists, which would show what facilities it included to reach these counts. Not providing these lists makes it hard for communities to engage with the agency's data and makes commenting inaccessible to those without specialized training and software.

Instead of placing these queries and lists into the docket, EPA acknowledged that these were not available and explained that "to reproduce these you will need someone familiar with relational database query techniques." Yet EPA has relied on the results of these relational

<sup>242</sup> After requests from interested groups, EPA placed this database in the docket and on July 24, 2018,

Industrial and Service Workers International Union (United Steelworkers or USW); International Union,

United Automobile, Aerospace and Agricultural Implement Workers of America (UAW).

EPA published a Notice of Data Availability (NODA) and extended the comment deadline to 30 days from publication of the NODA. 83 Fed. Reg. at 34,967 (July 24, 2018). Groups that requested the extension included Air Alliance Houston, Clean Air Council, Coalition For A Safe Environment, Coming Clean, Ohio Valley Environmental Coalition, Utah Physicians for a Healthy Environment, Sierra Club, and the Union of Concerned Scientists. *See* Email Chain from Emma Cheuse, Earthjustice, to Jim Belke *et al.*, EPA (July 11, 2018). In addition, the following organizations supported this extension request for meaningful public comment: United Steel, Paper and Forestry, Rubber, Manufacturing, Energy, Allied

<sup>&</sup>lt;sup>243</sup> Email from Mr. Jim Belke, EPA, to Emma Cheuse, Earthjustice (July 9, 2018).

database query techniques to create lists, data, and charts. Failing to provide the lists and data used to create the charts and documents for public review prevents Commenters and other concerned members of the public from being able to understand or check the analysis on which EPA is relying.<sup>244</sup> This causes prejudice to Commenters' and the public's ability to comment.

Commenters appreciate that EPA has provided MS Excel spreadsheets showing incident data from 2004-2013 (presumably created from the 2015 RMP Database) and 2014-2016 (presumably created from the 2017 RMP Database). However, these spreadsheets, again, show that EPA created lists and performed analyses that it has not shared for public review, in violation of notice-and-comment and in a prejudicial manner to Commenters' ability to meaningfully review and comment. In particular, Commenters reasonably believed that EPA created the first spreadsheet from the 2015 RMP Database, and the second from the 2017 RMP database, but EPA has recently stated that is not true in a notice of correction. EPA, Correction, 83 Fed. Reg. 36,837 (July 31, 2018), EPA-HQ-OEM-2015-0725-1423 ("EPA made incorrect references to the date of the RMP database version used to extract these accident data."). EPA has not given any indication in the public docket of what steps it took to search, what tables, columns, and criteria it used, what data it excluded from these spreadsheets, and why. EPA has given no indication of why some incidents, *e.g.*, the West, TX fertilizer plant explosion, are excluded from the list, although it appears to be because that facility is covered by the RMP but the actual release was a near miss, not an actual RMP-chemical release.

Because the incident and facility data go to the heart of the problem EPA's original rule aimed to reduce, and the proposed rollback rule attempts to ignore, these data are core to this rulemaking. It is prejudicial to Commenters that EPA has not given at least a full 30-day period of public comment after publishing notice of these missing data as required by § 7607(d)(5). It is also highly prejudicial that EPA still has not provided the full lists, query results, and other data on which it is now relying to try to repeal and weaken the Chemical Disaster Rule.

In sum, EPA's failure to provide accessible copies of the data it is relying on makes it hard for non-experts and community members to comment meaningfully on EPA's rulemaking. Providing only the database, without queries or output, obfuscates EPA's rationale and perpetuates environmental injustice by limiting the ability of those outside affected industries to meaningfully participate in the rulemaking.

2. The Proposed Rollback Rule Is Arbitrary and Capricious Because EPA Refuses to Address and Recognize the Need to Reduce Harm That Falls Disproportionately on Communities of Color and Low-Income Communities.

EPA acknowledges that "this action may have disproportionately high and adverse human health or environmental effects on minority populations, low-income populations and/or indigenous peoples, as specified in Executive Order 12898." 83 Fed. Reg. at 24,881; Rollback

-

<sup>&</sup>lt;sup>244</sup> *Id*.

<sup>&</sup>lt;sup>245</sup> See, e.g., 2004-13 Accident Data Spreadsheet (listing 2,291 incidents from 2004 to 2013 but not including the explosion at the RMP-covered facility in West, TX, which EPA's proposal discusses as relevant).

RIA at 79-80. But EPA is still proceeding with the action, and has reversed course not only on the substance of the Chemical Disaster Rule but also on the process it used to develop that rule. After spending three years developing the Chemical Disaster Rule, EPA is attempting to rescind almost the entire rule in less than one year. EPA admits its target date to finalize this rule, no matter what input it receives, is nine months from the date of this proposal, in February 2019. See Documentation of Teleconference Meeting between EPA and Earthjustice Regarding Public Hearings for Proposed RMP Reconsideration Rule (July 5, 2018) ("EPA intends to complete the rulemaking process before February 2019"), EPA-HQ-OEM-2015-0725-0984.

Contrary to its past approach, EPA now is rushing through its Rollback Rule with only a single period for public comment, zero listening sessions, and only one public hearing. When developing the Chemical Disaster Rule, as discussed above, EPA engaged communities around the country through two rounds of notice and comment, eight public listening sessions, and a public hearing on the proposed rule it developed in response to those listening sessions and the initial round of comments.

It is arbitrary and capricious for EPA to acknowledge the environmental *injustice* of its proposal, but do nothing to reduce this. The record directly contradicts EPA's statement that "this proposed rule does not impose any additional costs on affected communities," Rollback RIA at 81, and thus the Rollback Rule proposal which relies on this conclusion is unsupported and irrational. EPA does not acknowledge nor change its original recognition that these provisions, particularly the STAA prevention measures, would create particular benefits for communities of color, such that rescinding them denies communities of color and low-income communities, in particular, benefits they greatly need for health and safety. For example, as EPA found in issuing the Chemical Disaster Rule:

EPA's evaluation of the impacts on communities of color and low-income communities is set forth in the RIA. One particular amendment, the provisions regarding STAA, should improve the safety of these communities because it focuses on some of the larger, more complex chemical processes and facilities. As noted in the RIA, there is significant correlation among larger and more complex facilities, riskier facilities, and counties with larger African-American populations. Such targeting of the STAA requirements to the larger and more complex processes will benefit minority communities, which often are located closer to larger facilities with more complex chemical processes and who bear a larger portion of risk from chemical accidents.

Amendments RTC at 22, EPA-HQ-OEM-2015-0725-0729 (emphasis added). Yet EPA is proceeding with its proposal to rescind the prevention measures, including the STAA requirements, even though this will have greater foregone benefits, and thus cause greater harm and likelihood of harm, to such communities. EPA does so arbitrarily because it does not even discuss or explain how it can choose to do so, in view of its finding of the disparate harm its action will cause – this is disparate and knowing unequal and unjust treatment of communities of color. It violates the Clean Air Act, and contravenes fundamental principles of equal protection under law, regardless of race.

It is also arbitrary and capricious for the agency to disregard the obligations it has under its own statute to protect public health and policies and practices implementing and pursuant to

Executive Order 12898 to "make achieving environmental justice part of its mission," and to "identify[] and address[]" disproportionately high and adverse human health or environmental effects of its activities on minority populations and low-income populations to the "greatest extent practicable and permitted by law." EO 12898 § 1-101, 59 Fed. Reg. 7629 (Feb. 11, 1994). It is likewise arbitrary and capricious to ignore the agency's obligation under the Executive Order to "conduct its programs, policies, and activities that substantially affect human health or the environment, in a manner that ensures that such programs, policies, and activities do not have the effect of excluding persons (including populations) from participation in, denying persons (including populations) the benefits of, or subjecting persons (including populations) to discrimination under, such programs, policies, and activities, because of their race, color, or national origin." *Id.* at § 2-2.

Finally, EPA's failure to meaningfully engage with disproportionately affected groups renders its proposed action arbitrary and capricious because it is at odds, not only with the Executive Order, but with EPA's own guidance implementing that executive order. *See, e.g.*, EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis (June 2016);<sup>246</sup> EPA, Environmental Justice 2020 Action Agenda (Oct. 2016).<sup>247</sup>

3. EPA is Violating Due Process and Principles of Environmental Justice by Engaging in a Rushed Rulemaking Process Led by Conflicted Officials.

From the moment it first delayed the Chemical Disaster Rule, EPA has had a clear objective: rescinding all or almost all of the Chemical Disaster Rule in response to industry's requests. EPA now proposes to bring that reality to fruition, but its proposal is the product of a flawed decision-making process that was never really about improving EPA's disaster prevention programs under § 112(r)(7).

Administrator Pruitt prepared for and worked on material that became part of the Chemical Disaster Rollback proposed rulemaking during his tenure as Attorney General of Oklahoma, himself signing comments *opposing* the rule. Those comments formed the basis for this reconsideration proceeding, and ostensibly justified EPA's proposed delay of the Chemical Disaster Rule, as well. Comment submitted by Scott Pruitt, Office of Attorney General, State of Oklahoma et al., EPA-HQ-OEM-2015-0725-0624 (July 27, 2016).<sup>248</sup> Mr. Pruitt's former client (the State of Oklahoma) filed one of the reconsideration petitions to which EPA is now responding. EPA-HQ-OEM-2015-0725-0762. Although filed after Administrator Pruitt took office, the arguments for reconsideration follow up on arguments he included in his prior comments. Mr. Pruitt's attacks on the Chemical Disaster Rule before it was even finalized made clear his intent upon entering office.

Although Mr. Pruitt has now been forced to resign, the taint of his involvement in the agency's efforts to delay and then roll back the Chemical Disaster Rule linger in this proposed rule. In fact, EPA records show the Administrator himself directed the agency to rescind all

<sup>&</sup>lt;sup>246</sup> https://www.epa.gov/sites/production/files/2016-06/documents/ejtg 5 6 16 v5.1.pdf.

<sup>&</sup>lt;sup>247</sup> https://www.epa.gov/sites/production/files/2016-

<sup>05/</sup>documents/052216 ej 2020 strategic plan final 0.pdf

<sup>&</sup>lt;sup>248</sup> *See* note 229, *supra*.

accident prevention measures, all community information-availability provisions, and parts of the emergency coordination provisions, in addition to further delaying the few remaining parts of the rule. An EPA summary document sent to OMB states the following:

> The RMP Reconsideration proposed rule is deregulatory. The **Administrator** directed the proposal to include:

- Rescinding all accident prevention program provisions of the RMP Amendments rule (i.e., third party audits, safer technology and alternatives analyses, incident investigation root cause analysis, and most other minor changes to the prevention program). (An alternative proposal would retain certain minor changes to Program 2 prevention program provisions and one change to Program 3 that would not cause any divergence with OSHA PSM).
- Rescinding the public information availability provisions of the RMP Amendments rule, except for the provision requiring a public meeting after an accident, which will still be required but with minor language modifications.
- Modifying the emergency coordination and exercise provisions of the Amendments rule to address security concerns raised by petitioners\* and give more flexibility to regulated facilities in complying with these provisions.
- Extending compliance dates to one year after the effective date of a final rule for the emergency coordination provisions, four years after effective date for the emergency exercise and public meeting provisions, and five years after the effective date for incorporating new Subpart G data elements into a facility's RMP.

Interagency Review Communications Between OMB and EPA - Email from Gerain Cogliano of EPA to OMB (attached summary document) (Mar. 15, 2018), EPA-HQ-OEM-2015-0725-0892.

Furthermore, the recently nominated (but not yet confirmed) head of EPA's Office of Land and Emergency Management (OLEM), Peter Wright, is the former general counsel of DowDuPont. DowDuPont and its subsidiaries operate over 50 facilities subject to the Chemical Disaster Rule.<sup>249</sup> From 2004 to 2016, EPA data shows that DowDuPont, and their subsidiaries together averaged 7 chemical disaster incidents per year, for a total of 99 fires, explosions, or other hazardous releases under the pre-existing Risk Management Program.<sup>250</sup> According to EPA's data, these incidents led to the deaths of 6 workers, injured or caused over 200 people to be hospitalized or seek medical treatment, forced over 12,000 people to shelter-in-place or

<sup>&</sup>lt;sup>249</sup> See Am. Chemistry Council v. EPA, D.C. Cir. No. 17-1085; Brief of American Chemistry Council et al., Air Alliance Houston v. EPA, No. 17-1155 (consol. with No. 17-1181), Doc. No. 1715777 (filed Jan. 31, 2018); EPA, 2016 Risk Management Plan (RMP) National Database files (non-OCA version), https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0311.

<sup>&</sup>lt;sup>250</sup> 2004-13 Accident Data Spreadsheet; 2014-16 Accident Data Spreadsheet.

evacuate, and caused over \$67.5 million in property damage.<sup>251</sup> Mr. Wright is already working at the agency and may be involved in this rulemaking – EPA has not stated otherwise, raising both ethical and legal concerns on top of those created by Pruitt's original involvement.<sup>252</sup> Senators have raised serious constitutional concerns about Wright's work at the agency, and Commenters agree with and rely on those concerns here.<sup>253</sup> Unless he is screened off from this rulemaking process, Mr. Wright's participation will similarly taint this rulemaking process.

The conflicts between key Trump EPA appointees abound, and EPA has failed to establish any neutral or objective decision-making basis for this rulemaking. Acting Administrator Andrew Wheeler, the lead decision maker on this rulemaking, for example, has ties to members of the RMP Coalition – such as the American Forest & Paper Association (through Wheeler's former client International Paper) – according to a recent report by Public Citizen.<sup>254</sup>

Decision makers undermine the integrity of the agency rulemaking process and even "violate the Due Process Clause and must be disqualified when they act with an 'unalterably closed mind' and are 'unwilling or unable' to rationally consider arguments." *Air Transp. Ass'n of Am., Inc. v. Nat'l Mediation Bd.*, 663 F.3d 476, 487 (D.C. Cir. 2011). Furthermore, activities that create an appearance of impartiality violate federal ethics rules. *See* 5 C.F.R. § 2635.101(14) ("Employees shall endeavor to avoid any actions creating the appearance that they are violating the law or the ethical standards set forth in this part."); 57 Fed. Reg. 35,006 (1992) ("Employees have long been required by the standards of conduct to avoid even an appearance of loss of impartiality."). No member of the public can trust that the process or outcome of this rulemaking will be fair or objective in any way when the former Administrator and OLEM's newly nominated head (already working in the Administrator's office before confirmation) have such concrete conflicts of interest.

Violation of these norms and EPA's failure to create or engage in an open-minded rulemaking process is also a failure of environmental justice. Communities around the country that are disproportionately impacted by EPA's rulemaking have been deprived of a meaningful opportunity to participate in the development of this rule. These failures by the agency render EPA's proposed rule unconstitutional and unlawful. They also render the rulemaking arbitrary

<sup>&</sup>lt;sup>251</sup> 2004-13 Accident Data Spreadsheet; 2014-16 Accident Data Spreadsheet.

<sup>&</sup>lt;sup>252</sup> See Hiroko Tabuchi and Tryggvi Adalbjornsson, From Dow's 'Dioxin Lawyer' to Trump's Choice to Run Superfund, NY Times (July 28, 2018), <a href="https://www.nytimes.com/2018/07/28/climate/dow-epa-superfund.html">https://www.nytimes.com/2018/07/28/climate/dow-epa-superfund.html</a>.

<sup>&</sup>lt;sup>253</sup> Letter from U.S. Senators Carper (DE), Whitehouse (RI), Sanders (VT), and Markey (MA), to Mr. Peter C. Wright, Special Counsel to the Administrator, EPA (July 23, 2018), <a href="https://www.whitehouse.senate.gov/imo/media/doc/2018-07-20%20Signed%20Letter%20to%20Wright.pdf">https://www.whitehouse.senate.gov/imo/media/doc/2018-07-20%20Signed%20Letter%20to%20Wright.pdf</a>.

<sup>&</sup>lt;sup>254</sup> Public Citizen, Trump's Chemical Romance (Aug. 2018), <a href="https://www.citizen.org/sites/default/files/trump-administration-chemical-romance.pdf">https://www.citizen.org/sites/default/files/trump-administration-chemical-romance.pdf</a>; see also Public Citizen: RMP Coalition conflicts, data via ProPublica's Trump Town database, <a href="https://docs.google.com/spreadsheets/d/1A2S8kJLHTGrB-9WFBTTyvzgLROOD5I6ytz4KnEsfHeE/edit#gid=1117671389">https://docs.google.com/spreadsheets/d/1A2S8kJLHTGrB-9WFBTTyvzgLROOD5I6ytz4KnEsfHeE/edit#gid=1117671389</a>.

and capricious because it is at odds with federal ethics rules and the agency's own guidance on environmental justice, which includes a commitment to meaningfully involve communities. *See, e.g.*, EPA, Technical Guidance for Assessing Environmental Justice in Regulatory Analysis 15, (June 2016)<sup>255</sup>; EPA, Environmental Justice 2020 Action Agenda 14-15 (Oct. 2016)<sup>256</sup>; EPA, *Environmental Justice*, last updated May 18, 2018, https://www.epa.gov/environmentaljustice ("Environmental justice is the fair treatment and *meaningful involvement* of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies." (emphasis added)).

- B. <u>EPA Cannot Base Its Decision to Rescind or Weaken the Chemical Disaster Rule</u> on Cost.
  - 1. EPA's Rollback Rule is Based Primarily on the Agency's Deregulatory Agenda, Not Its Governing Statute or Facts in the Record.

Overall, EPA's proposed Rollback Rule should be rejected as a "mockery of the statute," for reasons discussed further below. *Air Alliance Houston*, Slip Op. at 28. The major crosscutting rationale that EPA uses to justify the proposed rule is economic burden. In light of new executive department policies outlined below, EPA states "an important factor in selecting the provisions of the final RMP Amendments rule that EPA seeks to rescind or modify with this proposal is that these provisions would otherwise place substantial economic burdens on regulated entities, potentially contravening the new policy direction set in [certain] Executive Orders." 83 Fed. Reg. at 24,871. EPA is now "reexamining the reasonableness of the [Chemical Disaster Rule] in light of three newly promulgated Executive Orders that require Agencies to place greater emphasis on reducing regulatory costs and burdens." 83 Fed. Reg. at 24,871.

First, EPA cites Executive Order 13771, "Reducing Regulation and Controlling Regulatory Costs" (Jan. 30, 2017). According to EPA, this order "says that any new incremental costs associated with new regulation shall, to the extent permitted by law, be offset by the elimination of existing costs associated with at least two prior regulations." 83 Fed. Reg. at 24,871. Second, EPA cites Executive Order 13777, "Enforcing the Regulatory Reform Agenda" (Feb. 24, 2017). 83 Fed. Reg. at 24,871. According to EPA, Executive Order 13777 "calls for agency Regulatory Reform Task Forces to identify regulations that, among other things, impose costs that exceed benefits, evaluate these regulations and make recommendations to the agency head regarding their repeal, replacement, or modification, consistent with applicable law." 83 Fed. Reg. at 24,871. Third, EPA cites Executive Order 13783, "Promoting Energy Independence and Economic Growth" (Mar. 28, 2017). 83 Fed. Reg. at 24,871. This order directs "executive departments and agencies to immediately review existing regulations that potentially burden the development or use of domestically produced energy resources and appropriately suspend, revise, or rescind those that unduly burden the development of domestic energy resources beyond the degree necessary to protect the public interest or otherwise comply with the law." 83 Fed. Reg. at 24,871. Executive Order 13783 "also directs that environmental regulations have greater benefits than cost, when permissible under law." 83 Fed. Reg. at

76

<sup>&</sup>lt;sup>255</sup> Available at https://www.epa.gov/sites/production/files/2016-06/documents/ejtg\_5\_6\_16\_v5.1.pdf.

<sup>&</sup>lt;sup>256</sup> Available at https://www.epa.gov/sites/production/files/2016-05/documents/052216\_ej\_2020\_strategic\_plan\_final\_0.pdf.

24,871.

EPA cites these three executive orders repeatedly as a basis for repealing the Chemical Disaster Rule's prevention provisions due to cost. *See*, *e.g.*, 83 Fed. Reg. at 24,873 (citing all three Executive Orders). EPA also claims generally to be "using its discretion to reopen its consideration of regulatory costs of the [Chemical Disaster Rule] in this reconsideration proceeding." 83 Fed. Reg. at 24,870.

But EPA does not find that the costs of the Chemical Disaster Rule actually outweigh its benefits. Nor could it, because EPA states it does not know whether the Rollback Rule will actually increase or decrease risk for communities. *See, e.g.*, Rollback RIA at 80 (stating "accident risks will increase while security risks will decrease," and "[t]o the extent that this rule results in *either increases or reductions* of risk to US populations overall, EPA anticipates that it will result in *greater risks or risk reductions* for minority communities and lower-income communities, since they bear a larger portion of the risk."). This contradicts that agency's prior finding that the benefits of the Chemical Disaster Rule *do* outweigh its costs, but – even if the agency had a basis for reassessing – just saying "we don't know" is not a determination that the rule's costs actually justify rescinding its major provisions.

The closest EPA comes to making a new cost-benefit determination is to say that "[c]onsidering the [allegedly] low and declining accident rate at RMP facilities under the existing RMP rule, the Agency believes it is *likely* that the costs associated with the prevention program provisions of the RMP Amendments exceed their benefits *unless significant non-monetized benefits are assumed*." 83 Fed. Reg. at 24,873 (emphasis added). EPA states its concern that without the italicized phrase, "the statement would directly conflict with our finding in the final rule on page 4598." EPA Response to OMB Comments at 14 (Apr. 12, 2018), EPA-HQ-OEM-2015-0725-0899. The record shows EPA added this language to try to avoid conflicting with its original finding, but EPA cannot have it both ways. Its proposed rule and RIA are unlawful and arbitrary because EPA failed to even meet its own cost-benefit goals, and because its statements are unsupported, contradictory to the record, and are plainly driven by extra-statutory concerns injected by the White House OMB and not within EPA's authority.

The non-monetized benefits that EPA refuses to "assume[]" are the numerous concrete benefits that EPA *found* the Chemical Disaster Rule would have. Maintaining the prevention measures would have qualitative and quantitative benefits for the directly-affected populations, by reducing their exposure to toxic air pollution and reducing other harm incurred by fenceline communities. The agency's preference to avoid any cost on industry, while neglecting the health and financial cost to communities, prioritizes industry's interest over people and is arbitrary and capricious.

Based on the non-monetized benefits EPA now seeks to disregard, EPA specifically "disagree[d] that the [Chemical Disaster Rule] would not provide benefits or that the costs of the rule would necessarily outweigh its benefits." 82 Fed. Reg. at 4685. EPA explained that:

the benefits of the final rule include reductions in the number of people killed, injured, and evacuated or otherwise inconvenienced by sheltering in place; reductions in the damage caused to property on-site and offsite including 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. The final rule also provides other benefits, such as increased public information, which in addition to helping to minimize the impacts of accidents on the offsite public, may also lead to more efficient property markets in areas near RMP facilities.

82 Fed. Reg. at 4684-85.

EPA tries to explain its reassessment by saying the agency "is now placing greater weight on the uncertainty of the accident reduction benefits than we had when we promulgated the RMP Amendments, especially in contrast to the extensive record on the costs of the rule." 83 Fed. Reg. at 24,871. EPA also states it is "uncertain" about "whether the additional requirements (i.e., third party audits, STAA, and root cause analysis) add environmental benefits beyond those provided by the existing requirements that are significant enough to justify their added costs." 83 Fed. Reg. at 24,871. But EPA does not explain how much uncertainty it is now attaching to these benefits, or why. Nowhere does EPA make a clear determination susceptible to comment on whether these provisions do or do not justify their costs or about how much benefit they actually convey. Instead, EPA admits that it can only find the Rollback Rule is justified by no longer "assum[ing]" the non-monetized benefits that EPA previously identified exist at all.

But EPA cannot ignore unquantified benefits just because their precise magnitude is uncertain. The *existence* of these benefits is not uncertain at all, and EPA concluded that overall, "the costs of the rule are reasonable in comparison to its benefits." 82 Fed. Reg. at 4598. EPA determined the rule would have significant and far-reaching benefits, including: reduced fatalities, reduced Injuries, reduced property damage, fewer people sheltered in place, fewer evacuations, avoided lost productivity, avoided emergency response costs, avoided transaction costs, avoided property value impacts, avoided environmental impacts, improved efficiency of property markets, and improved emergency response resource allocation. 82 Fed. Reg. at 4598.

Assuming there will be no benefit from the Chemical Disaster Rule's provisions is at odds with the record. EPA found these benefits exist, and EPA has no basis to change its finding. Even if EPA had a reason to find the provisions confer *less* benefit, which it does not, EPA cannot simply assume they provide no benefit. Such a conclusion is at odds not just with the record, but with common sense. This is arbitrary and capricious.

Furthermore, EPA previously found "it is not possible to estimate quantitative benefits for the final rule," because "EPA has no data to project the specific impact on accidents made by each final rule provision." 82 Fed. Reg. at 4685. By refusing to credit these non-monetized benefits now, the agency is painting itself into a corner where it cannot regulate to prevent Chemical Disasters at all. Such an approach to rulemaking is arbitrary and capricious. Indeed, EPA's approach is even internally inconsistent because the agency refuses to quantify the benefits of the Rollback Rule. EPA admits "benefits and foregone benefits could not be quantified because of lack of data," and yet nevertheless concludes that "EPA believes the benefits and averted costs are large enough to justify the foregone benefits." Rollback RIA at 87. This admission shows that EPA's entire rollback proposal is irrational and unsupported. It has not provided any evidence to support its "belief" that these "are large enough" or otherwise

shown how this is supported at all by actual facts in the record. If EPA believes that the uncertainty inherent in being unable to quantify costs and benefits makes a rule worth rescinding, that rationale should apply equally to the Rollback Rule.

The Chemical Disaster Rule, having been duly finalized, is the *status quo*. If there is any presumption, it is "not against safety regulation, but against changes in current policy that are not justified by the rulemaking record." *Motor Vehicle Mfrs. Ass'n of U.S., Inc. v. State Farm Mut. Auto. Ins. Co.*, 463 U.S. 29, 42 (1983). The Clean Air Act's mandate that EPA regulate to prevent chemical disasters reinforces that if there is any presumption here, it is in favor of regulating to protect health. Even if EPA has now decided to give greater weight to "uncertainty," EPA must apply that policy with an equal hand and preserve the *status quo* here.

Finally, EPA proposes that alternatives to regulation – in particular, an enforcement-led approach – could provide equivalent benefits at less cost. EPA's analysis of these options are discussed below with respect to each type of provision they might replace. In general, EPA's preference for an enforcement-led approach is premised on its determination that there are only a "small number[] of problematic facilities." 83 Fed. Reg. at 24,873. As noted above, over 1300 facilities had RMP releases during the 2004-2013 period that EPA examined, and at least that many may have experienced near misses. Regardless, EPA concludes that enforcement can replace improved regulation and therefore decides, "the prevention program provisions in the RMP Amendments place an unnecessary and undue burden on regulated entities." 83 Fed. Reg. at 24,873.

2. The Clean Air Act Does Not Allow EPA to Rescind Chemical Disaster Regulations Under § 112(r)(7) Based on Cost.

First, § 112(r)(7) of the Clean Air Act does not allow EPA to rescind protections on the basis of cost. EPA cites no authorization to consider cost at all, much less an authorization to repeal protections based on their cost even where, as here, the agency found they would save lives. Whitman v. Am. Trucking Ass'ns, 531 U.S. 457, 468 (2001). EPA's overarching policy goals of reducing costs are unlawful for consideration and irrelevant under the statutory scheme, which requires regulation based on certain factors. See, e.g., 42 U.S.C. § 7412(r)(7)(B)(i) (requiring regulation to provide "for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases."); see also id. § 7412(r)(1), (r)(7)(A); Air Alliance Houston, slip op. at 23-24, 26-27 ("Reading the plain text makes clear that Congress is seeking meaningful, prompt action by EPA to promote accident prevention.").

Unlike the provision the Supreme Court evaluated in *Michigan v. EPA*, 135 S. Ct. 2699 (2015), this provision sets specific statutory factors that do not include cost and therefore prevent EPA from considering cost. There, the statute directed the Administrator to regulate "if the Administrator finds such regulation is appropriate and necessary after considering the results of the study required by this subparagraph." 42 U.S.C. § 7412(n)(1). Here, instead, the statute directs that EPA *must* regulate, to provide "to the greatest extent practicable" for prevention of accidental releases and for response to such releases. *Id.* § 7412(r)(7); *see also Whitman*, 531 U.S. at 469 (finding the words "adequate margin" and "requisite" did not delegate authority to consider cost, where Congress had elsewhere authorized consideration of cost explicitly and

where consideration of cost threatened to undermine statutory goals of protecting human health).

EPA suggests that the words "practicable" and "reasonable" in the statute give it this discretion. For example, EPA says it is examining whether the Chemical Disaster Rule's provisions "are 'reasonable,' consistent with the President's policy direction," as the term "reasonable" is used in § 112(r)(7). 83 Fed. Reg. at 24,871. EPA also states the rules economic costs "are directly relevant to whether the Amendments are 'practicable' for sources, as that term is used in CAA section 112(r)(7)." 83 Fed. Reg. at 24,871. But both of these terms refer to what is "reasonable" or "practicable" for sources – not for EPA. Executive orders are irrelevant to these inquiries.

Even if EPA could consider cost, cost alone would not justify rescinding regulations. EPA is not weighing cost against benefit. Instead, EPA states it is now placing "greater emphasis on reducing regulatory costs and burdens," period. 83 Fed. Reg. at 24,871. EPA has not conducted any analysis of whether facilities could comply with the Chemical Disaster Rule, *i.e.* whether the rule is "practicable" or "reasonable" for facilities.

Indeed, it would be hard to find the Chemical Disaster Rule is not "practicable" or "reasonable" for sources because the agency already determined facilities could comply with all requirements of the Chemical Disaster Rule. To the extent concerns were raised, EPA addressed these by tailoring the compliances timelines. If EPA actually had concerns about practicability or reasonableness, it could alter those timelines or change the frequency requirements (e.g. for STAA) to reduce cost in a more tailored way.

Instead, this proposal relies on *the agency's* preference to avoid *any* cost on industry. EPA proposes to rescind all prevention measures and to weaken and delay other measures in the rule because they are not "reasonable" or "practicable" for *the agency* "in light of [the] three newly promulgated Executive Orders that require Agencies to place greater emphasis on reducing regulatory costs and burdens." 83 Fed. Reg. at 24,871. That is not allowed under the statute and is arbitrary and capricious.

EPA's consideration of cost is also arbitrary because it fails to adequately consider the lost benefits or the regulatory gaps and deficiencies that it sought to correct in the first place, when promulgating the Chemical Disaster Rule. EPA admits it can only find the proposed Rollback Rule justified if it does not "assume[]" the non-monetized benefits exist. 83 Fed. Reg. at 24,873. EPA cannot ignore these benefits simply because they are non-monetized. The agency admits the "foregone benefits could not be quantified because of lack of data," Rollback RIA at 87, but that does not entitle the agency to ignore its prior conclusion that "the costs of the [Chemical Disaster Rule] are reasonable in comparison to its benefits" or that the Chemical Disaster Rule will "result in a reduction of the frequency and magnitude of damages from releases." 82 Fed. Reg. at 4597-98.

Furthermore, many of the provisions EPA seeks to rescind have only very small costs in EPA's record. EPA attributes the majority of costs under the Chemical Disaster Rule to STAA, facility exercises, coordination, and third party audits and almost no costs to requirements for investigating near misses or auditing "each covered process," for example. 82 Fed. Reg. at 4597. EPA determined that even the more expensive provisions were practicable when it promulgated

the rule. It has not changed that finding, and it certainly cannot contend now that even those provisions with relatively small costs are somehow impracticable.

If EPA does reassess the practicability of its regulations, it must take notice and comment on its new determinations. Further, EPA would only be able to consider cost within the greater context of regulations that prevent disasters - the existence of some costs is presumed by the statute when it directs EPA to regulate. The mere existence of costs, standing alone, does not make regulation impracticable as EPA appears to suggest. EPA already found the requirements of the Chemical Disaster Rule were reasonable and practicable. While EPA states a new preference for minimizing cost, it has not found that the regulations are not "practicable" for sources to implement nor explained why the regulations are no longer "reasonable." That they impose cost – like any regulation – is only half a thought. If EPA is allowed to consider cost at all, then it has to compare those costs with the rule's benefits and assess whether the regulations will prevent and mitigate disasters "to the *greatest* extent practicable." 42 U.S.C. § 7412(r)(7). EPA must also acknowledge and more fully explain its change in position relative to the agency's prior determinations of practicability and reasonableness.

The terms "reasonable" and "practicable" must be read within their statutory context. The statute *requires* EPA to promulgate "reasonable" regulations that provide "to the greatest extent practicable" for prevention and mitigation. What is "reasonable" or "practicable" refer to sources' ability to implement those regulations – not to administration priorities. These terms must also be understood in their statutory context, where accident prevention and mitigation are the primary directives. The statute does not just say "promulgate practicable regulations," it says to promulgate regulations that provide "to the greatest extent practicable" for protection from disasters. In other words, the statute puts a thumb on the scale in favor of prevention – only a true finding of impracticability could justify rescission of a protective measure under this scheme.

Cost alone then, even a high cost, does not make measures impracticable. Rather, such protections must be *so* burdensome as to be impracticable, considering also the Chemical Disaster Rule's benefits and the statutory objectives and factors related to accident prevention and protection of the public health and welfare. Because EPA has not changed its determination of practicability *for sources*, rescission of the prevention measures violates § 7412(r)(7).

Similarly, EPA cannot consider costs alone when assessing what is "reasonable." EPA must ask what is "reasonable" for sources, in light of the statutory priorities and factors. The statute does not ask what is "reasonable" or "practicable" *for EPA*, so EPA's general policy preferences are irrelevant to these analyses. EPA notes that "[i]n developing the 1996 RMP rule, the Agency addressed the reasonableness of its regulations in part by taking account of the costs and implementation burdens." EPA took account of these when designing the Chemical Disaster Rule, too, and determined that "the costs of the rule are reasonable in comparison to its benefits." *E.g.*, 83 Fed. Reg. at 4598; *see also* 83 Fed. Reg. at 24,871 ("In developing the RMP Amendments, EPA also considered costs and burdens ....").

EPA's single-minded focus on cost also renders the proposed rule arbitrary and capricious because EPA gives exclusive weight to cost, and does not balance it against benefits or against the statutory factors and objectives Congress required EPA to consider. See, e.g.,

State Farm, 463 U.S. at 43 (explaining rules are arbitrary and capricious when the agency "has relied on factors which Congress has not intended it to consider" or "entirely failed to consider an important aspect of the problem"). Even if EPA could consider cost under the statute, it would at most be able to weigh it against benefits and statutory requirements and determine whether a rule's costs were "reasonable" and "practicable" for sources, in light of those statutory requirements and the benefits of the rule.

For example, when EPA promulgated the Chemical Disaster Rule it found "the costs of the rule are reasonable in comparison to its benefits." 82 Fed. Reg. at 4598. Here, on the other hand, EPA has not made a reasonableness or practicability determination for sources at all, much less based on the appropriate factors or considering the benefits of the rule. EPA has also not determined that the costs of the Chemical Disaster Rule actually outweigh its benefits, or to what extent. If EPA does decide to change its assessment of reasonableness or practicability for sources, it will need to provide notice and comment on its new assessment and it will need to provide a "more detailed" justification. FCC v. Fox Television Stations, Inc., 556 U.S. 502, 515 (2009).

Instead of making a determination about what is reasonable or practicable for sources, EPA repeatedly states its own preference for reducing *any* costs on industry, while it ignores the foregone benefits its proposed rollback would lead to. Not only is EPA's one-sided consideration of cost unlawful and arbitrary based on § 7412(r)(7)'s requirements, it is also arbitrary and capricious because EPA ignores the benefits of the Chemical Disaster Rule. When the Supreme Court has required consideration of regulatory costs, it has required costs be considered in relation to corresponding benefits. *See, e.g., Michigan,* 135 S. Ct. at 2707. EPA cannot consider only half the ledger as it does here, proposing to rescind regulations merely because the imposition of *any* costs goes against current executive branch preferences. *E.g.,* 83 Fed. Reg. at 24,871. To do so violates the statute and arbitrarily ignores important factors and aspects of the problem.

3. It is Unlawful to Rely on or Apply Executive Orders as an Independent Basis for Rulemaking or to Dictate the Outcome of a Rulemaking.

EPA says it is "reexamining the reasonableness of the Amendments in light of three newly promulgated Executive Orders that require Agencies to place greater emphasis on reducing regulatory costs and burdens." 83 Fed. Reg. at 24,871. These executive orders provide no authority for this rulemaking, and they cannot be the basis for EPA's decisions where the statute imposes specific factors EPA must consider.

First, executive orders offer no independent basis for rulemaking authority. It is "axiomatic" that "administrative agencies may act only pursuant to authority delegated to them by Congress." *Clean Air Council v. Pruitt*, 862 F.3d 1, 9 (D.C. Cir. 2017); *see also Michigan v. EPA*, 268 F.3d 1075, 1081 (D.C. Cir. 2001) (noting "EPA is a federal agency—a creature of statute" and that it "has no constitutional or common law existence or authority, but only those authorities conferred upon it by Congress."). Particularly here, where the Executive Orders require EPA to consider cost above all else - plainly contravening the statutory authority for this rule – acting pursuant to the orders not only provides no authority but is actually unlawful.

Second, EPA's Reliance on Executive Order 13771 is unconstitutional, unlawful and irrational. After EPA issued the Chemical Disaster Rule, President Trump signed an unlawful and unconstitutional Executive Order: White House, E.O. 13771, Reducing Regulation and Controlling Regulatory Costs, 82 Fed. Reg. 9339 (signed Jan. 30, 2017, published Feb. 3, 2017). A number of groups (represented by Earthjustice) have challenged that executive order in court as unconstitutional, unlawful, arbitrary, and capricious. EPA cannot lawfully or rationally rely on that executive order in this rulemaking, nor can the agency allow that order to influence development of the rule. As detailed in other parts of these comments, Clean Air Act § 7412(r)(7) provides specific requirements for promulgating RMP rules and that provision does not allow EPA to consider cost at all as a justification for repeal or weakening a rule, much less to do so in the way directed by the Executive Order.

Executive Order 13771 violates the constitutional separation of powers by directing agencies to consider factors that go beyond and conflict with the statutory factors Congress has directed the agencies to consider in implementing federal statutes. The Constitution gives Congress the power to enact laws. While the President can sign or veto legislation, it is black letter constitutional law that he cannot unilaterally amend statutes. EPA may only exercise the authority delegated to it by Congress and must adhere strictly to the limits on that authority. Nowhere has Congress authorized EPA to adopt or eliminate regulations solely for the purpose of reducing costs to regulated industries. Instead, EPA must enact (and maintain) any and all regulations necessary and appropriate to carry out its duties under the Clean Air Act.

Executive Order 13771 is also unconstitutional because it directs EPA to violate and exceed its legal authority in violation of the President's obligations under the Take Care Clause to faithfully ensure compliance with the law. An executive order cannot override a statute, limit the authority delegated and the legal responsibilities provided to the EPA Administrator by federal law, add factors that are impermissible under the statute, or delay statutorily required agency action. *See, e.g., In re: United Mine Workers of Am. Int'l Union*, 190 F.3d 545, 551 (D.C. Cir. 1999). The unconstitutionality of the E.O. is fully described in the plaintiffs' motion for summary judgment in *Public Citizen v. Trump*, No. 17-253 (D.D.C. filed May 15, 2018) (ECF No. 16) (attached).<sup>257</sup> Commenters hereby incorporate by reference all arguments regarding E.O. 13771 made in that motion.

Third, EPA's reliance on Executive Order 13771 irreparably infects the agency's decision-making process and illustrates an absence of reasoned decision-making. EPA's reliance on this order, which essentially mandates deregulation, can be contrasted with EPA's past efforts to follow Executive Order 12898 by designing *processes* that encourage meaningful participation of disparately impacted groups and in no way dictates or forces the outcome of rulemakings. Here, EPA admits that "an *important* factor in selecting the provisions of the final RMP Amendments rule that EPA seeks to rescind or modify with this proposal is that these provisions would otherwise place substantial economic burdens on regulated entities, potentially contravening the new policy direction set in these new Executive Orders." 83 Fed. Reg. at 24,871(emphasis added). Because the Executive Orders narrow EPA's discretion to comply with the law or give due weight to factors other than cost EPA's reliance on them renders EPA's proposed rule arbitrary and capricious. It is particularly unlawful here, where the statute does

<sup>&</sup>lt;sup>257</sup> Earthjustice is the lead counsel in this lawsuit.

not even allow the agency to consider cost in the first place, much less give it precedence over clearly-enunciated statutory factors and goals.

EPA insists it has discretion to undertake "further analysis of the reasonableness and practicability of the" Chemical Disaster Rule, even without the Executive Orders. But EPA gives such weight to the policies of these executive orders, and cites so little actual evidence in support of its proposed changes, that the orders' weight in EPA's decision-making process is apparent. EPA can certainly consider executive policies, but it cannot do so as a substitute for considering evidence and the statutory factors. EPA's decision *must* be dictated by reasoned decisionmaking and statutory directives.

Additionally, the presence of these executive orders in EPA's decision-making process undermines the integrity of the agency rulemaking process and "violate[s] the Due Process Clause" by forcing the agency to "act with an 'unalterably closed mind." *Air Transp. Ass'n of Am., Inc. v. Nat'l Mediation Bd.*, 663 F.3d 476, 487 (D.C. Cir. 2011). Because of the Executive Orders, EPA finds itself with no option but to deregulate (or else be forced to promulgate significant deregulatory actions elsewhere to balance out the cost). This leaves EPA "unwilling or unable' to rationally consider arguments." *Id.* This short-circuiting of EPA's decision-making is antithetical to reasoned decision making, making EPA's proposed rule arbitrary and capricious and also means EPA's action violates the Due Process clause.

4. EPA's Regulatory Impact Analysis and Conclusions Regarding Costs and Benefits are also Arbitrary and Capricious.

Additionally, many aspects of EPA's Regulatory Impact Analysis – on which it relies to justify the proposed rule – are arbitrary and capricious. *See, e.g.*, 83 Fed. Reg. at 24,873 (relying on allegedly "low and declining incident rate"); 83 Fed. Reg. at 24,870-75 (explaining major rationale of the rule is to "Reduce Unnecessary Regulations and Regulatory Costs").

First, EPA fails to adequately assess the foregone benefits in its impact analysis. EPA's analysis is focused primarily on the cost-savings to regulated entities from withdrawing the prevention measures and other parts of the Chemical Disaster Rule. Rollback RIA at 37-62. EPA does not meaningfully assess the consequences of withdrawing disaster-prevention measures it found were needed. Rollback RIA at 63-68. This can be seen by comparing the 25 pages EPA dedicates to cost savings with the 5 pages EPA dedicates to a vague summary of the foregone benefits. EPA acknowledges that RMP releases alone (i.e., not considering the non-RMP releases and near miss events that the Chemical Disaster Rule would prevent) cause \$274.7 million dollars of damage annually, and have a disproportionate impact on communities of color and low-income communities. Rollback RIA at 67, 80. But EPA makes no attempt to quantify or otherwise assess the harm that will befall these communities if it withdraws major protective provisions of the Chemical Disaster Rule. For example, EPA has acknowledged the harm from pollution exposure during releases, but does not discuss that factor quantitatively or qualitatively in its new RIA, even though this is substantial and falls particularly on communities of color. 258

<sup>&</sup>lt;sup>258</sup> See Rollback RIA at 52-62 (costs), 63-68 (foregone benefits), 77-80 (impacts to specific populations); see also UCS 2018 Impact Report, Ron White, UCS, The Impact of Chemical Facilities on

EPA also considers some amount of reduction in national security risk from the informational provision changes it proposes, but does not assess at all the loss of national security benefits due to EPA's weakening of the prevention and emergency response measures.

In fact, EPA admits that "accident risks will increase" as a result of the Rollback Rule and that EPA does not know how much. EPA says that "[t]o the extent that this rule results in either increases or reductions of risk to US populations overall, EPA anticipates that it will result in greater risks or risk reductions for minority communities and lower-income communities, since they bear a larger portion of the risk." Rollback RIA at 80. In so admitting, EPA acknowledges that it has not even determined whether this rule will be net beneficial or detrimental to human health and the environment. In other words, EPA does not know whether its proposed rule actually contravenes the clear statutory test to "provide, to the greatest extent practicable, for the prevention and detection of accidental releases." 42 U.S.C. § 7412(r)(7)(B). EPA also does not know whether the Rollback Rule is reasonable or whether its benefits outweigh its costs. Rulemaking based on a guess or assumption is by definition arbitrary and capricious. See Horsehead Res. Dev. Co. v. Browner, 16 F.3d 1246, 1269 (D.C. Cir. 1994) ("speculation is an inadequate replacement for the agency's duty to undertake an examination of the relevant data and reasoned analysis").

EPA also fails to adequately assess the full benefits of the Chemical Disaster Rule provisions and makes unsupported conclusions like the statement highlighted above, that "this proposed rule does not impose any additional costs on affected communities," Rollback RIA at 81. EPA's own proposal shows that is inaccurate; the rule will allow increased deaths, injuries, toxic exposures, evacuations and shelter-in-place orders. Therefore, it is simply false and unsupported to say that the proposed Rollback Rule will impose no costs or harm.

Second, many of the repealed provisions are triggered only by accidents, so there is no cost at all unless an incident occurs. Such provisions are clearly warranted and have their costs narrowly tailored to affect only facilities that would experience the most benefit. EPA does not consider this and instead supports its proposed rescissions with a generalized policy of reducing regulatory costs everywhere.

Third, EPA also overestimates the cost of STAA by assuming the same costs for every cycle, even though it admits that many alternatives will not need to be reanalyzed. Rollback RIA at 56. EPA also now argues that STAA may impose "indirect" costs, which could "also be incurred, if facilities take actions based on the results of their STAA (or based on external pressures to implement STAA recommendations regardless of whether they are necessary or practical)." 83 Fed. Reg. at 24,872. EPA specifically declined to include such costs because STAA does not mandate any such actions. Amendments RIA at 56-60 (declining to adopt a version of STAA that would have mandated adoption, precisely because of costs). EPA's suggestion that facilities might be forced to adopt technologies as a result of STAA due to external pressures is purely speculative and, in any case, would not be attributable to the rule but to third-party actions. If facilities do adopt safer technologies as a result of their assessments, it

Environmental Justice Communities (Aug. 2018),

 $\underline{https://www.ucsusa.org/sites/default/files/attach/2018/08/impact-chemical-facilities-on-environmental-justice-communities-ucs-2018.pdf.}$ 

would be because they determined it was net-beneficial to do so. 82 Fed. Reg. at 4646. It is arbitrary and capricious for EPA to speculatively fabricate indirect costs like this in order to justify rescinding STAA.

Fourth, EPA's Regulatory Impact Analysis includes certain core "limitations and conclusions" that EPA has not adequately supported. For example, EPA attempts to justify its refusal to consider any incidents other than those discussed in the RIA by stating that "EPA could not add accidents that had not been reported or correct accident impact data where they may have been inaccurate." Rollback RIA at 87. EPA provides no basis for this conclusion, however. EPA has information on additional such accidents, including Arkema and other releases during and after Hurricane Harvey, which it has minimally acknowledged on its brief Hurricane Response website. It also is well aware of additional incidents that have occurred since 2014 for which the Chemical Safety Board has begun or completed investigations, and which commenters and people testifying at the public hearing have presented information, as cited above, and shown on its website (such as the recent update on the Husky Refinery disaster, and the Arkema Report, available at www.csb.gov). EPA could have requested information from facilities regarding such incidents before issuing the rollback proposal. Presumably it also has since received additional reports. The 2017 RMP database EPA placed into the docket only goes through October 2017. Yet, EPA's proposal was not published until May 30, 2018 and EPA has drawn data from the 2018 database. EPA has not given any justification for failing to include the most current data it has into the public record, and considering it for the current proposal.

Fifth, EPA also attempts to rely on a decline in incidents as a basis for its RIA and cost-benefit conclusions. In the proposed rule, EPA states that: "Considering the low and declining accident rate at RMP facilities under the existing RMP rule, the Agency believes it is likely that the costs associated with the prevention program provisions of the RMP Amendments exceed their benefits unless significant non-monetized benefits are assumed." 83 Fed. Reg. at 24,873 (citing Rollback RIA Ex. 3-7 at 34). In the draft RIA, EPA states that "accident data for 2014-2016 are now available, and these data show a continuing decline in the number of RMP-reported accidents." Rollback RIA at 32. EPA admits immediately in the same part of the draft RIA, however, that its data are incomplete for recent years, stating for example:

- "2013 was the most recent year for which there were complete accident data when EPA began its analysis in early 2015," and the analysis in the RIA shows that is *still* the most recent year for which EPA has complete accident data. *Id.* at 33.
- "Recent substantial declines should be viewed as *tentative*. Past experience with RMP facility accident reports suggests that following the next 5-year reporting wave . . ., the current 2014, 2015, and 2016 accident totals *will increase*." *Id.* at 32 (emphasis added).
- "Although EPA changed this requirement in 2004 to require owners and operators to update their RMP accident history information within 6 months of any reportable accident, not all sources consistently comply with this requirement." *Id.* at 33.

- "EPA notes ... that accident totals for the most recent five years of data within the RMP national database increase slightly after each major five-year RMP reporting cycle occurs." *Id*.
- "EPA expects that while the overall trend in accidents is downward, actual accident numbers for 2014-2016 may increase above those shown here after the 2019 reporting wave occurs." *Id.*

EPA therefore admits that it does not have complete data on which it could rely to demonstrate such a decline. That is why it proposes to continue relying on the 2004-2013 data and cost analysis. That is why it attempts to compare the 2015 and 2017 RMP databases but to use only some data from each in this analysis. EPA has also admitted that it has more recent data, from the 2018 database, that it has not shared with the public. EPA's admission that it has only incomplete data since 2013, combined with its refusal to gather available data since that time, makes its conclusion that there is any alleged "decline," arbitrary and unsupported.

Moreover, and importantly, even if the data shows any decline, EPA's singular focus on the number of incidents per year, on average, is insufficient grounds to propose the repeal and weakening of the RMP rules. EPA provides no denominator for each year's number, and so has neither calculated a per-year accident rate, not shown any actual change in such accident *rates*. Additionally, correlation does not imply causation. Even if there were a slow decline in accident rates taking place, such an effect could easily be caused by economic factors or changes in the size or concentration of regulated industries. Until EPA has more complete data, it is premature to conclude any such decline exists, though. EPA's own statements make this clear:

Mr. Belke discussed that many factors could account for the decline. The regulatory environment is one factor. Implementation of the current accident prevention regulations, which are intended to increase process safety and reduce accidents, likely has had an effect on the trend in accidents. Also there are fewer facilities covered under the RMP regulation – some previously covered facilities have dropped inventories of chemicals below reporting thresholds and others have substituted chemicals that are not RMP regulated chemicals. However, the decline in number of regulated facilities, by itself, does not appear to account for the drop in accident frequency at RMP facilities. Industry also has their own voluntary accident prevention programs, such as ResponsibleCare, Responsible Distribution and ResponsibleAg, which may result in fewer accidents. Economic influences and other factors could also account for some changes. EPA has not done any specific analysis to determine exactly why the number of accidents has declined over the years.

Teleconference Meeting Notes From Discussion With JJ Keller On RMP Accident Rates (posted Aug. 9, 2018), EPA-HQ-OEM-2015-0725-1484.

Further, even if EPA's pre-existing regulations are helping prevent *some* releases, they are not effectively providing for the prevention and detection of releases when so many releases

continue to occur. The statute requires EPA "provide, to the greatest extent practicable, for the prevention and detection of accidental releases." 42 U.S.C. § 7412(r)(7). EPA acknowledges that over a hundred still occur on average every year and so the agency is obligated to do better – EPA's own data from 2014-16, which it admits are incomplete, show a total of 458 incidents over that three-year period, which is on average 152 incidents per year. Even if only the reportable-harm incidents are included, that is still 340; or on average, 113 per year. It is arbitrary and capricious to conflate a gradual decline in the raw number of accidents per year, that are still extremely high, with having solved the problem. EPA's attempt to analyze the alleged decline does not look at all at the harm resulting from incidents, only the raw number of incidents. Considering the actual harm shows that single incidents in recent years, including the Chevron Richmond Refinery fire, the West Fertilizer incident, the Arkema fire, and more, have caused some of the greatest harm.

As EPA admits, any single incident can cause catastrophic harm. If anything, even if a decline in the raw numbers of incidents exists, at most this shows that it is indeed feasible for regulated facilities to take steps to reduce and prevent incidents, supporting the need for EPA's requirements, not for the proposed repeal.

Sixth, the prejudicial influence of the White House Office of Management and Budget (OMB), pursuant to the unlawful application and reliance on the Executive Orders (as discussed above), infects the entire proposed Rollback Rule. There are myriad examples where the OMB proposed or actually succeeded in changing core EPA findings on which its proposal relies, and these provide further evidence illustrating that EPA's proposal is based on caprice, not facts, and is therefore arbitrary. For example, OMB edited the following key sentence of the NPRM repeatedly during interagency review: "Considering the low and declining accident rate at RMP facilities under the existing RMP rule, the Agency believes it is likely that the costs associated with the prevention program provisions of the RMP Amendments may exceed their benefits." EPA-HQ-OEM-2015-0725-0901; EPA-HQ-OEM-2015-0725-0897 (adding 'which is unlikely').

## Additionally, OMB added the following language to NPRM:

- "The agency acknowledges that the continual decrease in accidental releases under the original RMP rule is evidence that the original rule was working and that additional costs may not justify the additional requirements. EPA will carefully examine the individual provisions of the RMP Amendments for their respective costs and benefits in implementing the statutory provisions."). Summary of Interagency Working Comments on Draft Language under E.O. 12866 Interagency Review ¶ 33, EPA-HQ-OEM-2015-0725-0901.
- OMB stated that "[OMB] believe[s] that the literature does not provide significant evidence that any of these requirements yield significant benefits over the original RMP rule, since we think the original RMP rule has apparently been quite effective at reducing accidents." *id.* ¶ 35.
- OMB added the following language to the NPRM: "Lastly, given the application of the current requirements, the agency may have underestimated the incremental benefits of performing the STAA in comparison to estimated \$70 million in annual

costs. The agency may also underestimated [sic] the costs of performing the safer technology reviews." *Id.* ¶ 36.

• OMB added the following language to the NPRM: "CSAG correctly noted that having a reportable release does not mean that the facility has a systemic issue." *Id.* ¶ 37.

It is also clear that many of the policy positions EPA now adopts are actually *OMB's* positions, and not EPA's. For example:

• When EPA stated that it knew third-party audits were in fact superior, OMB responded as follows and directed EPA to change its position:

Somehow, EPA KNOWS that third party audits are superior to company audits. EPA doesn't KNOW this – EPA believes this – this is a subject of uncertainty. (We disagree with this evaluation. We prefer to use experienced company auditors over third parties who lack the in-depth experience with plant processes. The knowledgeable SBREFA SERs also believed this. This is substantiated in multiple comments).

Summary of Interagency Working Comments on Draft Language under E.O. 12866 Interagency Review ¶ 1 (Apr. 26, 2018), EPA-HQ-OEM-2015-0725-0896.

• OMB pressure may also underlie EPA's decision to rescind community information access. The OMB reviewer stated, "this reviewer agrees with EPA's decision and analysis on deleting the problematic language. We raised related security concerns in commenting on EPA's original proposal to adopt a provision (§ 68.205) to address the issue of availability of information to LEPCs and emergency response officials." Summary of Interagency Working Comments on Draft Language under E.O. 12866 Interagency Review ¶¶ 9-10, 14 (Apr. 4, 2018), EPA-HQ-OEM-2015-0725-0901.

Lastly, and seventh, EPA's analysis relies on the assumption that its unlawful Delay Rule would have stayed in effect until February 2019. 83 Fed. Reg. at 24,855. But EPA's Delay Rule was unlawful and arbitrary and capricious and the D.C. Circuit recently ordered it be vacated. See generally Air Alliance Houston v. EPA, No. 17-1155 (D.C. Cir. Aug. 17, 2018), on which Commenters rely even though, due to EPA's refusal to extend the comment deadline, there was insufficient time to include additional cites throughout these comments. Facilities around the country will need to take immediate steps to comply. Nowhere does EPA account for the investments that companies will have already been required to make (e.g., to begin STAAs or prepare for third-party auditing) by the time it finalizes its Rollback Rule. See generally Rollback RIA (failing to account for sunk costs). EPA also ignores the reliance interests of communities in maintaining the protections that should now be in effect since EPA's unlawful delay has been ended. EPA must recalculate its entire Regulatory Impact Assessment based on

this new *status quo*, and must create a new public comment opportunity for input on the revised RIA to avoid running afoul of the Clean Air Act's procedural requirements in § 7607.

## C. EPA Must Not Rescind the Disaster Prevention Provisions

Although EPA alternatively proposes retaining a few of the prevention measures, EPA primarily proposes to rescind the prevention updates *entirely*. *See*, *e.g.*, 82 Fed. Reg. at 24,852 (describing an alternative proposal to keep certain hazard analysis, incident investigation requirements, employee training, and safety data sheet requirements). In announcing its action, EPA stated clearly that the proposal includes "[r]escinding *all* accident prevention program provisions of the RMP Amendments rule." EPA, RMP Reconsideration Proposed Rule Fact Sheet at 1 (June 2018);<sup>259</sup> *see also* 83 Fed. Reg. at 24,852 (stating "EPA proposes to rescind almost all the requirements added to the accident prevention provisions").

EPA's justifications for rescinding these provisions are its desire for increased coordination with OSHA and its desire to reduce the "burden" of the cost of compliance on regulated entities. *See*, *e.g.*, EPA June 2018 Fact Sheet at 1.

1. Rescinding the Accident Prevention Measures Violates § 112(r)(7) and EPA Lacks Authority to Finalize the Proposed Repeal.

EPA proposes in the Proposed Rollback Rule to amend the Risk Management Program. To do so, however, EPA must satisfy all requirements and statutory factors in 42 U.S.C. § 7412(r)(7). EPA's proposal fails to do so.

a. EPA Cannot put in Place a Regulatory Program Under § 7412(r)(7)(B) that does not Provide to the Greatest Extent Practicable for the Prevention and Detection of Releases.

First, EPA determined that its pre-existing RMP regulations are failing to satisfy the requirements of § 7412(r)(7)(B) and so it amended them with the Chemical Disaster Rule – EPA cannot rescind the Chemical Disaster Rule's protections without proposing alternative means of satisfying the requirements in § 7412(r)(7)(B) and § 7412(r)(1). As discussed in Part III (statutory and legal background), § 7412(r)(7)(B) requires EPA to promulgate "reasonable regulations and appropriate guidance to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases." 42 U.S.C. § 7412(r)(7)(B). The purpose of such regulations must be "to prevent the accidental release and to minimize the consequences of any such release" of a covered chemical. *Id.* § 7412(r)(1); *see generally* Part III, *supra*. The D.C. Circuit has affirmed the importance of prevention – explaining that § 7412(r) of the Act "makes clear that Congress is seeking meaningful, prompt *action* by EPA to promote accident prevention." *Air Alliance Houston*, Slip Op. at 26-27 (emphasis in original).

The Clean Air Act's obligations under § 7412(r)(7) are ongoing. Although the statute

90

https://www.epa.gov/sites/production/files/2018-06/documents/revised rmp reconsideration rule factsheet 6-13-18.pdf.

imposes an initial duty to promulgate regulations by a date certain, EPA cannot ignore future findings that the regulations it promulgated are insufficiently protective. Furthermore, § 7412(r)(7)(A), on which EPA relied in part for the Chemical Disaster Rule, see, e.g., 82 Fed. Reg. at 4599-601, plainly is intended to add to the requirements under § 7412(r)(7)(B). If EPA determines the regulations it originally promulgated no longer satisfy the Act's requirements, or that more is needed to assure chemical disaster prevention, as it did here in each instance, then it has a legal duty and responsibility under the Clean Air Act to revise its regulations. EPA made exactly that determination when promulgating the Chemical Disaster Rule, and cannot now rescind its improved prevention measures and leave the public without adequate protection.

When EPA promulgated the Chemical Disaster Rule, it determined that the pre-existing RMP regulations were failing to achieve these goals and were not preventing accidental releases "to the greatest extent practicable." *See* Part V.C.4, *infra* (discussing EPA's prior findings). Additionally, EPA found that compliance with the Chemical Disaster Rule was achievable in the timelines EPA adopted, 82 Fed. Reg. at 4675-78, and EPA found that the Chemical Disaster Rule would "result in a reduction of the frequency and magnitude of damages from releases," 82 Fed. Reg. at 4683. In other words, not only were the pre-existing regulations insufficiently protective, but preventing disasters to a *greater extent* than pre-existing regulations *was practicable*.

EPA's proposal to rescind the prevention measures violates the statutory test because EPA is proposing to adopt regulations that – by the agency's own findings – do not provide for prevention and detection of accidental releases to the "greatest extent practicable." EPA has not determined those regulations are impracticable for sources.

Having found the pre-existing Risk Management Program insufficiently protective, EPA cannot rescind the updates it promulgated in the Chemical Disaster Rule without providing equivalently protective replacements to address the problems it found. EPA already found, and the record shows, that those regulations are "necessary," and there is a need for the Chemical Disaster Rule to protect workers' and communities' safety, and to reduce fatalities, injuries, life disruption, and other harm. 82 Fed. Reg. at 4599, 4683. As EPA originally explained:

In the proposed rule, EPA identified specific incidents that demonstrated *failures and difficulties in accident prevention, emergency response, and information availability despite the general effectiveness of Part 68.* We have applied lessons learned from those incidents in developing the amendments adopted in the final rule. Several of the amendments in the final rule will respond to CSB's suggested rule changes based on their review of specific incidents, which is consistent with the structure of CAA 112(r)(6)(C)(ii) and EPA's rulemaking authority in CAA 112(r)(7). Some of the rule changes, such as new information availability provisions, will improve how existing provisions work (e.g., improving the public's access to existing disclosure). Some of the rule changes also will improve compliance by making compliance easier to verify (e.g., documentation of coordination with responders will simplify verifying compliance with the emergency response requirements of subpart E). In sum, *the history of implementation of the RMP rule has given EPA sufficient experience to support modernizing and improving* the underlying RMP rule and *not simply resort to compliance oversight of the existing rule*.

Amendments RTC at 246, EPA-HQ-OEM-2015-0725-0729 (emphasis added); *see also* EPA Activities Under EO 13650, Risk Management Program (RMP) Final Rule, Questions & Answers at 1 (Aug. 2017) (summarizing why updates are "necessary"). EPA also discussed and explained why particular prevention measures are "necessary" under the statutory framework. <sup>261</sup>

Even in the proposal's RIA, EPA admits this remains true. *See, e.g.*, Rollback RIA at 18 ("[L]ooking across the United States and universe of regulated facilities, these accidents occur with sufficient frequency to warrant regulation."), EPA-HQ-OEM-2015-0725-0907; Amendments RIA at 17 (same, but also noting that recent catastrophic incidents "highlight the regulatory need that this final rule modernization is addressing."), EPA-HQ-OEM-2015-0725-0734. Rescinding protections in the face of these problems violates § 7412(r)(7)(A) and (B).

As an alternative, EPA proposes promoting inherently safer technologies and designs through programs that would encourage technology transfer. 83 Fed. Reg. at 24,873. This idea is entirely speculative as EPA provides no details or proposed plan to develop such a program. EPA cannot propose rescinding STAA now on the basis that it may, one day, replace it with something else.

b. EPA's Proposed Rollback Rule is not Authorized by the Statute.

Second, EPA's proposed Rollback Rule finds no authority under § 7412(r) – it is *ultra vires* and therefore unlawful. EPA cannot promulgate a rule under this section that is contrary to the statutory objectives and violates the statutory requirements for such rules.

In addition to the reasons described above, the proposed rule violates § 7412(r)(7)(B) because its purpose and effect are not to prevent releases. EPA even admits that it does not know whether the Rollback Rule will lead to a net decrease or *net increase* in accidental releases. See Amendments RIA at 80 (admitting EPA "EPA does not know the magnitude of risk changes," and concluding that "[t]o the extent that this rule *results in either increases or reductions of risk* to US populations overall, EPA anticipates that it will result in greater risks or risk reductions for minority communities and lower-income communities, since they bear a

\_

<sup>&</sup>lt;sup>260</sup> https://www.epa.gov/sites/production/files/2017-08/documents/rmp\_final\_rule\_qs\_and\_as\_8-02-17.pdf.

<sup>&</sup>lt;sup>261</sup> See, e.g., Amendments RTC at 138 ("EPA believes a practicability determination for any considered IST or ISD is *necessary* to ensure the facility owner or operator seriously considers whether IST or ISD modifications could further reduce risks and prevent accidents at the facility." (emphasis added)); *id.* at 219, 247 ("EPA also believes that many of these provisions are *necessary* updates to the existing RMP rule to ensure continued public safety concerning the operation of chemical facilities in and near communities. Further, the rule has been structured such that the costliest provisions are targeted towards the largest and highest-risk facilities or only occur after an accident. The only provisions that are universally applicable are public disclosure and rule familiarization" (emphasis added)); *see also id.* at 155 ("the Agency also believes enhancing the existing rule's emergency response provisions was *necessary*. As EPA explained in the preamble to the proposed rule, EPA has often found that facilities either are not included in the community emergency plan or have not properly coordinated response actions with local authorities, and EPA believes the final rule will help to address these problems." (emphasis added)); *see also supra* n.228.

larger portion of the risk."). The record shows, as EPA originally found, that the proposed Rollback Rule will *increase* harm. Further, EPA's rationales for rescinding the prevention measures have nothing to do with accident prevention or what is "reasonable" or "practicable" for sources. 42 U.S.C. § 7412(r)(1), (7).

Nor does the proposed rule seek to fulfill the objectives enumerated in § 7412(r)(1) of "prevent[ing] the accidental release" or covered chemicals or "minimiz[ing] the consequences" of such releases. 42 U.S.C. § 7412(r)(1). Instead, the proposed Rollback Rule is contrary to these statutory objectives and would *rescind* measures that EPA found would prevent releases and minimize their consequences.

The proposed rule also finds no authority in § 7412(r)(7)(A). EPA does not demonstrate how the proposed rule is a "release prevention, detection, [or] correction requirement[]." 42 U.S.C. § 7412(r)(7)(A). Without any authority, EPA's proposed Rollback Rule is *ultra vires* and unlawful.

c. EPA Cannot Rescind Provisions that Responded to CSB Recommendations without Providing an Alternative Response.

Third, § 7412(r) also requires EPA to "respond ... formally and in writing not later than 180 days after receipt" of any recommendations from the Chemical Safety Board regarding accidental release prevention. 42 U.S.C. § 7412(r)(6)(I). As discussed above, the CSB has recommended repeatedly that EPA improve its disaster prevention regulations under the Risk Management Program and has released new reports with significant investigations and findings even during the delay, as provided on its website and in the attachments to this Comment, on Husky, Arkema, and preventable startup and shutdown hazards, as some examples. This provides strong evidence under the statute that without the Chemical Disaster Rule, EPA's Program neither provides sufficiently for accident prevention nor does so to the greatest extent practicable. Moreover, EPA cannot rescind regulations that responded to these recommendations without re-addressing the CSB recommendations and reports on which they were based and explaining why it is rejecting the recommendations and refusing to respond with regulations that implement the recommendations. See Amendments RTC at 246 ("Several of the amendments respond to CSB's suggested rule changes based on their review of specific incidents, which is consistent with the structure of CAA 112(r)(6)(C)(ii) and EPA's rulemaking authority in CAA 112(r)(7)."). For example, EPA cannot rescind STAA without addressing the CSB's recommendation 2010-08-I-WA-R1 asking EPA to "[r]evise the Chemical Accident Prevention Provisions under 40 CFR Part 68 to require the documented use of inherently safer systems analysis and the hierarchy of controls to the greatest extent feasible when facilities are establishing safeguards for identified process hazards." CSB, Investigation Report: Catastrophic Rupture Of Heat Exchanger, Tesoro Anacortes Refinery, at 114 (May 2014).<sup>262</sup>

EPA's failure to even acknowledge that it is rescinding provisions that responded to CSB recommendations also renders the agency's proposed Rollback Rule arbitrary and capricious. EPA must acknowledge these recommendations and explain how its newly proposed regulation

\_

<sup>&</sup>lt;sup>262</sup> https://www.csb.gov/file.aspx?DocumentId=5851.

will respond to them.

d. EPA does not have "Discretion" to Rescind the Chemical Disaster Rule's Prevention Measures.

Fourth, EPA's assertion that it has discretion to rescind the Chemical Disaster Rule's protections is incorrect. EPA argues it has authority to rescind parts of the Chemical Disaster Rule because "the CAA did not require EPA to promulgate [it]." 83 Fed. Reg. at 24,856. EPA argues that the agency met its obligations under the statute when it promulgated the first version of the rule in 1996 (and the accompanying listing rule in 1994). *Id.* at 24,856-57. According to EPA, promulgation of the Chemical Disaster Rule was merely "a discretionary regulatory action in response to Executive Order 13650, 'Improving Chemical Safety and Security.'" *Id.* at 24,857. But that is not how EPA treated its action. It found these amendments were necessary and reasonable to fill gaps in the existing regulatory framework showing that it inadequately prevented specific chemical incidents. *See, e.g.*, Amendments RTC at 246. It also found specifically that they were needed due to "failures and difficulties" under the existing framework. *Id.* As discussed above, EPA found that they would prevent chemical disasters to a greater extent than pre-existing regulations, making them mandatory under the statute.

EPA also specifically issued certain measures "to respond to CSB's suggested rule changes based on their review of specific incidents, which is consistent with the structure of CAA 112(r)(6)(C)(ii) and EPA's rulemaking authority in CAA 112(r)(7)." *Id.* The Act requires such a response and even sets a deadline to underscore this duty, as stated in the statutory provisions which EPA originally cited and on which it relied; thus, it cannot be considered merely "discretionary," as EPA now describes.

Furthermore, even if it were true that promulgation of the Chemical Disaster Rule was discretionary, it does not follow that "the Agency may take additional action to rescind or modify provisions of the RMP Amendments rule if the Agency finds that it is reasonable to do so." 83 Fed. Reg. at 24,857. EPA is still bound by the Clean Air Act's requirements. When EPA reached new record conclusions and revised the Risk Management Program, the Chemical Disaster Rule became the new *status quo*. Because rescission of those protections does not satisfy the statutory factors and leaves people unprotected in the face of regulatory failures EPA itself identified, EPA's proposed rule is unlawful under the statute as well as arbitrary and capricious. *E.g.*, Amendments RTC at 246.

The fact that EPA has made (fundamentally different) discretionary changes to the Risk Management Program in the past without challenge in no way implies those changes were in fact authorized by the statute. More importantly, those past actions do not provide *any* legal basis for *this* change.

Finally, EPA has not identified any authority that allows it to weaken its chemical disaster regulations under § 7412(r). It has no authority to backslide, and cannot cite any authority that allows it to *undo* prevention measures it put in place to protect public health and safety without a lawful finding that supports this change under the statutory factors. EPA must do more than simply speculate regarding a future outcome – EPA must meet the statutory test and must show that the Chemical Disaster Rule would not actually prevent and reduce chemical

incidents and reduce deaths, injuries, shelter-in-place and evacuations, and other harm, contrary to what EPA originally found. EPA can make no such showing. Because there is no evidence that repealing measures will protect health and safety, and because there is no evidence that the measures will not actually reduce deaths and injuries as intended, EPA has no authority for the proposed prevention repeal.

- 2. EPA Coordinated Sufficiently with OSHA and Cannot Indefinitely Postpone Protections Pending a New Rulemaking.
  - a. EPA's Rationale Proposes to Repeal Protections now and then see what, if any, Prevention Measures OSHA Issues After Further Consultation.

Aside from costs, the main rationale EPA cites for its proposed repeal of the prevention measures is its belief that it needs to coordinate more with OSHA before making changes to the Risk Management Program. EPA describes this rationale as "Maintain Consistency in Accident Prevention Requirements" with OSHA's PSM Program. 83 Fed. Reg. at 24,862. EPA offers this as a generalized rationale for its proposal to rescind all prevention program requirements.

EPA "believes it did not give sufficient weight to the value of coordination with OSHA and focused too much on its legal authority to proceed independently." *Id.* at 24,864. Accordingly, "EPA now proposes to determine that a more sensible approach would be to have a better understanding of what OSHA will be doing in [the area of disaster prevention] before revising the RMP accident prevention program." *Id.* EPA thus "proposes to rescind the RMP accident prevention amendments pending further action by OSHA." *Id.* EPA believes "it would be prudent to understand OSHA's path forward ... before owners and operators are required to implement changes under the RMP rule in order to decide whether any divergence from OSHA's PSM standard is reasonable for EPA." *Id.* 

EPA explains that "[t]his approach would allow the two programs' process safety requirements to remain aligned as much as possible so that the regulated community may have a better understanding of what to do to comply while reducing unnecessary complexity and cost." *Id.* Consistency "between required safe practices and common understanding of requirements should help industry to comply with the PSM standard and RMP rule and improve the effectiveness of accident prevention efforts." *Id.* EPA also argues this approach would better "fulfill the Congressional purpose of coordination between the two agencies while maximizing consistency and ease of implementation of regulatory requirements." *Id.* 

b. The Statute Provides Distinct Legal Responsibilities and Authorities to EPA and OSHA, and EPA has no Statutory Basis to Delay for OSHA.

Although the Clean Air Act does direct EPA and OSHA to "coordinate" RMP and PSM, 263 Congress intended each agency to act "expeditiously,"264 not wait indefinitely for the other. EPA and OSHA have overlapping and complementary mandates: "OSHA regulates to protect workers; EPA's responsibility is to protect public health and safety and the environment." EPA, General Guidance on Risk Management Programs Ch. 7, at 7-1 (Apr. 2004). For example, the Clean Air Act authorizes EPA to promulgate regulations for the prevention and detection of "accidental releases of regulated substances" into the ambient air. In furtherance of this mandate, EPA must require each stationary source operator to "prepare and implement a [Risk Management Plan] ... in order to protect human health and the environment."

The 1990 Clean Air Act Amendments directed OSHA to "promulgate, pursuant to the Occupational Safety and Health Act, a chemical process safety standard designed *to protect employees* from hazards associated with accidental releases of highly hazardous chemicals in the workplace." Pub. L. 101–549, title III, §304(a), 104 Stat. 2576 (1990), *codified* at 29 U.S.C. § 655 *but subsequently amended*. The OSH Act, unlike the Clean Air Act, directs the Secretary of Labor to regulate "occupational safety or health standard[s]" and expressly applies only to "to employment performed in a workplace" – not to the environment of the surrounding community.

Following Congress's direction, OSHA issued its PSM standard "to reduce the number of *employee* fatalities and injuries associated with catastrophic releases of hazardous substances." OSHA, Final Rule, Process Safety Management of Highly Hazardous Chemicals; Explosives and Blasting Agents, 57 Fed. Reg. 6356, 6401 (1992). The OSHA and PSM purpose of protecting "employees" is repeated throughout the rulemaking notice. *See*, *e.g.*, *id.* at 6372 ("OSHA believes that its definition of process reflects the intent of the [CAA Amendments] which requires that the standard be designed to protect employees from hazards associated with accidental releases of highly hazardous chemicals in the workplace."). This is consistent with OSHA's overall purpose which is "to assure so far as possible every working man and woman in the Nation safe and healthful working conditions and to preserve our human resources," *again* focused on employees in the workplace. 29 U.S.C. § 651; *id.* § 653 (OSH Act applies "to employment performed in a workplace").

<sup>&</sup>lt;sup>263</sup> 42 U.S.C. § 7412 (r)(7)(D).

<sup>&</sup>lt;sup>264</sup> *Id.* § 7412(r)(7)(A). This phrase is also used in several other paragraphs of § 7412.

 $<sup>\</sup>underline{^{265}}\ \underline{https://www.epa.gov/sites/production/files/2013-11/documents/chap-07-final.pdf}.$ 

<sup>&</sup>lt;sup>266</sup> 42 U.S.C. § 7412 (r)(7)(A); see also § 7412(r)(2)(a), which clarifies "accidental release" as meaning "...into the ambient air..."

<sup>&</sup>lt;sup>267</sup> *Id.* § 7412(r)(7)(B)(ii).

<sup>&</sup>lt;sup>268</sup> 29 U.S.C. § 655.

<sup>&</sup>lt;sup>269</sup> *Id.* § 653.

EPA's and OSHA's duties overlap, but OSHA's duty under the PSM program does not require it to evaluate or consider impacts to first-responders to a chemical incident, much less community members outside the fenceline of facilities who are not employees in the workplace.<sup>270</sup> EPA, on the other hand, was directed to protect "public health and the environment" and to promulgate regulations that "to provide, to the greatest extent practicable, for the prevention and detection of accidental releases of regulated substances and for response to such releases by the owners or operators of the sources of such releases." 42 U.S.C. § 7412(r)(7)(B)(i). The "objective" of EPA's regulations and programs under § 7412(r) is "to prevent the accidental release and to minimize the consequences of any such release" of any regulated substance under § 7412(r) or "any other extremely hazardous substance." *Id*. § 7412(r)(1).

Because their statutory objectives overlap, Congress directed EPA to "consult with" and "utilize the expertise of" the Secretary of Labor in the RMP rulemaking process. The agencies must also "coordinate" their program requirements. But Congress did not require EPA to wait for OSHA to act first. In no way did Congress intend for coordination to indefinitely delay the protective actions of either agency.

Congress intended for each agency to act quickly and, if necessary, independently. EPA's proposed rule quotes the portion of a Senate Committee Report which indicates the purpose of the coordination requirement is to ensure that "requirements imposed by both agencies to accomplish the same purpose are not unduly burdensome or duplicative." EPA fails, however, to address other key legislative intentions expressed in the same report which favor urgent action by each agency. For instance, the sentence immediately following the one quoted by EPA reads: "This requirement for coordination in no way diminishes [EPA's] authority to act and does not imply that requirements under this section must be set aside or delayed where OSHA is acting with respect to the same hazard."275 Additionally, the report implies that EPA should regulate even when OSHA fails to do so – in response to industry comments at a Committee hearing that OSHA is better suited than EPA to regulate chemicals in the workplace, the report "note[s] that OSHA has not chosen to act ... even in light of the evidence from its own [study] which indicated that existing OSHA regulations are not effective in preventing or mitigating the threat of catastrophic chemical accidents."<sup>276</sup> Congress did not want a finger-pointing game where each agency says it is waiting for the other while communities go unprotected.

<sup>&</sup>lt;sup>270</sup> OSHA has separate responsibilities to some first responders, where it is responsible for them as employees – this is separate from its accident prevention duties, however.

<sup>&</sup>lt;sup>271</sup> 42 U.S.C. § 7412(r)(7)(D).

<sup>&</sup>lt;sup>272</sup> *Id.* § 7412(r)(7)(B)(i).

<sup>&</sup>lt;sup>273</sup> *Id.* § 7412(r)(7)(D).

<sup>&</sup>lt;sup>274</sup> 83 Fed. Reg. at 24,856 (quoting S. Rep. No. 101-228, at 244 (1989)).

<sup>&</sup>lt;sup>275</sup> S. Rep. No. 101-228 at 244.

<sup>&</sup>lt;sup>276</sup> *Id*.

Congressional intent is clear: OSHA's inaction should not delay EPA's action. Nothing in the text of the Clean Air Act requires EPA to wait for OSHA action before amending its Risk Management Program regulations. Congress developed § 112(r)(7)'s intent alongside its urgent desire to prevent chemical disasters in the United States. In 1984, a chemical release at a pesticide plant in Bhopal, India killed thousands of people and injured even more. Congress concluded, after this disaster, that "[s]udden, catastrophic events that result in the release of extremely hazardous substances are a significant (and perhaps, increasing) threat to public health and safety in the United States."<sup>277</sup> Congress further concluded that existing efforts to prevent these disasters were insufficient, and that "it is appropriate that Federal agencies play a leading role in accident prevention and mitigation."<sup>278</sup> With these findings and goals in mind, Congress passed the Clean Air Act Amendments in 1990, in part "to prevent the accidental release and to minimize the consequences of any such release of any [hazardous chemical] substance."<sup>279</sup> These Amendments, of course, directed EPA, OSHA, DOT, and others, to act as quickly as possible to prevent chemical disasters.<sup>280</sup> Congress directed many entities to act to increase the likelihood that one would act quickly, not to slow the progress of each by tethering it to that of the others. EPA's assertion that it must wait for OSHA to act defies logic and Congressional intent as embodied in the statute's text, and illustrated by statutory structure, context, and legislative history.

Finally, EPA has clearly recognized its independent duty in the original Chemical Disaster Rule rulemaking (as quoted below), and in issuing the 1996 RMP regulations, stating: "EPA and OSHA have separate legal authority to regulate chemical process safety to prevent accidental releases." 61 Fed. Reg. 31,668, 31,687 (June 20, 1996). Thus, as EPA has long recognized, it may not simply refer to the PSM and then presume to have completed its job.

Rather, "cross referencing the OSHA standard would be tantamount to a delegation of authority to set standards in this area from the Administrator of EPA to the Secretary of Labor, because OSHA would be able to modify the PSM requirements without an EPA rulemaking under CAA § 307(d)." 61 Fed. Reg. at 31,687. The Senate "explicitly considered and rejected the possibility of the Administrator delegating to OSHA responsibility for hazard assessment.... [which] included many of the elements of PSM." *Id.*; see, e.g., S. Rep. No. 101-228 at 226 (stating that "[t]o the extent comparable requirements for hazard assessment are imposed on similar facilities by [OSHA], [EPA] is to coordinate the hazard assessment requirements [with OSHA] .... This is not\_authority for the Administrator to delegate the responsibilities of [EPA] under this section to OSHA") (emphasis added).

Yet, EPA's delay for OSHA here would effectively delegate EPA's responsibilities to OSHA. EPA may not propose or finalize a repeal that would, in essence, delegate to OSHA EPA's responsibility to protect communities under Clean Air Act § 7412(r) and 7607.

<sup>&</sup>lt;sup>277</sup> *Id.* at 143.

<sup>&</sup>lt;sup>278</sup> Id.

<sup>&</sup>lt;sup>279</sup> 42 U.S.C. § 7412(r)(1).

<sup>&</sup>lt;sup>280</sup> *Id.* § 7412(r)(7)(A) ("[r]egulations promulgated pursuant to this subparagraph shall have an effective date, as determined by the Administrator, assuring compliance *as expeditiously as practicable*." (emphasis added)).

c. EPA Did Coordinate with OSHA Extensively and Cannot Justify Repeal and Delay for Further Coordination.

Although EPA now asserts it should coordinate more with OSHA, EPA does not deny that it previously *did* coordinate with OSHA throughout the rulemaking process. 83 Fed. Reg. at 24,863-64; *see also* Amendments RTC at 254 (listing at least 32 meetings between EPA and OSHA during the entire rule development period, ranging from June 2014 through September 2016, shortly before the final rule was signed in December 2016). Nor does EPA attempt to change its prior determination that it satisfied any legal obligation to coordinate with OSHA during development of the Chemical Disaster Rule. *See* Amendments RTC at 232 ("EPA notes that it did coordinate with OSHA in the development of the proposed and final rules, and ... EPA does not believe it is necessary for the Agency to conduct its rulemaking on exactly the same timeline as OSHA."). In the Chemical Disaster Rulemaking, EPA expressly rejected the argument that it had failed to coordinate sufficiently with OSHA:

EPA consulted and coordinated with [Department of Labor ("DOL")], OSHA and DOT. As an initial matter, DOL, DHS and DOT were part of the Working Group under EO 13650. That order and report of the Working Group reflect consultation and direction regarding the development of this final rule. Second, we note that EPA's decision to not consider the regulation of [ammonium nitrate (AN)] at this time explicitly is based on an effort to coordinate any potential regulatory requirements for this substance with actions contemplated by other agencies, including OSHA. Third, while the content of interagency deliberations are not for the record for judicial review under CAA section 307(d), multiple agencies have an opportunity to review a draft rule under EO 12866 Regulatory Planning and Review. Additionally, OSHA and DHS had representatives attend the SBAR panel which discussed the development of the proposed rule. Furthermore, in the background document for small entity representatives to the OSHA Process Safety Management SBREFA Panel, the document notes that OSHA is tracking the development of the RMP Modernization rule "closely" and that it is "coordinating with EPA to resolve potential conflicts between the requirements of the PSM standard and the RMP rules." All of this is a matter of public record in the docket for this rulemaking.

For many years, EPA and OSHA have established a regular meeting to consult with the DOL and coordinate the PSM and RMP programs, including but not limited to interpretation of overlapping regulatory provisions and the development of potential amendments to the rules. During several of these regular meetings (including but not limited to meetings on various dates in Appendix A to this document), staff from the agencies discussed the development of the RMP Modernization Rule, potential issues to be addressed by EPA, and OSHA's intent to convene a SBAR panel as it explored potential

regulatory amendments. EPA has coordinated with the Department of Transportation on a more ad hoc basis as issues arise. With respect to the RMP Modernization Rule, early on in the EO 13650 process, DOT and EPA recognized that there would be minimal impacts on DOT programs from the contemplated RMP Modernization Rule and therefore there would be less need for continuing coordination meetings.

Finally, EPA disagrees with commenters that the RMP rule and the OSHA PSM rule should be available concurrently for comment. Each agency has distinct rulemaking procedures and the statute itself contemplates that the rulemakings may proceed on different schedules. OSHA's rulemaking under section 304 of the CAAA of 1990 was due within 1 year of enactment, while EPA's list rule was due 2 years after enactment and the RMP rule was due 3 years after enactment. Due to the statutory structure, it is not unreasonable for there to be some lack of synchronous process. Nevertheless, EPA has coordinated, and will continue to coordinate, with OSHA on revisions to the RMP rule and PSM standard to ensure consistency and avoid inconsistent duplicative requirements.

## Amendments RTC at 250-51.

EPA's actions, described above, satisfy the meaning of "consultation" as determined by courts in recent years. Petitioners in a 2015 Ninth Circuit case argued that the Department of Energy had "failed to consult with the affected States [before taking an action] ... as required by § 824p(a)(1)."281 The court concluded that Congress, in drafting the relevant statute, had intended the dictionary definition of "consult" to apply: "to 'seek information or advice from (someone with expertise in a particular area)' or to 'have discussions or confer with (someone), typically before undertaking a course of action."282 Presumably, Congress intends the dictionary definition of "consultation" as the default for all of its statutes which use the term, as it expressly provides an alternative definition in instances in which it does not. For example, the Policy for Indian Control of Indian Education expressly defines the meaning of "consult" as it applies to that statute: "In this subsection, the term 'consultation' means a process involving the open discussion and joint deliberation of all options with respect to potential issues or changes between the Bureau and all interested parties."283

In the Clean Air Act, Congress did not provide an alternative definition of "consult." Therefore, Congress intended the dictionary definition of the term to apply to that statute. The actions EPA admits it took in relation to OSHA are sufficient to satisfy this definition and thus EPA's obligation under the CAA. EPA certainly sought information from OSHA, and EPA

<sup>&</sup>lt;sup>281</sup> Cal. Wilderness Coal. v. Dep't of Energy, 631 F.3d 1072 (9th Cir. 2015).

<sup>&</sup>lt;sup>282</sup> Id. at 1087 (citing The New Oxford Dictionary 369 (2001)).

<sup>&</sup>lt;sup>283</sup> 25 U.S.C. § 2011 (Provides that "[a]ll actions under this Act shall be done with active consultation with tribes.")

certainly had discussions and conferred with OSHA before promulgating the Chemical Disaster Rule. Moreover, no reasonable reading of the term "consultation" would require EPA to engage in more than the thirty meetings with OSHA in which it already engaged. In fact, a court previously found that a level of consultation much lower than thirty meetings would satisfy a similar consultation directive under another federal law (if it had found that such a legal duty existed, which it did not in that case). *See Hopi Tribe v. EPA*, 851 F.3d 957 (9th Cir. 2017).

Rather than challenging the agency's legal conclusion that its coordination was in fact sufficient, EPA claims merely that it is reconsidering the "policy wisdom" of its approach. 83 Fed. Reg. at 24,864. EPA does not contest its prior coordination activities satisfied any legal requirements. But EPA's proposal to rescind all protections in favor of a wait and see approach is fundamentally at odds with the statutory scheme and is arbitrary and capricious. EPA cannot just relinquish its statutory duties and hope another agency takes action to solve the problems EPA itself identified.

EPA "believes it would be prudent to understand OSHA's path forward in this area before owners and operators are required to implement changes under the RMP rule in order to decide whether any divergence from OSHA's PSM standard is reasonable for EPA." First, this misstates the reasonableness requirement of § 112(r)(7), which asks what is reasonable for sources, not EPA. Second, it is entirely speculative. If OSHA adopts different requirements than EPA, EPA can consider at that future time whether to amend its regulations to match them if it finds good reason to do so, and can fulfill all applicable legal requirements. Third, it ignores the statutory obligation EPA itself has – as discussed, having identified failures in its own program, EPA cannot disavow § 112(r)'s mandate and wait for another agency to fix those problems for it. Finally, it is black letter administrative law that EPA is responsible for its own regulatory actions – it cannot shift the blame to OSHA. EPA needs its own reasons for adopting or withdrawing a regulation. Furthermore, because EPA satisfied Congress's instruction to consult with OSHA, consultation provides no lawful or reasonable rationale for the repeal of the rule. EPA states that "we should not retain and put into effect changes to the prevention aspects of the Risk Management Program until we have a better understanding of OSHA's plans for the PSM standard changes ...." 83 Fed. Reg. at 24,864. But the statute does not so cabin EPA's authority. It actually directs otherwise: EPA should retain and put into effect these changes, for all of the reasons EPA originally found, after consultation with OSHA. As the Senate Report and statutory text make clear, Congress intended the agencies to consult not that EPA wait to assure regulations were identical to OSHA's. See, e.g., S. Rep. No. 110-228 at 244-45 (stating that EPA requirements "[do not] move [EPA] into a field fully and effectively occupied by OSHA standards," and also indicate that "the [RMP] requirement[s] may be different from other [regulatory] requirements," presumably including OSHA's PSM).

There is no statutory direction for OSHA to be the primary regulator, and for EPA to be the follower. Thus, EPA's rationale for seeking more OSHA consultation is not a lawful basis on which the agency "should" or can repeal or revise the original rule.

d. Repeal and Delay Pending a New Rulemaking (Whether by EPA or OSHA) is Unlawful Under the Clean Air Act

Rescinding accident prevention measures under § 7412(r)(7) pending future rulemaking

action by another agency violates the Clean Air Act's requirement for EPA to assure compliance with RMP rules "as expeditiously as practicable;" is inconsistent with the Act's overall intent for urgency (particularly for prevention measures like the Chemical Disaster Rule that respond to CSB recommendations); and contravenes the statutory restriction on EPA's authority prohibiting any delays pending reconsideration beyond three months. *See* 42 U.S.C. §§ 7412(r)(7)(A)-(B), (r)(6), 7607(d)(7)(B). *See generally Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018) (on which Commenters rely even though, due to EPA's refusal to extend the comment deadline, there was insufficient time to include additional citations throughout these comments).

First, the Act requires EPA to respond promptly to CSB recommendations (directing a response within 180 days), to assure a "timely regulatory response is made to a problem which has been identified as a high priority." S. Rep. 101-228 at 238; 42 U.S.C. § 7412(r)(6). EPA's Chemical Disaster Rule was a response, in part, to the CSB's formal IST recommendation and served to implement other recommendations and guidance from CSB investigation reports. EPA can have no lawful justification for waiting for OSHA, when the Act directs it to respond promptly to CSB recommendations. Furthermore, the statutory direction to "consult" with OSHA, but to "respond" to CSB shows that if there is any contradiction between guidance from these agencies, the statute implements Congress's choice for EPA to follow the CSB's guidance as an independent expert agency, not to wait for further OSHA consultation.

Second, EPA admits it "proposes to rescind the RMP accident prevention amendments pending further action by OSHA." 83 Fed. Reg. at 24,864. This is a delay pending future consideration by the agency of whatever issues are raised in the still-hypothetical OSHA rulemaking. In other words, this is an indefinite delay pending reconsideration.

Recognizing the importance of final rules being final unless and until duly changed, Congress authorized reconsideration-based delays in only one instance. Congress created a procedure for seeking reconsideration of rules, established factors for when EPA must convene reconsideration, and directed that "[t]he effectiveness of the rule may be stayed during such reconsideration ... by the Administrator or the court for a period not to exceed three months." 42 U.S.C. § 7607(d)(7)(B). Nowhere else does the Act grant EPA such power.

The D.C. Circuit has held that § 7607(d)(7)(B) limits EPA's authority to postpone a rule based on reconsideration to only three months, most recently in vacating the unlawful Delay Rule that had postponed the Chemical Disaster Rule. *Air Alliance Houston*, Slip Op. at 20, 25-26 ("Congress saw fit to place a three-month statutory limit on 'such reconsideration"); *see also NRDC v. Reilly*, 976 F.2d 36, 41 (D.C. Cir. 1992) ("prior to ... the 1990 Amendments, the EPA had *no authority* to stay the effectiveness of a promulgated standard except for the single, three-month period authorized by section 307(d)(7)(B)" and "we find the 1990 Amendments equally unambiguous" (emphasis added)); *see also Lead Indus. Ass'n v. EPA*, 647 F.2d 1184, 1186 (D.C. Cir. 1980) ("Section 307(d)(7)(B) of the Act ... states that even 'new information' reconsideration by EPA does not automatically postpone the effectiveness of the rule, and it limits any stay that may be issued by EPA or a court during such reconsideration to a period of no longer than three months.").

EPA's Delay Rule, which postponed all elements of the Chemical Disaster Rule for 20 months so that EPA could complete this reconsideration rulemaking, was subject to litigation

before the D.C. Circuit. *Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir.). Commenters incorporate by reference all arguments made in that litigation and in comments on the Delay Rule. *See, e.g.*, Final Opening Brief of Community Petitioners and Petitioner-Intervenor United Steelworkers Union, No. 17-1155 (D.C. Cir. Jan. 31, 2018), DN1715852; Final Reply Brief of Community Petitioners and Petitioner-Intervenor United Steelworkers Union, No. 17-1155 (D.C. Cir. Jan. 31, 2018), DN1715853; Comment submitted by Earthjustice on behalf of Air Alliance Houston *et al.*, EPA-HQ-OEM-2015-0725-0861 (May 19, 2017).

EPA's proposal to rescind the Chemical Disaster Rule's prevention measures so the agency can wait and see what OSHA does is an even more egregious example of postponing a final rule pending reconsideration. Here, EPA says it will not even reconsider these provisions until another agency acts – extending the timeline indefinitely. Not only is this arbitrary and capricious, as discussed below, but it also violates the Clean Air Act's prohibition on delay pending reconsideration. Because the Act plainly limits EPA's authority to delay a final rule for reconsideration to three months, that is "the end of the matter." *See Chevron*, 467 U.S. at 842-43.

Furthermore, such delay is not lawful or "reasonable" under § 7412(r)(7) either. EPA asserts that waiting to see what OSHA does "is reasonable for EPA." 83 Fed. Reg. at 24,864. But what is reasonable for EPA is beside the point – § 7412(r)(7) directs EPA to develop "reasonable" regulations for sources storing or using RMP chemicals. Regulations must be "reasonable" vis a vis the clear statutory objectives to prevent and reduce chemical releases and the harm they cause, and assure effective regulation of chemical facilities – not EPA's whim and caprice. There is nothing unreasonable about EPA being the first actor in advancing safety regulations. Even OSHA has recognized that the pre-existing regulatory framework for chemical disaster prevention is inadequate. See Report of the Small Business Advocacy Review Panel on OSHA's Potential Revisions to the Process Safety Management Standard at 3 (finding that, despite improvements, "the data show that substantial numbers of incidents, deaths, and injuries still occur."), EPA-HQ-OEM-2015-0725-0923.

e. Repeal and Delay Pending a New Rulemaking by EPA and/or OSHA is Arbitrary and Capricious

EPA's revocation of the protection measures pending future action by OSHA is also arbitrary and capricious. EPA is rescinding protections now because there *might* be a conflict in the future with another agency's regulations. Revoking life-saving regulation for future potential reconsideration and/or to avoid a purely hypothetical problem is antithetical to reasoned decisionmaking. *See generally Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018) (on which Commenters rely even though, due to EPA's refusal to extend the comment deadline, there was insufficient time to include additional citations throughout these comments).

First, it is arbitrary to rescind these protections without meeting the requirements discussed below to provide the requisite explanation, here a more detailed one required under *Fox*, for reversing course. EPA's revocation will remain in effect indefinitely unless and until the agency completes a full notice and comment, following action by OSHA, to instate new prevention measures that address the defects EPA identified in the record. *Cf. Public Citizen v. Steed*, 733 F.2d 93, 98 (D.C. Cir. 1984). In a "180 degree reversal of its 'former views as to the

proper course,' ... [the agency] has taken almost the identical position that the [industry petitioners] had taken, and that [the agency] had opposed" in the prior rulemaking. *Id.* For example, before, EPA found its consultation with OSHA sufficient; now EPA finds over 30 consultation meetings to be insufficient. EPA gives no rational ground for this change, much less one that provides the "more detailed explanation" for directly contradicting its prior fact-finding that it *had* consulted with OSHA. *Fox*, 556 U.S. at 515; *see also State Farm*, 463 U.S. at 42.

Second, even if the record supported a need for additional coordination with OSHA (which it does not), it does not support the agency's conclusion that coordination was so inadequate that the public would be better off with no protections in the meantime. *See Steed*, 733 F.2d at 100, 102 ("Without showing that the old policy is unreasonable, for [the agency] to say that no policy is better than the old policy solely because a new policy *might* be put into place in the indefinite future is as silly as it sounds." (emphasis in original)). EPA's desire for further coordination with OSHA cannot sustain rescission of the prevention measures of the Chemical Disaster Rule or any other part of the rule. Aside from being arbitrary and capricious, EPA has no authority for such a suspension. "As the D.C. Circuit recently held, a decision to reconsider a rule does not simultaneously convey authority to indefinitely delay the existing rule pending that reconsideration." *NRDC v. Nat'l Highway Traffic Safety Admin.*, 894 F.3d 95, 111–12 (2d Cir. 2018) (citing *Clean Air Council v. Pruitt*, 862 F.3d 1, 9 (D.C. Cir. 2017)).

Third, it is arbitrary and capricious to repeal the prevention measures, pending OSHA consultation and potential future rulemaking, because EPA has not established and cannot show that all facilities and all affected people, including fenceline communities, would receive protections or even be considered under the OSHA process and PSM rules. As described above, OSHA does not include community impacts as a requirement under its jurisdiction and authority. Thus, its rules, if ever finalized, cannot be guaranteed to strengthen community protection as EPA found was needed.

The programs do not fully overlap. Instead, EPA admits that some facilities are covered by the RMP, and not the PSM at all, recognizing they have different thresholds and requirements, as shown by the flow chart in the Rollback RIA at 16. "Facilities that are exempt from the OSHA PSM standard may be subject to requirements under the RMP rule." Rollback RIA at 16 (note omitted). Some reasons facilities may be subject only to the RMP (and not the PSM), as listed by EPA, include:

- The lists of substances regulated are not identical. Commenters found at least 84 chemical substances that are regulated only by EPA's RMP (and not by the PSM).<sup>284</sup>
- Federal OSHA has no authority over state and local government employees, so the OSHA PSM standard "does not apply to publicly owned facilities (mainly water and wastewater treatment systems) in States where federal OSHA implements and enforces the standard (about half the States)." Rollback RIA at 16. Only 26 states, Puerto Rico and the Virgin Islands have OSHA-Approved State Plans.

<sup>&</sup>lt;sup>284</sup> See OSHA, Process Safety Management and Risk Management Plan Regulatory Requirements (last visited Aug. 21, 2018), <a href="https://www.osha.gov/chemicalexecutiveorder/psm\_terminology.html">https://www.osha.gov/chemicalexecutiveorder/psm\_terminology.html</a>; see also Chart of Chemicals Regulated by EPA's RMP, OSHA's PSM, or Both (created from OSHA website).

 A review of the two programs suggests that for all facilities, and all RMP program levels, OSHA has not considered certain off-site impacts to be part of its regulation at all, such that certain impacts are regulated and addressed only or mainly by the RMP program, if at all.

Fourth, EPA's OSHA justification is arbitrary because it has given no valid basis for waiting until after OSHA has updated worker safety protections to promulgate its own changes. Rather, both updates are needed, and neither agency has a valid reason to wait for the other – either can move first, and the other will be able to work with it to ensure consistency. This is exactly what EPA did, and OSHA appeared satisfied. OSHA did not submit comments on the updates, support EPA's delay in 2017 for this reconsideration process, or ask EPA to repeal and delay the prevention measures pending more consultation.

Fifth, it is also arbitrary for EPA to propose repeal based on OSHA consultation because EPA may consult with OSHA while the rule is in effect. EPA may consult as much with OSHA as it wishes. At some point in the future, EPA and/or OSHA could decide to revise their rules for consistency or other purposes (as long as such changes satisfy the Act), if consultation produces any good reason to do so. But there is no reason to repeal now. By attempting to limit its own ability to act without additional consultation with OSHA or while awaiting OSHA action, EPA is exceeding its statutory authority to avoid action. EPA has failed to explain why it could not engage in the less harmful alternative of consulting while the regulations are being implemented, to consider changing them if needed at a future time if indeed any issue or problem is found that would require such a change.

Finally, there is a very real possibility that OSHA will never act, despite both agencies' acknowledgement that chemical disaster prevention updates are needed. Regulatory difficulties and delay at OSHA have plagued the agency and are well-documented.<sup>285</sup> For example, between 1981-2010, the Government Accountability Office ("GAO") found that it took from fifteen months to nineteen years for OSHA to develop and issue health and safety standards, and that *the average was "more than 7 years.*"<sup>286</sup> In 2010, the Center for Progressive Reform described OSHA's record of "dropp[ing] more standards from its regulatory agenda than it has finalized, largely due to insufficient budget authority," and called the agency "a picture of regulatory dysfunction."<sup>287</sup> When EPA was asked "[w]hat is the timeline for working with OSHA on future regulations?" the answer was "Unknown." Meeting between EPA and the Soc'y of Chem. Mfrs. and Affiliates (SOCMA) at 1 (June 5, 2018), EPA-HQ-OEM-2015-0725-0981.

This systematic dysfunction is apparent in DOL's incomplete attempts to update PSM. DOL initiated a process to update its PSM rules several years ago, in response to Executive

105

<sup>&</sup>lt;sup>285</sup> See, e.g., GAO Report, GAO-12-330, Workplace Safety & Health, Multiple Challenges Lengthen OSHA's Standard Setting (Apr. 2012), https://www.gao.gov/assets/590/589825.pdf; Ctr. for Progressive Reform ("CPR"), T. McGarity, R. Steinzor, et al., Workers at Risk: Regulatory Dysfunction at OSHA (Feb. 2010).

<sup>&</sup>lt;sup>286</sup> GAO 2012 ("What GAO Found") (emphasis added).

<sup>&</sup>lt;sup>287</sup> CPR 2010 at 1.

Order 13650, but never completed (or even proposed) a rulemaking.<sup>288</sup> On December 9, 2013, and pursuant to the Order, DOL issued a Request for Information to "to identify issues related to modernization of the Process Safety Management standard and related standards necessary to meet the goal of preventing major chemical accidents."<sup>289</sup> On March 7, 2014, the deadline for that comment period was extended to March 31, 2014.<sup>290</sup> Currently, OSHA does not even have a leader in place because Congress has not yet confirmed Trump's nominee for the Assistant Secretary of Labor for Occupational Safety and Health.<sup>291</sup> OSHA Assistant Secretary Vacancy Wears On, Occupational Health & Safety (June 5, 2018),

https://ohsonline.com/articles/2018/06/05/osha-assistant-secretary-vacancy-wears-on.aspx. The lack of confirmed leadership is likely to further slow down any action by the agency.

Following this comment period, in spring 2016, OSHA convened a Small Business Advocacy Review Panel ("SBAR Panel") to review potential PSM updates "as an initial rulemaking step ... [required by] the Small Business Regulatory Enforcement Fairness Act of 1996.<sup>292</sup> The SBAR panel met and published a report on August 1, 2016.<sup>293</sup> The report summarizes the panel's findings and recommendations. DOL has not yet proposed any regulations in response to the panel's report, but it did, on August 23, 2016, solicit public comments on drafts of three PSM guidance documents.<sup>294</sup> The deadline for this comment period was originally September 23, 2016, but later extended to September 30, 2016.<sup>295</sup> Final versions of these three guidance documents have not yet been published – they are not available on the OSHA website or on Westlaw. Separate from these three proposed guidance documents, OSHA published PSM-related guidance memorandums on May 11, 2016,<sup>296</sup> and July 18, 2016.<sup>297</sup> The

<sup>&</sup>lt;sup>288</sup> According to the OMB's Unified Regulatory Agenda search engine, DOL most recently contemplated any action related to PSM rules in Spring 2014. Documents on the DOL website indicate slightly more recent action.

<sup>&</sup>lt;sup>289</sup> 78 Fed. Reg. 73,756 (Dec. 9, 2013).

<sup>&</sup>lt;sup>290</sup> 79 Fed. Reg. 13,006 (Mar. 7, 2014).

<sup>&</sup>lt;sup>291</sup> There is a Deputy Assistant Secretary who is the Acting Assistant Secretary currently.

<sup>&</sup>lt;sup>292</sup> DOL, Process Safety Management, SBAR Panel Overview (last visited Aug. 21, 2018), <a href="https://www.osha.gov/dsg/psm/index.html">https://www.osha.gov/dsg/psm/index.html</a>.

<sup>&</sup>lt;sup>293</sup> OSHA, OMB, and SBA, Process Safety Management SBREFA Panel Final Report (Aug. 1, 2016), EPA-HQ-OEM-2015-0725-0923, <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0923">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0923</a>.

<sup>&</sup>lt;sup>294</sup> Memorandum to Open Docket to Allow for the Submission of Documents and Comments on PSM Guidance Document Drafts, <a href="https://www.regulations.gov/document?D=OSHA-2016-0021-0001">https://www.regulations.gov/document?D=OSHA-2016-0021-0001</a> (Aug. 23, 2016).

<sup>&</sup>lt;sup>295</sup> Memorandum to Extend the Comment Period to Allow for the Submission of Documents and Comments on PSM Guidance Doc. Drafts, <a href="https://www.regulations.gov/document?D=OSHA-2016-0021-0006">https://www.regulations.gov/document?D=OSHA-2016-0021-0006</a> (Sep. 22, 2016).

<sup>&</sup>lt;sup>296</sup> Memorandum re RAGAGEP in Process Safety Management Enforcement (May 11, 2016), https://www.osha.gov/laws-regs/standardinterpretations/2016-05-11-0.

<sup>&</sup>lt;sup>297</sup> PSM Memorandum for Regional Administrators and State Plan Designers (July 18, 2016), <a href="https://www.osha.gov/laws-regs/standardinterpretations/2016-07-21">https://www.osha.gov/laws-regs/standardinterpretations/2016-07-21</a>.

first memo addresses overlap between PSM and "recognized and generally accepted good engineering practices (RAGAGEP)" and the second memo clarifies "... the concentration of a chemical that must be present in a process for the purpose of determining whether the chemical is at or above the threshold quantity listed in Appendix A of the [PSM]."<sup>298</sup>

Further, DOL and EPA participate in the Chemical Facility Safety and Security Working Group established by Executive Order 13650. This working group published status updates in 2013, 2014, and 2015, summarizing relevant actions taken by each member agency.<sup>299</sup> It also published a status report for the President in 2014.<sup>300</sup> A short report published in 2016 simply provides a brief overview of existing regulations of each agency that are relevant to the Executive Order.<sup>301</sup> DOL has not provided any further updates or actions in that venue in recent years.

Thus, the potential PSM revisions for which OSHA convened a Small Business Advocacy Review Panel in 2016 have become yet another standard the agency has "dropped." OSHA has yet to actually propose amendments to its standards, much less finalize anything. There appear to be no active plans to initiate or complete regulatory action. As EPA admits, it is "unclear" if or when OSHA will ever update the PSM. 83 Fed. Reg. at 24,862 (quoting RMP Coalition Pet'n). Although OSHA has long expressed interest to "modernize" the PSM standards which are currently "over twenty years old," Commenters were unable to find evidence of any current efforts to modernize PSM. 302

There is likely no evidence because OSHA has formally indicated that it is not presently working on PSM updates. In fact, it is unclear whether OSHA has taken any significant action on the PSM updates since 2016. The Office of Information & Regulatory Affairs within the White House Office of Management and Budget maintains a list of "long-term actions," which are "[agency] items under development but for which the agency does not expect to have a regulatory action within the 12 months after publication of this edition of the Unified Agenda." PSM rulemaking for the prevention of chemical accidents is listed as a "long-term action," on the Spring 2018 list, with the timing of its next action described as "next action

https://www.dhs.gov/sites/default/files/publications/2014-08-25-final-chemical-eo-status-report-508.pdf.

<sup>&</sup>lt;sup>298</sup> OSHA Memorandums, *supra* nn.293, 294.

<sup>&</sup>lt;sup>299</sup> OSHA, Actions to Improve Chemical Facility Safety and Security – A Shared Commitment (last visited Aug. 21, 2018), https://www.osha.gov/chemicalexecutiveorder/.

<sup>&</sup>lt;sup>300</sup> Executive Order 13650, Actions to Improve Chemical Facility Safety and Security – A Shared Commitment: Report for the President (May 2014),

<sup>&</sup>lt;sup>301</sup> Executive Order 13650 Regulatory Programs Overview (Aug. 2016), https://www.osha.gov/chemicalexecutiveorder/EO 13650RegulatoryProgramsOverview.pdf.

<sup>&</sup>lt;sup>302</sup> DOL, Action Plan: Modernizing Policies and Regulations (last visited Aug. 21, 2018), <a href="https://www.osha.gov/chemicalexecutiveorder/modernizing">https://www.osha.gov/chemicalexecutiveorder/modernizing</a> action plan.html.

<sup>&</sup>lt;sup>303</sup> OIRA, Spring 2018 Unified Agenda of Federal Regulatory and Deregulatory Actions, <a href="https://www.reginfo.gov/public/do/eAgendaHistory?operation=OPERATION\_GET\_PUBLICATION&showStage=longterm&currentPubId=201804">https://www.reginfo.gov/public/do/eAgendaHistory?operation=OPERATION\_GET\_PUBLICATION&showStage=longterm&currentPubId=201804</a>.

undetermined" and dated as "to be determined." Relatedly, according to OIRA's Spring 2018 Unified Regulatory and Deregulatory Agenda, DOL does not have any current short-term plans published in the Federal Register to modify its PSM rules. Thus, any OSHA action to update the PSM is likely to be *at least* over a year away.

Furthermore, EPA has no active coordination in progress, much less any definitive plans to assure updates ever occur under either framework based on such consultation. An indefinite suspension of the prevention measures to allow such hypothetical activities to occur is arbitrary and capricious. It is an irrational justification that has no basis in fact. *See, e.g.*, Meeting between EPA and the Soc'y of Chem. Mfrs. & Affiliates (SOCMA) at 1 (June 5, 2018), EPA-HQ-OEM-2015-0725-0981, <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0981">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0981</a> ("Q. What is the timeline for working with OSHA on future regulations? A. Unknown. Most areas for coordinating RMP regulations with OSHA PSM involve the accident prevention program elements. Local emergency response coordination requirements already diverge." (emphasis added)).

3. It is Arbitrary and Capricious to Rescind Accident Prevention Measures Without Addressing the Prior Record and the Reasons why EPA Developed Those Protections or Explaining why no Prevention Updates is Better than Those Finalized.

To satisfy the Act's requirement for reasoned decisionmaking, EPA must provide a rational explanation of its proposal and must reconcile its proposal with the facts in the rulemaking record and meet the Act's test for rulemaking requirements. 42 U.S.C. § 7607(d)(9). As the Supreme Court has explained, "[o]ne of the basic procedural requirements of administrative rulemaking is that an agency must give adequate reasons for its decisions." *Encino Motorcars v. Navarro*, 136 S. Ct. 2117, 2125 (2016). EPA has not done so here. *See generally Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018) (on which Commenters rely even though, due to EPA's refusal to extend the comment deadline, there was insufficient time to include additional citations throughout these comments).

By proposing to rescind almost all prevention measures in the Chemical Disaster Rule, "EPA reversed its course of action," and must provide the requisite reasoned explanation based on facts found in the record for that change. *NRDC v. EPA*, 683 F.2d 752, 760 (3d Cir. 1982); *see also State Farm*, 463 U.S. at 41-42. "Where an agency has sharply changed its substantive policy, then, judicial review of its action, while deferential, will involve a scrutiny of the reasons given by the agency for the change." *NRDC*, 683 F.2d at 760. Further, because the Delay Rule "disregard[s]" EPA's own prior fact-findings and the robust record "that underlay" the Chemical

<sup>&</sup>lt;sup>304</sup> Process Safety Management and Prevention of Major Chemical Accidents, <a href="https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201804&RIN=1218-AC82">https://www.reginfo.gov/public/do/eAgendaViewRule?pubId=201804&RIN=1218-AC82</a> ("Legal Deadline: None," "Next Action Undetermined: To Be Determined").

<sup>&</sup>lt;sup>305</sup> DOL's Agency Rule List – Spring 2018 (last visited Aug. 21, 2018), https://reginfo.gov/public/do/eAgendaMain?operation=OPERATION\_GET\_AGENCY\_RULE\_LIST&cu\_rrentPub=true&agencyCode=&showStage=active&agencyCd=1200&Image58.x=29&Image58.y=22&Image58=Submit.

Disaster Rule, EPA must provide a "more detailed justification" to change course. *Fox*, 556 U.S. at 515-16. It has failed to do so, just as the D.C. Circuit held EPA has failed to do so in issuing the 20-month suspension of these protections. *See Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018).

EPA originally determined that the Chemical Disaster Rule would prevent and reduce "the frequency and magnitude" of chemical accidents which have killed people, have caused injury or illness to thousands, and have caused hundreds of thousands of people to shelter-inplace. 82 Fed. Reg. at 4683; 81 Fed. Reg. at 13,643 tbl.4; Amendments RIA 87 ex. 6-5. EPA also found a "significant risk ... to workers and communities" under the pre-existing framework, and found the costs of the Chemical Disaster Rule "reasonable" compared to the benefits of "reductions in the number of people killed, injured, and evacuated," and other harm. 82 Fed. Reg. at 4597-99, 4683-85; *see also* Amendments RIA 73-79 (benefits); 82 Fed. Reg. at 4604, 4607, 4616, 4656, 4665 (describing new requirements as "needed" and "necessary"); *id.* at 4600 (describing final rule as "advanc[ing] process safety where needed"). As the D.C. Circuit held, EPA found and "the record shows ... a need for [regulatory] improvements to protect workers and community safety, and to reduce fatalities, injuries, life disruption, and other harm." *Air Alliance Houston*, Slip Op. at 29 (citing 82 Fed. Reg. at 4599-600).

EPA now suggests it is "possible that the existing rule's prevention program measures already encompass many of the benefits of the [Chemical Disaster Rule's] prevention provisions—some facilities may already be considering safer technologies in conjunction with their process hazard analysis, using root cause analysis for incident investigations, and/or hiring independent third parties to conduct audits." 83 Fed. Reg. at 24,873. This is contradicted by the record, where EPA found each provision of the Chemical Disaster Rule was needed to fill specific gaps. Based on a decade's worth of data, EPA found that "revisions could further protect human health and the environment from chemical hazards through advancement of process safety management based on lessons learned." 82 Fed. Reg. at 4595. Notably, EPA does not even suggest its proposed rescissions are based on the merits of the disaster prevention measures in the Chemical Disaster Rule. See, e.g., EPA Response to OMB Comments at 5 (Apr. 12, 2018) ("There is no need to reiterate discussion of the merits of third party audits here, as we are not proposing to rescind the third-party audits based on concerns about their merits."), EPA-HQ-OEM-2015-0725-0899; id. at 12 ¶ 28 ("EPA does not support adding additional language regarding the merits of the three prevention provisions in the costs rationale section. EPA already discussed benefits of STAA, TPA and root cause in the proposed Amendments rule at 82 FR 13662-13667, 13654-13658 and 126547-13650, respectively. Also, we addressed these same objections to third party audits and STAA in the final Amendments rule at 82 FR 4612-4629 and 4635-4636, respectively.").

EPA found that "[t]he current Risk Management Program incident investigation requirements under §§ 68.60 and 68.81 do not explicitly require root causes to be determined and reported, rather they only require 'the factors that contributed to the incident." 81 Fed. Reg. at 13,648. Because "[f]acility owners and operators that conduct incident investigations that only identify 'factors that contributed to the incident' may miss identifying the underlying, system-related reason why an incident occurred (which would be revealed in a root cause analysis)," EPA adopted the root cause analysis requirement. *Id.* EPA provided a number of examples of chemical disasters where facilities, under the pre-existing RMP regulations, failed to identify

root causes, which "resulted in missed opportunities to address the proper causes of the incidents, share the lessons learned and prevent further similar incidents." *See id.* at 13,648-49 (describing examples). Nowhere does EPA explain how it intends to address this regulatory gap, or why it no longer views these regulatory failures as a problem. *See supra* note 228.

Similarly, EPA found that "in some cases, self-auditing may be insufficient to prevent accidents, determine compliance with the RMP rule's prevention program requirements, and ensure safe operation." 81 Fed. Reg. at 13,654. EPA found that "[i]ncident investigations often reveal that these facilities have deficiencies in some prevention program requirements related to [the] process" where a release occurred. *Id.* EPA cited examples where CSB found defective auditing, and examples where EPA had determined third party auditing was necessary when investigating accidents that had occurred. *Id.* at 13,654-55. Again, EPA fails to address these failures of pre-existing risk management regulations or to explain why it no longer finds third party audits beneficial. Instead, and of particular relevance to the auditing and investigation requirements, EPA admits that "studies have ... found a history of past accidents is a strong predictor of future accidents." 83 Fed. Reg. at 24,872.

Regarding the STAA requirement, EPA "disagree[d] that its approach ignores recent safety improvements on the part of the petroleum refining sector." 82 Fed. Reg. at 4633. Even if some facilities are already considering some safer technologies, that does not mean an STAA requirement would have no benefit. EPA explained specifically that a "facility's recent implementation of a safer technology alternative does not foreclose consideration of additional safer technologies in the future." Id. Since 1996, "EPA has seen that advances in ISTs and safer alternatives are becoming more widely available and are being adopted by some companies." 81 Fed. Reg. at 13,663. Voluntary "implementation of some ISTs has been identified through surveys and studies and potential opportunities have been identified through EPA inspections and CSB incident investigations." Id. EPA there believed "that there is a benefit in requiring that some facilities evaluate whether they can improve risk management of current hazards through potential implementation of ISTs or risk management measures that are more robust and reliable than ones currently in use at the facility." Id. Among its findings, EPA cited examples of IST opportunities identified by petitioners, as well as findings by the National Academy of Sciences and the CSB that supported adoption of the STAA requirement. Id. at 13,665. EPA's proposal to rescind this requirement fails to address any of this evidence or the agency's prior conclusions on STAA.

With the Chemical Disaster Rule, EPA revised its RMP framework to address these and other identified problems. *See also*, *e.g.*, 81 Fed. Reg. at 13,648, 13,655, 13,663, 13,675, 13,677-78; *see also id.* at 13,648-49 (listing examples of disasters prior rule failed to prevent), 13,655-56 (same), 13,671 (same), 13,674-75 (same), 13,678 (same). All of EPA's original findings on the prevention measures remain facts in the record, as EPA has acknowledged them, and neither directly reversed them nor provided any justification for reversing them. Even if cost and OSHA coordination were not unlawful and arbitrary rationales, as described above, EPA would still need to weigh its new rationales against the record evidence that it previously relied on. The agency cannot simply discard facts found to make room for new rationales or preference that have no rational basis or contradict the record and the agency's own findings.

Additionally, EPA's Rollback RIA continues to acknowledge that the Chemical Disaster

Rule would reduce deaths, injuries, and other serious harm as well as the risk of catastrophic harm, just as EPA originally found. *See*, *e.g.*, Rollback RIA at 63-64. EPA concedes that the proposal will remove the benefits the prevention requirements would have created. *Id.* at 64. EPA admits that the proposal:

would result in a reduction in the magnitude of prevention ... benefits, relative to the baseline post 2017 Amendments rule. The prevention program provisions were designed to prevent accidents by triggering improvements in plant design, equipment, procedures, or operator training, for example. Preventing serious accidents avoids numerous types of direct damages, including worker, responder, and public fatalities and injuries, public evacuations, public sheltering-in-place, and property and environmental damage [as well as indirect damages].... As all of the prevention program provisions of the Amendments final rule are proposed to be rescinded, any prevention benefits associated with those provisions would be foregone.

*Id.* at 64 (emphasis added). EPA gives no health or safety-based justification at all for repealing and removing these benefits. The record certainly contains no health or safety explanation, as EPA originally offered, for changing its factual conclusion and determining the opposite of what it found: *i.e.*, where these measures were necessary to reduce deaths, EPA now repeals them anyway without explanation even though this action directly contradicts its original decision.

EPA's attempt to reweigh costs and benefits in the new Rollback Regulatory Impact Analysis, as discussed later, does not provide adequate reasons, much less the detailed justification required, for the agency's about-face. In short, EPA fails to explain how it can propose to repeal these provisions when it found they are needed to address "failures and difficulties" under EPA's existing framework, and respond to specific CSB recommendations (such as on IST). EPA does assert that some of the Chemical Disaster Rule's benefits could be replaced by an enforcement-led approach, but, as discussed further below, EPA's analysis is mistaken and whether EPA will adopt such an approach remains wholly speculative.

In sum, EPA fails to justify repealing the prevention measures, because it does not show that its original findings that these measures are "necessary" to meet a "regulatory need" were incorrect or irrational, nor does EPA make the substantive findings required under § 7412(r)(7) to repeal them. *See, e.g., Air Alliance Houston*, Slip Op. at 27-36.

4. Rescission of the Prevention Measures is Arbitrary and Capricious Because EPA's Record Shows a need for them to be at Least as Strong, if not Stronger, than when EPA Promulgated the Chemical Disaster Rule.

The data show that accidents are continuing to occur frequently and cause serious harm, even with the pre-existing Risk Management Program regulations in place. As discussed above, public media reporting shows at least another 61 publicly known chemical incidents have occurred since the Chemical Disaster Rule was delayed.<sup>306</sup> The accident frequencies from EPA's own data show a trend that suggests many more have in fact occurred. Even EPA's data for

<sup>&</sup>lt;sup>306</sup> BGA et al., *A Disaster In The Making* (last updated Aug. 22, 2018), https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule.

2014-2016, which EPA admits is likely to increase, shows approximately 100 or more accidents occurring per year. Given the magnitude of this problem and the harm it is causing to communities and workers, it is arbitrary and capricious for EPA to rescind almost all prevention measures without enacting an adequate replacement.

EPA Incident Data	2004-13 <sup>307</sup>	2014-16 (Reported so far) <sup>308</sup>	Totals (2004- 16, so far)
Reported RMP Facility	2,291	458	2,749
Incidents			
Deaths	59	12	71
Injuries, or medical	17,099	444	17,543
treatment			
Sheltered in	451,665	43,207	494,872
place/evacuation			
Property damage	\$2.1 billion	\$514.8 million	\$2.6 billion

EPA suggests there may be a trend of decreasing incident rates per year, but the data show no such decline. EPA admits any "tentative" decline in the raw numbers per year is based on incomplete data. Moreover, the alleged rate of decline is so low that significant numbers of accidents would continue occurring for decades – EPA can hardly contend that the chemical disaster problem in this country has actually been solved.

EPA has not shown it is any less necessary to prevent and reduce the many harmful incidents still occurring. First, even if the raw number of accidents per year were decreasing at a small amount per year – as EPA suggests – that would not mean there is no need for improved regulations. EPA's data shows a significant number of harmful incidents continue to occur. Recent explosions at the Arkema chemical plant in Crosby, Texas; at the Husky Refinery in Superior, Wisconsin; at the Kuraray chemical plant in Pasadena, Texas; and elsewhere show that severe RMP releases and near misses continue to occur and cause significant harm. Second, EPA admits that it has incomplete data for recent years and that the number of accidents reported in those years is likely to increase. Rollback RIA at 33 (noting "accident totals for the most recent five years of data within the RMP national database increase slightly after each major five-year RMP reporting cycle occurs," so "actual accident numbers for 2014-2016 may increase above those shown here after the 2019 reporting wave occurs.").

Further, the number of incidents is only one marker of the need for regulatory improvements. As EPA originally recognized, the severity of harm from the incidents is another important indicator, and some of the most recent incidents have caused particularly severe harm. For example, the Chevron Richmond Refinery (2012) and Husky Refinery (2018) incidents each injured or required dozens of people to seek medical treatment, exposed thousands of people to

112

<sup>&</sup>lt;sup>307</sup> 2004-13 Accident Data Spreadsheet.

<sup>&</sup>lt;sup>308</sup> 2014-16 Accident Data Spreadsheet.

toxic chemicals in smoke, and required the evacuation of large urban and residential areas.<sup>309</sup> Other incidents during 2016-18 alone, from Tennessee, to Texas, to Utah, and Colorado caused serious harm that EPA cannot ignore.<sup>310</sup>

Additionally, EPA itself recognizes that the potential remains for catastrophic incidents and that the Chemical Disaster Rule would have reduced this risk. EPA acknowledges additional risk exists, due to national security or criminal threats at chemical facilities. Commenters agree that these risks are an important part of the picture, and a serious concern. The need to prevent a Bhopal-like disaster in the U.S. was a core purpose of the 1990 Clean Air Act Amendments that led to the RMP program in the first place. Yet EPA undoes all prevention updates, even when there is no doubt that its RMP program is neither preventing regular chemical disasters nor has sufficient prevention measures to prevent a national catastrophe "to the greatest extent practicable." EPA's refusal to consider the catastrophic risks, including national security risks, and determine that these warrant keeping, rather than repealing, the prevention measures is arbitrary and capricious.

EPA's proposal is particularly arbitrary because it is inherently contradictory. EPA *does* recognize the incident data continue to show a need for certain emergency response coordination and public meeting requirements. *See, e.g.*, Rollback RIA at 64. It is not rational to split hairs as EPA attempts to do. The same data show the need *both* to keep the prevention updates *and* to keep the measures EPA proposes to keep precisely because they are still needed. Furthermore, the many chemical releases, explosions, and fires that occurred in the wake of Hurricane Harvey last summer show a particularly strong need for EPA to retain and implement the Chemical Disaster Rule. It is arbitrary and capricious for EPA to fail to consider this new information.

The hurricane and other CSB-provided guidance on "Natech Risk Assessment and Management" shows that natural disasters are a common "root cause," or contributing factor to chemical incidents. This new evidence provides further support for the Chemical Disaster Rule's prevention measures that would require consideration of root causes in the Process Hazard Analysis, and would require stronger incident investigation and audit requirements, for example, as well as employee training for all involved (including supervisors who may be making decisions regarding how to prepare for an impending flood or hurricane, for example). It also provides a factor that EPA must evaluate that it has not, which is arbitrary and capricious.

<sup>&</sup>lt;sup>309</sup> See, e.g., CSB, Final Investigation Report, Chevron Refinery and Fire, Aug. 6, 2012 (Jan. 2015), <a href="https://www.csb.gov/final-investigation-report---chevron-refinery-and-fire-">https://www.csb.gov/final-investigation-report---chevron-refinery-and-fire-</a>; CSB, Factual Investigation Update, April 26, 2018 Husky Superior Refinery Explosion and Fire (Aug. 2018), <a href="https://www.csb.gov/file.aspx?DocumentId=6077">https://www.csb.gov/file.aspx?DocumentId=6077</a>.

<sup>310</sup> BGA et al., *A Disaster In The Making* (last updated Aug. 22, 2018), <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule">https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>; UCS, <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>; UCS, <a href="https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule">https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule</a>; UCS, <a href="https://earthjustice.org/features/to

<sup>&</sup>lt;sup>311</sup> CSB Final Arkema Investigation Report at 122-23 (2018), http://www.csb.gov/file.aspx?DocumentId=6068.

Information from the Gulf in recent years is a warning sign to EPA and all communities that face frequent "natech" incidents, which are technological disasters on top of natural disasters. Recent events like Hurricane Harvey make clear that preparation and prevention must *increase* to protect health and safety in these regions, not decline or be further delayed as EPA has proposed.

Safer technology and alternatives analyses and other requirements that fully evaluate the threat of a double disaster would likely include:

- The concrete measures highlighted in the CSB's report on natech risk prevention, such as additional and redundant back-up power, chemical management, and flood planning and response.<sup>312</sup>
- The use of less hazardous chemicals altogether, such as ending or phasing out the use of hydrofluoric acid which is one of the chemicals that made the recent Husky Refinery fire and the Torrance, CA near-miss particularly dangerous.<sup>313</sup>
- More, not less, air monitoring, enforcement, and corrective actions from past incidents at similar facilities.

Further, the CSB has recently provided new comments to EPA, new reports, and a factual update on the Husky Superior Refinery fire and explosion.<sup>314</sup> These provide additional information showing the need for EPA to implement, not roll back, the Chemical Disaster Rule. The reports and information about the latest incidents, such as Arkema, that EPA has tried to avoid considering as a near miss, only show, on top of West, TX, the importance of the Chemical Disaster Rule's near miss requirements.

As experts like the CSB release information on the increased, foreseeable and preventable health and safety threats at chemical facilities, it is arbitrary and capricious for EPA to ignore this evidence. This is especially true in light of the role Congress gave the CSB in  $\S 112(r)$  – EPA must at least consider and evaluate any new evidence coming from CSB.

In recent years, California, New Jersey, Massachusetts, and Contra Costa County, as some examples, have finalized important new state or local measures that illustrate the need and value of provisions like the STAA, incident investigation, emergency response and other requirements that EPA proposes to delete or weaken here. Other communities, like those in Los Angeles, CA, and Duluth, MN, and Superior, WI, have called for more protections, such as a phase-out of the use of hydrofluoric acid at local refineries, which shows a strong interest in supporting the consideration, and implementation, of STAA, since hydrofluoric acid phase-out is

\_

<sup>&</sup>lt;sup>312</sup> *Id*.

<sup>&</sup>lt;sup>313</sup> USW, *A Risk Too Great: Hydrofluoric Acid in U.S. Refineries* (Apr. 2013), http://assets.usw.org/resources/hse/pdf/A-Risk-Too-Great.pdf.

<sup>&</sup>lt;sup>314</sup> See CSB Comments (2018), EPA-HQ-OEM-2015-0725-1393; CSB, Factual Investigative Update, April 26, 2018 Husky Superior Refinery Explosion and Fire at 4 (Aug. 2018), <a href="https://www.csb.gov/file.aspx?DocumentId=6077/">https://www.csb.gov/file.aspx?DocumentId=6077/</a>.

an example of this.<sup>315</sup> The South Coast Air Quality Management District is currently considering a ban on use of hydrofluoric acid, because there are inherently safer technologies and practices available that allow refineries to operate without using this.<sup>316</sup> EPA cannot ignore and instead must fully evaluate these data, summarized above. EPA has previously recognized the relevance and found some of these measures show the need and likely benefits of the Chemical Disaster Rule. It provides no basis to change those findings here, and could not do so without meeting the heightened test required by *Fox* as well as providing a reasoned explanation for the change, pursuant to *State Farm*. *Fox*, 556 U.S. at 515; *see also State Farm*, 463 U.S. at 42. EPA has never addressed some of these developments and must evaluate them. It would be arbitrary and capricious for EPA to proceed with the proposed Rollback Rule when it runs directly counter to the effective and efficient measures that these state and local developments represent.

Finally, EPA also does not address the health burden currently placed on families in fenceline communities and the cost associated with that burden. Releases under the Risk Management Program or "near misses" contribute substantial additions to the air pollution exposures that such communities face. EPA does not consider this harm.

## 5. EPA's Analysis of the Costs of STAA is Arbitrary and Capricious

EPA specifically reassesses the cost-benefit evaluation for STAA. EPA notes "two assumptions" on which it "judged the costs of STAA to be reasonable." 83 Fed. Reg.at 24,871. First, EPA says it "explicitly assumed that, whatever the cost of a new safer technology alternative, a company would incur such costs only if it were net beneficial to the company." *Id.* at 24,871 (citing Amendments RTC at 70). EPA "acknowledged that no benefits would accrue from implementing STAA unless facilities subject to the requirement voluntarily elect to implement a safer technology." 83 Fed. Reg. at 24,872. EPA also says it "implicitly assumed that an unknown but sufficient fraction of the three affected industries would in fact implement changes as a result of having performed STAA to make the requirement to conduct STAA assessments reasonable." *Id.* at 24,871-72. To be clear, EPA otherwise has "not concluded that we underestimated the costs of STAA reviews." EPA Response to OMB Comments at 13 (Apr. 12, 2018), EPA-HQ-OEM-2015-0725-0899.

EPA now "questions the implicit assumption that a sufficient number of sources would implement STAA improvements to offset the costs of the provision." 83 Fed. Reg. at 24,872. EPA says it "did not account for the indirect costs of implementing safer technologies and alternatives in the RMP Amendments rule." Id. EPA states that such "indirect costs" could

115

<sup>&</sup>lt;sup>315</sup> See, e.g., Nick Green, "County joins political efforts to ban toxic chemical from refineries in Torrance and Wilmington," *Daily Breeze* (March 8, 2017), <a href="https://www.dailybreeze.com/2017/03/08/county-joins-political-efforts-to-ban-toxic-chemical-from-refineries-in-torrance-and-wilmington/">https://www.dailybreeze.com/2017/03/08/county-joins-political-efforts-to-ban-toxic-chemical-from-refineries-in-torrance-and-wilmington/</a>; see also infra n.321.

<sup>&</sup>lt;sup>316</sup> South Coast Air Quality Management District, Proposed Rule 1410 Hydrogen Fluoride Storage and Use at Petroleum Refineries, <a href="http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/proposed-rule-1410">http://www.aqmd.gov/home/rules-compliance/rules/scaqmd-rule-book/proposed-rules/proposed-rule-1410</a>.

<sup>&</sup>lt;sup>317</sup> In fact, EPA did "not agree that the potential costs of STAA implementation should have been included in the Amendments rule RIA." EPA Response to OMB Comments at 6 (Apr. 12, 2018), EPA-

"also be incurred, if facilities take actions based on the results of their STAA (or based on external pressures to implement STAA recommendations regardless of whether they are necessary or practical)." *Id*.

This concern has no basis in fact and is arbitrary and capricious. EPA is proposing to repeal one of the central features of the Chemical Disaster Rule based on speculation that third parties will somehow pressure facilities into adopting safer alternatives, even when an analysis explicitly shows adoption to be infeasible. Everything about this rationale is speculative.

EPA was clear in the Chemical Disaster Rule that STAA does not mandate adoption of any technology. The only costs that can be directly attributed to such a requirement are the costs of the assessment itself. As EPA noted, it *is* likely STAA will lead to adoption of some safer technologies but this would only happen if a company determines it is practicable and net beneficial *to that company* to make such an investment. In other words, if a company determines it can adopt a safer alternative or technology, the cost will be more than offset by the benefit to just that company. The benefits to the public would be far greater.

In speculating that companies will adopt technologies even where they determine it to be infeasible, EPA makes two errors. First, it is arbitrary and capricious to base rescission of this requirement on speculation. EPA provides no evidence to support its theory that companies will be pressured into adopting expensive technologies that are net detrimental to the company. Second, EPA fails to consider the benefits that will accrue from adoption of safer technologies, regardless of the reason for adoption. Even if public pressure existed and somehow put a thumb on the scale, the benefits to the public from adopting safer technologies and alternatives are tremendous and go far beyond what companies would consider in their STAA (where they are determining only if adoption is net beneficial *for the company itself*). EPA fails to consider these benefits entirely, and again favors consideration of costs alone in its analysis.

Furthermore, EPA has failed to evaluate the benefits from STAA, including from all available types of IST for the three industry sectors for which the Chemical Disaster Rule would require an STAA. EPA originally found significant benefits from STAA requirements, such as those implemented in New Jersey and Contra Costa. That the full benefits, such as the exact number of accidents prevented or harm reduced, may be difficult to quantify does not allow EPA to ignore its prior finding that these requirements *do* have significant benefits.<sup>318</sup> EPA has failed to justify directly contradicting its prior determination that STAA would prevent and reduce incidents, deaths, injuries, and other harm. *See, e.g.*, Amendments RTC at 130-31.

As commenters have highlighted to EPA in various contexts, there are significant examples of inherently safer technologies, practices, and processes that are available and feasible to implement at petroleum refineries, and many of these are also potential measures that would

L

HQ-OEM-2015-0725-0899. It appears EPA discussed these indirect costs only at the prompting of OMB. *Id.* 

<sup>&</sup>lt;sup>318</sup> See, e.g., Amendments RTC at 131 ("Because the requirements involve prevention of accidents before they occur, it is difficult to provide a quantitative assessment that the requirement would reduce a certain number of accidents.").

help make facilities in the chemical manufacturing or pulp/paper mill sectors inherently safer. EPA cannot justify refusing to even attempt to quantify the foregone benefits, and thus the harm, that the proposed Rollback Rule would cause to communities exposed to the 1,558 STAA-subject facilities, by allowing these sources not to perform the STAA at all, even though one or more of these types of measures is likely to make a significant difference in preventing and detecting accidental releases.

#### Prevention measures

The phase-out of highly dangerous hydrofluoric acid, including a ban on its use by new sources and a requirement to consider and if possible use a safer alternative. Since the USW's A Risk Too Great, there have been significant developments and examples of the need for refineries to consider phasing hydrofluoric acid out. For example, the South Coast Air Quality Management District is currently considering a proposal to require this at two local refineries after a recent and serious near-miss release at Torrance. Community members and mayors in Duluth, MN, and Superior, WI, have similarly called for the Husky Refinery to phase out use of hydrofluoric acid after the fire at the Husky refinery in early 2018 led to a 10-mile south evacuation in part "to protect the public from the smoke plume and as a precaution in case the refinery's highly toxic hydrofluoric acid equipment was compromised."321 There are various types of IST that facilities could evaluate to end their use of hydrofluoric acid, which would make them less likely to kill or injure as many people, even if an incident occurs at the facility.<sup>322</sup> In addition, Chevron in Salt Lake City, UT, has entered into a pilot project to phase out the use of hydrofluoric acid, using a new technology that recently won the "2017 Platts Breakthrough Solution Award."323

\_\_\_

<sup>&</sup>lt;sup>319</sup> See Comments of Earthjustice, Envtl. Integrity Project et al. (Oct. 28, 2014), EPA-HQ-OAR-2010-0682-0568.

<sup>&</sup>lt;sup>320</sup> Rollback RIA at 30 (ex. 3-5). EPA has provided the number but thus far has not provided the list, noting that these include facilities whose NAICS begins with 322, 324, or 325 (in the petroleum refineries and coal products manufacturing, pulp/paper mill, or chemical manufacturing industry sectors).

<sup>&</sup>lt;sup>321</sup> CSB, Factual Investigative Update, April 26, 2018 Husky Superior Refinery Explosion and Fire at 4 (Aug. 2018), <a href="https://www.csb.gov/file.aspx?DocumentId=6077">https://www.csb.gov/file.aspx?DocumentId=6077</a>; Matt McKinney, "Twin Ports mayors call on Superior refinery to stop using highly toxic chemical, Superior Duluth leaders ask Husky Energy to stop using hydrogen fluoride," *Star Tribune* (May 2, 2018), <a href="https://www.startribune.com/twin-port-mayors-call-on-superior-refinery-to-stop-using-highly-toxic-chemical/481509431/">http://www.startribune.com/twin-port-mayors-call-on-superior-refinery-to-stop-using-highly-toxic-chemical/481509431/</a>.

<sup>&</sup>lt;sup>322</sup> See, e.g., S. Zhang et al., Norton Engineering, Alkylation Technology Study, Final Report to SCAQMD (Sept. 9, 2016), <a href="http://www.aqmd.gov/docs/default-source/permitting/alkylation-technology-study-final-report.pdf">http://www.aqmd.gov/docs/default-source/permitting/alkylation-technology-study-final-report.pdf</a>; see also supra notes 75, 316.

<sup>&</sup>lt;sup>323</sup> Hye Kyung Timken, Chevron, Isoalky Technology: Next Generation Alkylate Gasoline Manufacturing Process Technology (Aug. 2, 2017), <a href="http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1410/chevron-presentation.pdf">http://www.aqmd.gov/docs/default-source/rule-book/Proposed-Rules/1410/chevron-presentation.pdf</a>; Honeywell UOP, Honeywell UOP and Chevron Win 2017 Platts Breakthrough Solution Award for Ionic Liquids Alkylation Technology (Dec. 12, 2017),

- A requirement for anonymous near-miss reporting and other types of anonymous safety and maintenance reporting to allow workers to provide critical information on how to prevent an accident to EPA, the states, and the public, without threatening their jobs. Such systems have served the federal aviation system well preventing plane crashes they are also used effectively by firefighters, and a similar system is being developed for the off-shore drilling sector by the Bureau of Safety and Environmental Enforcement (BSEE) in the Interior Department. Further, EPA should require sources themselves to report all near misses, as some states have done. 81 Fed. Reg. at 13,651-52 (describing New Jersey program). The CSB recommended this be implemented at the Belle, West Virginia, DuPont facility, and in 2013, found that it had been implemented.<sup>324</sup> Anonymous reporting about non-compliance can also help inform decisions by EPA to require third-party audits.
- Requirements for back-up power, to prevent accidental releases in the event of a power outage.

#### **Detection measures**

- Leak detection and repair.<sup>325</sup> Jesse Marquez of the Coalition For A Safe Environment highlighted how the use of inexpensive gas detection leak equipment could have prevented serious explosions in California.<sup>326</sup>
- Real-time fenceline air monitoring, with real-time information sharing over the internet of air concentrations to anyone who has the application software. Such software could provide automatic notices of elevated air concentrations of hazardous air toxics to those who elect to receive them. EPA recently finalized fenceline monitoring at all U.S. refineries, but it includes only passive sampling and will not assist in a real-time emergency. Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards, Final Rule, 80 Fed. Reg. 75,178, 75,182-83 (Dec. 1, 2015). EPA recognized that the purpose of this monitoring was to assure compliance with the standards rather than assist in a real-time emergency. The purpose of the present rule is to do just that, and EPA should require this monitoring under its accidental release authority.

https://www.uop.com/?press\_release=honeywell-uop-and-chevron-win-2017-platts-breakthrough-solution-award-for-ionic-liquids-alkylation-technology.

<sup>&</sup>lt;sup>324</sup> See CSB, Recommendations Status Change Summary, http://www.csb.gov/assets/recommendation/Status Change Summary DuPont Belle R5.pdf.

<sup>&</sup>lt;sup>325</sup> See, e.g., CSB, Investigation Report, Pesticide Chemical Runaway Reaction Pressure Vessel Explosion, Bayer CropScience, Institute, WV, Aug. 28, 2008 (No. 2008-08-I-WV) (Jan. 2011), https://www.csb.gov/assets/1/20/bayer\_report\_final.pdf?13959; see also, e.g., EPA, Leak Detection and Repair A Best Practices Guide (2014), https://www.epa.gov/sites/production/files/2014-02/documents/ldarguide.pdf.

<sup>&</sup>lt;sup>326</sup> J. Marquez Testimony at Public Hearing (June 25, 2018), <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0965">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0965</a>.

These comments incorporate by reference and resubmit those comments, citing Part VI, pp. 135-150 (focused on IST).<sup>327</sup> In finalizing the refineries air toxics standards, EPA pointed to the RMP rulemaking as the place to consider IST comments, stating that the comments were outside of the scope of that rulemaking. *See, e.g.*, NESHAP from Petroleum Refineries, Response to Comments, EPA-HQ-OAR-2010-0682-0802, at 322-23, 356 (Sept. 2015). Therefore, Commenters urge EPA not to repeal the STAA requirement. Doing so would be arbitrary and unlawful, as it would delete key prevention measures from the rule. In addition, EPA should require refineries to evaluate the specific types of safer practices described in the attached comments "to the greatest extent practicable," as § 7412(r)(7)(B)(i), directs.

Finally, as EPA's own data supports that facilities that have had past incidents have a significantly higher incident rate than others, EPA gives no rational basis for simply changing the metric it uses if it somehow determines that the top incident sector targets are not tailored enough. For example, it would be irrational for EPA not to require STAA, for all facilities with at least one prior incident during the single decade EPA evaluated, or, at minimum, for those facilities it has described as the worst-problem facilities. The increased risk associated with past incidents may be even higher in the sectors EPA identified for STAA, which already have significantly higher-than-average incident rates. EPA's proposal to rescind STAA for all of the originally targeted sectors, without considering retaining at least the provisions for what it describes as the individual facilities with the worst records and/or the facilities that have had a prior incident, is arbitrary and capricious.

## 6. An Enforcement-Led Approach Cannot Replace Regulation

EPA argues that that "[i]n lieu of broadly imposing STAA in particular on broad sectors, an enforcement-led approach can retain much benefit of the RMP Amendments at a fraction of the cost," and "[s]uch an approach would contain a compliance assistance element as well." 83 Fed. Reg. at 24,873. Similarly, EPA "believes an enforcement-led approach is preferable to a uniform regulatory standard for third party audits and root cause analyses." *Id.* at 24,872. In EPA's estimation, "[a]n enforcement-led approach allows the agency additional discretion to make a determination of the utility of a third-party audit or a root-cause analysis." *Id.* EPA does not propose any actual plan to change its enforcement of the Risk Management Program.

EPA cannot justify repealing prevention measures based on a potential and speculative increase in enforcement. Further, EPA may not replace regulation with enforcement – the two go hand in hand and are not mutually exclusive alternatives for the agency to choose between. The proposed change is arbitrary and capricious, and it also violates the statute because the Clean Air Act requires EPA to promulgate "regulations" that provide "to the greatest extent practicable" for the prevention of chemical disasters. 42 U.S.C. § 7412(r)(7)(B). Communities, workers, and first-responders need both regulations and enforcement, not one or the other.

EPA previously rejected the very idea that an enforcement-led approach would be sufficient to correct the serious chemical disaster problem shown in its data. *See*, *e.g.*, Amendments RTC at 50, 52, 246 (rejecting commenter request to rely on existing enforcement authority because "EPA believes it is appropriate to require" third-party auditors for "a subset of

-

<sup>&</sup>lt;sup>327</sup> See Comments of Earthjustice, EIP et al. (Oct. 28, 2014), EPA-HQ-OAR-2010-0682-0568.

RMP-regulated facilities"; finding that "[t]he third-party auditing regulatory requirements simply ensure that regulated entities will, in a carefully-defined subset of circumstances, take reasonable measures to assess and ensure their own compliance"; determining that non-compliance was not the only cause of accidents). EPA already found that both enforcement *and* regulatory amendments are necessary. EPA determined that, "simply resort[ing] to compliance oversight of the existing rule" alone, as industry had requested, would not solve the problems EPA had found and could not displace improvements to the prevention program. Amendments RTC at 246 (emphasis added) ("In sum, the history of implementation of the RMP rule has given EPA sufficient experience to support modernizing and improving the underlying RMP rule"). As EPA further explained, in rejecting a comment that a prior accident should trigger STAA:

Finally, EPA disagrees that the STAA requirement should be triggered only by accidental releases. Although the Agency agrees that accidental releases may indeed signal to the owner or operator that safer technology alternatives should be considered, the Agency prefers that owners and operators evaluate safer technologies before accidents occur, with the aim of ultimately preventing such accidents. Also, similar to the Agency's objection to requiring STAA reviews only after major process changes, requiring an STAA only after an accident would mean that many processes subject to this provision may never undergo an STAA.

### Amendments RTC at 107 (emphasis added).

Yet EPA has now adopted the arguments it previously rejected without a reasoned explanation for the change or the requisite detailed explanation for abandoning its prior fact-findings. *Fox*, 556 U.S. at 515; *see also State Farm*, 463 U.S. at 42 ("an agency changing its course by rescinding a rule is obligated to supply a reasoned analysis for the change beyond that which may be required when an agency does not act in the first instance.").

EPA also now suggests that the thousands of RMP chemical releases that covered facilities have experienced are due only to a few bad actors. The agency's own data refute this – showing well over a thousand facilities have experienced problems, and showing that thousands of incidents have occurred *despite* EPA's past and ongoing enforcement efforts. Moreover, based on the regulatory shortcomings EPA identified, many facilities may have been in compliance with the pre-existing regulations when disasters occurred. EPA found a "regulatory need" for the Chemical Disaster Rule, and this cannot be replaced by enforcement. Amendments RIA 17 (emphasis added). EPA found that "looking across the United States and universe of regulated facilities, these accidents occur with sufficient frequency to warrant regulation." *Id.* (emphasis added). EPA has not revisited the findings these statements were based on. EPA's attempt to rely on a potential future "enforcement-led" approach is thus unlawful, arbitrary, and mistaken.

First, the suggestion that only a few facilities experience RMP chemical releases or near misses is false. Accidents occur throughout the universe of regulated facilities, and especially in the paper, chemical manufacturing, and coal/petroleum products industries. EPA notes that a small percentage of facilities had extremely high accident rates, but this does not disprove that *many* other facilities also experienced accidents. *See* 83 Fed. Reg. at 24,872 (noting data submitted by American Chemistry Council suggesting less than 2% of facilities that reported

multiple releases were responsible for 48% of reportable accidents in EPA's 2004 to 2013 data set, and that in the chemical manufacturing industry 99 out of 1465 facilities were responsible for approximately 70% of reportable accidents in the sector and more than one-third of all reportable accidents). At most, this data could show that, in addition to an unacceptably high accident rate across the universe of regulated facilities, a few particularly bad actors have *even higher* accident rates.

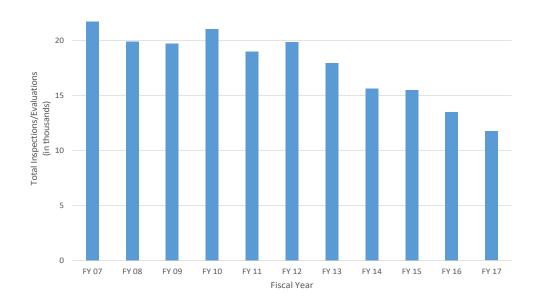
EPA cannot dispute that its own accident data for 2004-2013 includes accidents at 1326 unique facilities (based on the EPAFacilityID value) – plus another 356 in accident data from 2014-16 (out of 2291 and 458 total, respectively). *See* Accident Spreadsheet 2004-2013; Accident Spreadsheet 2014-2016. Across the two data sets, there are accidents at 1549 unique facilities – in other words, well over half (around 56%) of all accidents occur at facilities that have never experienced an accident before. *See* Accident Spreadsheet 2004-2013; Accident Spreadsheet 2014-2016. Furthermore, 1549 facilities is approximately 12.6% (or 1 in 8) of the 12,318 facilities under the Risk Management Program that were identified by EPA in its RIA. Rollback RIA at 9 ex. A. This problem is far too widespread to fix with only enforcement and is hardly limited to a tiny subset of so-called "bad actors."

Additionally, there were 1327 unique *Program 3* facilities that had accidents in the data set, which is approximately 22% of the 5980 facilities in that program level. *See* Rollback RIA at 73 ex. 7-2 (2015 total); Accident Spreadsheet 2004-2013 *and* Accident Spreadsheet 2014-2016 (combing both spreadsheets, filtering for Program 3 incidents, and then counting unique EPAFacilityIDs). This is particularly alarming because Program 3 facilities are those with the most severe worst-case scenarios when things go wrong – yet over 1 in 5 are experiencing accidental releases (and many more may be having near misses).

EPA cannot reasonably engage in enforcement-related activities at each of the distinct facilities that are having accidents. EPA's own data provides clear evidence that better baseline regulations are needed, especially for Program 3 facilities. By way of analogy, if one in eight cars on a highway were getting into accidents, it would be strong evidence that the speed limit needed to be lowered to improve baseline safety.

Second, there is no evidence in the docket that EPA has increased or even will increase enforcement in a meaningful way to prevent future incidents. It is arbitrary and capricious to propose rescinding regulations now, based on the mere possibility that EPA may one day put an alternative program into place. *See Steed*, 733 F.2d at 102 ("Without showing that the old policy is unreasonable, for [the agency] to say that no policy is better than the old policy solely because a new policy *might* be put into place in the indefinite future is as silly as it sounds." (emphasis in original)). EPA cannot replace something with nothing and pretend it has an adequate replacement. The statute requires preventative action. *See*, *e.g.*, 42 U.S.C. § 7412(r)(1), (7)(A)-(B); *Air Alliance Houston*, Slip Op. at 5-7, 24, 26-27.

In fact, EPA enforcement under this administration and the previous one has dropped compared to previous years and will likely continue to fall due to staffing shortages and budget cuts.<sup>328</sup> The Washington Post recently reported that EPA has lost a tenth of its criminal investigators since November 2016.<sup>329</sup> The Environmental Integrity Project has also released a report showing that cases lodged and average penalties were down significantly in President Trump's first year, relative to prior administrations. Environmental Integrity Project, Paying Less to Pollute, Feb. 15, 2018, http://www.environmentalintegrity.org/wp-content/uploads/2017/02/Enforcement-Report.pdf.



Federal Inspections and Evaluations (Conducted by EPA) FY 2007 – FY 2017.<sup>330</sup>

Even though EPA chose to include "Reducing Risks of Accidental Releases at Industrial

Eric Lipton and Danielle Ivory, "Under Trump, E.P.A. Has Slowed Actions Against Polluters, and Put Limits on Enforcement Officers," *The New York Times* (Dec. 10, 2017), <a href="https://www.nytimes.com/2017/12/10/us/politics/pollution-epa-regulations.html">https://www.nytimes.com/2017/12/10/us/politics/pollution-epa-regulations.html</a> (describing analysis that showed that during the first nine months of Pruitt's tenure, EPA "has filed about a thousand fewer cases and sought almost \$9 billion less in those cases ... than during the same period in the Obama Administration"); *see also* "Civil Penalties Against Polluters Drop 60 Percent So Far Under Trump," Envtl. Integrity Project (Aug. 10, 2017), <a href="https://www.environmentalintegrity.org/news/penalties-drop-under-trump/">https://www.environmentalintegrity.org/news/penalties-drop-under-trump/</a>; "EPA Pollution Enforcement Shrivels Across the Board," Public Employees for Envtl. Responsibility (Mar. 29, 2018), <a href="https://www.peer.org/news/news-releases/epa-pollution-enforcement-shrivels-across-the-board.html">https://www.peer.org/news/news-releases/epa-pollution-enforcement-shrivels-across-the-board.html</a>.

<sup>&</sup>lt;sup>329</sup> Dino Grandoni, "The Energy 202: EPA loses a tenth of its criminal investigators since Trump's election," *The Washington Post* (June 21, 2018), https://www.washingtonpost.com/news/powerpost/paloma/the-energy-202/2018/06/21/the-energy-202-epa-loses-a-tenth-of-its-criminal-investigators-since-trump-s-election/5b2aa8ea30fb046c468e6f1a/?utm term=.0843fb04d627.

<sup>&</sup>lt;sup>330</sup> EPA, Fiscal Year 2017 EPA Enforcement and Compliance Annual Results at 11 (Feb. 8, 2018), https://www.epa.gov/sites/production/files/2018-01/documents/fy17-enforcement-annual-results-data-graphs.pdf.

and Chemical Facilities" as one of its National Enforcement Initiatives in the FY17-19 cycle, there were only 363 inspections conducted out of the total 12,500 RMP-regulated facilities in fiscal year 2017.<sup>331</sup> Furthermore, EPA chose to focus on releases at chemical facilities as a National Enforcement Initiative in recognition of the fact that "[t]housands of facilities nationwide, many of which are in low income or minority communities, make, use and store extremely hazardous substances" and "[c]atastrophic accidents at these facilities – historically about 150 each year – result in fatalities and serious injuries, evacuations, and harm to human health and the environment."<sup>332</sup> Commenters agree this shows a need for increased enforcement, but it *also* shows a need for better regulation. Indeed, EPA set this enforcement initiative in February 2016, while it was *also* proposing to adopt the Chemical Disaster Rule. EPA, *EPA Announces National Enforcement Initiatives for Coming Years* (Feb. 18, 2016), <a href="https://archive.epa.gov/epa/newsreleases/epa-announces-national-enforcement-initiatives-coming-years.html">https://archive.epa.gov/epa/newsreleases/epa-announces-national-enforcement-initiatives-coming-years.html</a>. The agency itself saw that *both* enforcement and regulation were necessary to solve this urgent problem.

EPA's recent enforcement action against MFA Enterprises<sup>333</sup> appears to be the only such consent decree on EPA's website that states that it is an example of "EPA's National Enforcement Initiative for Chemical Accident Risk Reduction" under this Administration.<sup>334</sup> A search for CAA § 7412(r)(7) RMP enforcement cases or administrative complaints filed from January 23, 2017, through August 15, 2018, on EPA's ECHO website, shows 0 criminal enforcement actions and only 247 total civil enforcement milestones (administrative or judicial) during this one year and a half since the new Administration entered office.<sup>335</sup> Average penalties for violations were only \$32,645 with supplemental environmental projects ("SEPs"), which may or may not include things like mandating adoption of IST or other prevention measures, averaging only \$25,082.<sup>336</sup> In fact, only 20 of these cases had SEPs at all.<sup>337</sup>

Third, an enforcement-led approach would not adequately address releases at chemical facilities and would also result in an inconsistent enforcement scheme that would be influenced by different priorities and resources in the regional offices.<sup>338</sup> Enforcement alone is unlikely to

<sup>&</sup>lt;sup>331</sup> EPA, National Enforcement Initiative: Reducing Risks of Accidental Releases at Industrial and Chemical Facilities (last updated May 14, 2018), <a href="https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-risks-accidental-releases-industrial-and">https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-risks-accidental-releases-industrial-and</a>.

 $<sup>^{332}</sup>$  Id

<sup>&</sup>lt;sup>333</sup> EPA, MFA Incorporated and MFA Enterprises Incorporated, Settlement Information Sheet, <a href="https://www.epa.gov/enforcement/mfa-incorporated-and-mfa-enterprises-incorporated-settlement-information-sheet">https://www.epa.gov/enforcement/mfa-incorporated-and-mfa-enterprises-incorporated-settlement-information-sheet</a>; Consent Decree (July 2018), <a href="https://www.epa.gov/sites/production/files/2018-07/documents/mfa-cd.pdf">https://www.epa.gov/sites/production/files/2018-07/documents/mfa-cd.pdf</a>.

 $<sup>^{334}</sup>$  Id

<sup>&</sup>lt;sup>335</sup> See ECHO Report, <a href="https://echo.epa.gov/">https://echo.epa.gov/</a> (as Excel Spreadsheet Jan. 23, 2017, through Aug. 15, 2018).

<sup>&</sup>lt;sup>336</sup> *Id*.

<sup>&</sup>lt;sup>337</sup> *Id*.

<sup>&</sup>lt;sup>338</sup> See EPA Office of Inspector General, EPA Must Improve Oversight of State Enforcement (Dec. 9, 2011), <a href="https://www.epa.gov/sites/production/files/2015-10/documents/20111209-12-p-0113.pdf">https://www.epa.gov/sites/production/files/2015-10/documents/20111209-12-p-0113.pdf</a> (stating that EPA "does not consistently hold states accountable for meeting enforcement standards, has not set

result in adoption of IST, third party audits, or any other prevention measure even at "bad actor" facilities. EPA officials cannot unilaterally require third party auditing, STAA, response exercises, or other components of the Chemical Disaster Rule when settling an enforcement action – the facility owner must agree to all parts of a settlement. Nor do courts have power to order such specific remedies, when they are not required by the regulatory scheme. Negotiation for, and then overseeing compliance with, such agreements is also very burdensome on enforcement staff, which may lead staff to avoid such remedies in favor of fines. It is also the Commenters' understanding that EPA evaluates regional enforcement programs by the number of cases brought or resolved, and not by the types of remedies obtained – providing a further incentive not to pursue these more complex and resource intensive remedies in the majority of enforcement actions.

As noted above, only about 20 cases in the past 18 months even included SEPs that could have potentially included adoption of improved prevention measures not required by regulation. To be clear, many SEPs do not involve such measures at all. While enforcement is an essential part of assuring compliance with EPA's regulations, enforcement cannot be relied on to implement STAA, third party auditing, or any other prevention measures that EPA found important and is not a substitute for regulations that proactively require these measures.

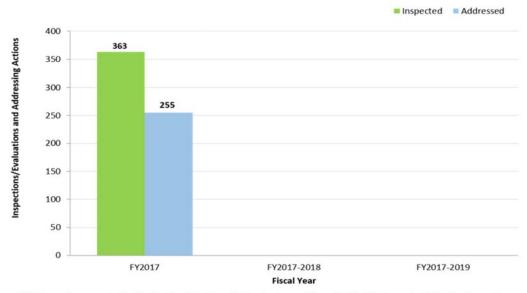
An enforcement-led approach would not proactively ensure that common-sense preventative measures are in place, but rather would be *reactive* and only come into play *after* a release or accident has already occurred and caused harm. EPA relies on its new policy direction with a focus on "regulatory burden reduction and improved net benefits" to justify an enforcement-led approach, but this is not an adequate or sufficient reason to get rid of prevention program provisions. 83 Fed. Reg. at 24,872. EPA is unjustly and arbitrarily shifting the burden from the regulated industry to both the community members that live near these facilities and are forced to shelter in place and breathe toxic air whenever a release or incident occurs and to the local governments who have to pay for emergency response and cleanup costs. When considering the public health harms, property damage, cleanup costs, and enforcement costs that occur under such an approach, changing to a reactive, enforcement-based approach actually *increases* the burden on the American public.

clear and consistent national benchmarks, and does not act effectively to curtail weak and inconsistent

enforcement by states").

124

# Cumulative Number of EPA Inspected and Addressed Facilities that Use Extremely Hazardous Substances



<sup>\*</sup>Addressed means that a facility is subject to a federal enforceable order (judicial or administrative) requiring compliance, or has been inspected and found to have no significant violations.

Source EPA. National Enforcement Initiative: Reducing Risks of Accidental Releases at Industrial and Chemical Facilities (last updated May 14, 2018), <a href="https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-risks-accidental-releases-industrial-and">https://www.epa.gov/enforcement/national-enforcement-initiative-reducing-risks-accidental-releases-industrial-and</a>.

Enforcement after the fact at a facility destroyed by a chemical incident, that may never be rebuilt, has little value for the community. Enforcement after deaths and injuries have occurred, however valuable to prevent a future similar incident, does nothing for the people already harmed. Therefore, an enforcement-led approach is completely insufficient to respond to the well-understood and documented problems in the record that show the need for prevention, not just after-the-fact action.

Without the prevention measures EPA is proposing to repeal, like the third-party audits, incident investigation requirements, reporting, and others EPA found were needed, EPA's enforcement program also does not have the information it needs to enforce effectively. The Chemical Disaster Rule was proposed hand-in-hand with EPA's enforcement initiative and would have given agency enforcement staff better tools and information to carry out their work. See, e.g., 40 C.F.R. § 68.93(c) (providing new recordkeeping requirements for coordination with response organizations); id. § 68.96(b)(3) (exercise evaluation report); id. §§ 68.60(d), (g) (new recordkeeping requirements for incident investigations and incident investigation record retention requirements for Program 2 facilities); id. § 68.81(d), (g) (same for Program 3 facilities).

EPA does not find or show that some kind of enforcement-led approach would provide protections equivalent to the prevention measures, or provide any evidence to support that. Rather, EPA recognizes it would *not* provide the full benefits and fails to show that it would provide significant prevention benefits at all, beyond a conclusory statement that has no evidentiary basis in the record. 83 Fed. Reg. at 24,873 (stating that this approach "can retain"

much benefit ... at a fraction of the cost" without providing any support or analysis of why or how this might be accurate). It could not do so, as the STAA requirements, for example, would assure prevention of harm *before* an incident occurs, not just after the fact. Similarly, the incident investigation, stronger Process Hazard Analysis root cause, near miss, and other requirements, the third-party audit, and training requirements are all measures to put in place before at least the next incident happens, to prevent it or reduce harm from it. These are the types of measures that an enforcement action might achieve, to deter future harm. Indeed, EPA itself has recently implemented just such measures as part of the remedy in an enforcement action against a fertilizer distribution company with multiple locations, MFA Incorporated and MFA Enterprises. As shown by that example, EPA itself still acknowledges these measures have value to prevent and deter future problems, even at facilities that are not in the three most serious incident sectors, as EPA has required some of the measures it now proposes to repeal at these fertilizer plants. This example also illustrates how inadequate it is for EPA to purport to rely on future potential cases like this one to correct problems rather than requiring all facilities to do so, to meet a stronger regulatory framework for prevention.

Notably, EPA does not highlight any past example of any enforcement it has done that has prevented future incidents, even though EPA has a long record of engaging in enforcement. There is no evidence, for example, of any EPA enforcement milestones for facilities listed in *A Disaster In The Making*, after they had serious incidents since early 2017, except for one – the Premco Valero Refinery, Enforcement Case No. 06-2018-3316, resulting in only a \$50,000 penalty and closed June 2018.<sup>341</sup> Unfortunately, incidents at facilities, such as Arkema and Husky Energy, that have experienced inspections or some kind of federal or state enforcement show that the enforcement of the existing regulatory framework alone has not worked; facilities need to implement the prevention measures the CSB has recommended and that EPA found are needed.<sup>342</sup> The 2017 RMP Database also includes 2686 accidents between 2004 and 2016 that occurred at facilities that had previously had safety inspections by regulators, so promises of compliance assistance offer little reassurance. RMP Database, EPA-HQ-OEM-2015-0725-0989

\_

<sup>&</sup>lt;sup>339</sup> EPA, MFA Incorporated and MFA Enterprises Incorporated, Settlement Information Sheet, <a href="https://www.epa.gov/enforcement/mfa-incorporated-and-mfa-enterprises-incorporated-settlement-information-sheet">https://www.epa.gov/enforcement/mfa-incorporated-and-mfa-enterprises-incorporated-settlement-information-sheet</a>; Consent Decree (July 2018), <a href="https://www.epa.gov/sites/production/files/2018-07/documents/mfa-cd.pdf">https://www.epa.gov/sites/production/files/2018-07/documents/mfa-cd.pdf</a>.

<sup>&</sup>lt;sup>340</sup> *Id.* (requiring, among other things, and independent third-party auditors, stronger process hazard analysis).

<sup>&</sup>lt;sup>341</sup> See Excel Spreadsheet, created from <a href="https://echo.epa.gov/facilities/enforcement-case-search/results">https://echo.epa.gov/facilities/enforcement-case-search/results</a> (using search criteria: Any; Case Lead: Federal EPA; Law Cited: Clean Air Act (CAA); Civil Section(s) cited: 112[R][7]; 112[R][1]; or 112R; milestones other than case closed, date range Jan. 23, 2017 – Aug. 15, 2018); see Civil Enforcement Case Report, No. 06-2018-3316, Premcor (Valero) Refining RMP CAFO, <a href="https://echo.epa.gov/enforcement-case-report?id=06-2018-3316">https://echo.epa.gov/enforcement-case-report?id=06-2018-3316</a>.

<sup>&</sup>lt;sup>342</sup> See, id. (listing EPA enforcement action at Arkema that was closed January 26, 2017); see also e.g., Arkema ECHO report, <a href="https://echo.epa.gov/detailed-facility-report?fid=110000463258">https://echo.epa.gov/detailed-facility-report?fid=110000463258</a> (detailing deviations and violations found during the 5 year period before the 2017 disaster, as well as, e.g., an informal enforcement action under the CAA after the April 2014 inspection); Husky Energy – Superior Refinery ECHO report, <a href="https://echo.epa.gov/detailed-facility-report?fid=110000422962">https://echo.epa.gov/detailed-facility-report?fid=110000422962</a> (2017 penalty in an EPA case for \$31,937 on Sept. 29, 2017, months before the April 26, 2018 disaster).

(querying accidents in given date range with a non-null last inspection date). There is a particularly strong need for STAA in the three sectors EPA originally found should perform STAA, precisely for the reasons EPA itself found and the CSB outlined in its prior recommendation and investigation reports on refineries.<sup>343</sup> To repeal based on enforcement, EPA must rely on data demonstrating that its proposed enforcement-led approach is likely to be sufficient to prevent and reduce future harm, rather than an approach where EPA enforces the stronger prevention measures (including IST, incident investigation, Process Hazard Analysis updates, audits, training, and more) that it found were needed to reduce deaths and injuries. EPA has not included any such analysis and the record shows the contrary. Thus, EPA's argument is arbitrary and capricious, and unsupported by the record.

The most likely outcome is that enforcement will either *decrease*, in keeping with current trends, or at most it will stay more or less the same. Yet EPA has been enforcing its RMP regulations since their inception and thousands of incidents have still occurred. Reverting to the status quo is not a reasonable alternative to the regulations EPA found were needed and is now rescinding. Without any evidence of a plan in motion that would ensure protection, EPA cannot pretend it will so dramatically increase its enforcement efforts that there is no longer a need to correct the *regulatory* deficiencies the agency previously identified.

Fourth, EPA's proposal to use enforcement instead of the prevention measures contradicts the CSB's recommendations and investigation reports which have shown that prevention updates, including IST, and the root cause and incident investigation requirements, as some examples, are needed, not just enforcement.<sup>344</sup>

Fifth, EPA's approach is unlawful and arbitrary because it would gut the ability of *states*, *workers*, *and community-members* to complement and supplement EPA's enforcement. Only EPA has the ability to enforce the Act's general duty provision, 42 U.S.C. § 7412(r), and EPA has a core governmental enforcement responsibility under the Act. *Id.* § 7413. But state and local governments and affected stakeholders can also assist in enforcing the RMP regulations, and would have the ability to help assure compliance with the Chemical Disaster Rule, once it is effective. *See*, *e.g.*, 42 U.S.C. § 7604(a). The 1990 Amendments modified the Act precisely to strengthen citizen enforcement, recognizing that this is essential to the working of the Act.

Finally, EPA's attempt to go back to enforcement-only contradicts the wealth of additional evidence in the record, including from the Chemical Safety Board, the United Steelworkers, and other experts, showing that U.S. refineries, in particular, warrant the STAA

\_\_\_

sector and for petroleum refineries).

<sup>&</sup>lt;sup>343</sup> See, e.g. Amendments RTC at 16 ("The record reflects that the likelihood of severe accidents is greater in the sectors that must conduct a STAA under the final rule .... EPA is reasonably limiting STAA requirements to sectors that we view as most likely to have more frequent, severe releases and that are most likely to benefit from a STAA."); *id.* at 99-101 (discussing regulatory need to apply STAA to three sectors chosen); *id.* at 103-04 (describing the regulatory need to require STAA for the pulp and paper

<sup>&</sup>lt;sup>344</sup> See, e.g., Amendments RTC at 21 (citing CSB reports that "suggested rule changes based on their review of specific incidents, which is consistent with the structure of CAA 112(r)(6)(C)(ii) and EPA's rulemaking authority in CAA 112(r)(7)").

requirements. For example, as the CSB testified, U.S. refineries have had damage from chemical incidents at approximately 4 times the rate of similar facilities elsewhere in the world.<sup>345</sup> Further, "[d]espite the fact that the nation's roughly 150 petroleum refineries represent only a small fraction of the thousands of industrial and chemical facilities that exist in the US, the CSB has seen a great number of serious and deadly incidents at refineries over the last decade."<sup>346</sup> A USW report after the 2005 BP Texas City Refinery disaster found that "highly hazardous conditions" were pervasive at U.S. refineries, as well as high rates of near misses showing an even greater danger for workers and community members.<sup>347</sup> That many refineries use dangerous chemicals like hydrofluoric acid, for which there are safer alternatives, only further shows the need for a *regulatory approach*, rather than an enforcement-led approach after a dangerous release has occurred.<sup>348</sup>

7. If EPA Finds National Security Risks Warrant Regulatory Action, it may not Rationally Address them only on one side of the Ledger

EPA cites national security as a risk regarding information sharing, but fails to consider this at all as a reason to require the prevention measures. *See Conservation Law Found. v. Evans*, 209 F. Supp. 2d 1, 8 (D.D.C. 2001) ("an agency rule would be arbitrary and capricious if the agency ... entirely failed to consider an important aspect of the problem" (quoting *State Farm*, 463 U.S. at 43)). EPA's failure to weigh national security concerns as a reason to retain the prevention measures of the Chemical Disaster Rule render its proposal arbitrary and capricious.

Measures that prevent and reduce the consequences of chemical disasters do so irrespective of a disaster's cause. Strengthening the Risk Management Program would protect national security by reducing the threat of a terrorism-related chemical release at covered facilities. For example, one of the safer alternatives that refineries would need to assess is the possibility of phasing out the use of hydrofluoric acid, which has been proposed in California's South Coast Air Quality Management District. Removing hydrofluoric acid from a refinery would dramatically reduce the harm if that refinery had a fire or explosion, regardless of what caused the incident. Over 1.6 million people in the Salt Lake City area where multiple

<sup>&</sup>lt;sup>345</sup> CSB Testimony at 9-10 (June 27, 2013), EPA-HQ-OEM-2015-0725-0272.

<sup>&</sup>lt;sup>346</sup> CSB, Regulatory Report Chevron Richmond Refinery, Richmond, California, August 6, 2012 at 14 (Jan. 2014), EPA-HQ-OEM-2015-0725-0263.

<sup>&</sup>lt;sup>347</sup> USW, Beyond Texas City, EPA-HW-OEM-2015-0725-0859.

<sup>&</sup>lt;sup>348</sup> USW, *A Risk Too Great: Hydrofluoric Acid in U.S. Refineries* (Apr. 2013), http://assets.usw.org/resources/hse/pdf/A-Risk-Too-Great.pdf.

<sup>&</sup>lt;sup>349</sup> Nick Green, "AQMD proposes ban on toxic hydrofluoric acid at South Bay Refineries," *Daily Breeze* (Jan 17, 2017), http://www.dailybreeze.com/government-and-politics/20170117/aqmd-proposes-ban-on-toxic-hydrofluoric-acid-at-south-bay-refineries.

<sup>&</sup>lt;sup>350</sup> See, e.g., USW, A Risk Too Great: Hydrofluoric Acid in U.S. Refineries (Apr. 2013), http://assets.usw.org/resources/hse/pdf/A-Risk-Too-Great.pdf; Jim Morris, Use of toxic acid puts millions at risk, Center for Public Integrity (Feb. 24, 2011), https://www.publicintegrity.org/2011/02/24/2118/use-toxic-acid-puts-millions-risk; EPA, Hydrogen Fluoride, https://www.epa.gov/sites/production/files/2016-

refineries currently use hydrofluoric acid are in a danger zone from a release of this highly toxic chemical right now.<sup>351</sup>

The prevention measures in EPA's Chemical Disaster Rule would apply to numerous chemical facilities around the country that pose a similar threat to the lives of civilians, workers, and first responders. Protections in the rule requiring consideration of safer alternatives in chemical use and management at some of the most dangerous industries will help prevent or reduce harm in the event of a release, regardless of cause. As NJ DEP found when implementing its own IST program, "[m]ost of the facilities that use extraordinarily hazardous substances could become less attractive terrorist targets by converting to alternative chemicals or processes identified through periodic IST reviews if feasible and practicable." 352

The same is true for the improved coordination and emergency response provisions in the Rule, which will all help reduce harm in the event a release occurs. The rule would ensure first responders are prepared to address possible incidents at covered facilities, to reduce the number of casualties, and to minimize the other consequences of disasters. If communities and first responders are not prepared to address such incidents, the potential impact can be orders of magnitude greater.

Nowhere does EPA assess the value of improved coordination and information-sharing (including facility exercises) for *protecting* national security. EPA has identified a few "past cases of security breaches or planned security breaches" at chemical facilities around the world, including a handful with some relation to U.S. facilities:

In 2015, a truck was driven into a warehouse containing chemicals in France leading to an explosion, as part of an apparent terror attack (Trager 2015). One of the 1993 World Trade Center bombers, Nidal Ayyad, worked at a New Jersey chemical company and procured chemicals to make the bomb. The Government Accountability Office cites a Justice Department finding that in the late 1990s domestic terrorists plotted an attack on a chemical facility housing large quantities of propane (Kaplan 2006). Finally, the theft of anhydrous ammonia, a key ingredient in production of the illicit drug methamphetamine, is a well know security threat at facilities that store it. These thefts have caused accidental chemical releases from the facilities. For example, siphoning activities have resulted in valves being left open. Several past examples of thefts accompanied by accidental releases are summarized in US EPA

<u>10/documents/hydrogen-fluoride.pdf</u>; EPA, Hydrogen Fluoride Study under § 112(n)(6) of the Clean Air Act, Report to Congress (attached).

<sup>&</sup>lt;sup>351</sup> *Id.* at C-2 tbl.C2; Cristina Flores, "Report says 1.6 million Utahns at risk in potential hydrofluoric acid leak," *KUTV.com* (Oct. 3, 2015), <a href="http://kutv.com/news/local/state-not-sure-whether-utah-refineries-use-hydrofluoric-acid">http://kutv.com/news/local/state-not-sure-whether-utah-refineries-use-hydrofluoric-acid</a>.

<sup>&</sup>lt;sup>352</sup> See EPA-HQ-OEM-2015-0725-0888, Attachment # 51: Mark N. Mauriello, Acting Comm'r, Dep't of Envtl. Prot., Inherently Safer Technologies Implementation Summary at 2 (Jan. 15, 2010).

2000, pp 1-3.<sup>353</sup>

Rollback RIA at 67-68. As EPA admits, these illustrate the general risk of terrorist or criminal activity at a chemical facility and have nothing to do with sharing information with first responders or LEPCs. EPA also includes in the docket a report by the Council on Foreign Relations finding that chemical facilities pose attractive targets for terrorists. Eben Kaplan, *Targets for Terrorists: Chemical Facilities*, Council on Foreign Relations (Dec. 11, 2006), EPA-HQ-OEM-2015-0725-0912. Yet the agency does not consider any of this evidence as reason to retain, rather than rescind, the prevention measures.

Additional evidence of this threat is summarized by the Congressional Research Service ("CRS") in its 2006 report on chemical facility safety. CRS Report for Congress, *Chemical Facility Security* at CRS-4 to CRS-5 (Aug. 2, 2006). For example, the CRS notes that chemical trade publications have been found in al Qaeda hideaways. *Id.* at CRS-4. As the CRS has summarized, "[f]acilities handling large amounts of potentially hazardous chemicals (i.e., chemical facilities) *might* be of interest to terrorists, either as targets for direct attacks meant to release chemicals into the community or as a source of chemicals for use elsewhere." *Id.* at Summary (emphasis added). However, CRS has explained that "few terrorist attacks have been attempted against chemical facilities in the United States, the risk of death and injury in the near future is estimated to be low, relative to the likelihood of accidents at such facilities or attacks on other targets using conventional weapons." *Id.* 

In recent years, and in view of cyber attacks on the U.S. election system and threats to U.S. energy facilities, other federal agencies have highlighted the importance of preventing cyber-terrorism.<sup>355</sup> EPA's proposal does nothing to address or reduce those threats, nor does EPA explain how *rescinding* the prevention measures, including STAA, would do anything but worsen the impact that such a threat would have, if carried out. Using STAA and comprehensive auditing and incident investigation to preemptively identify and eliminate vulnerabilities is essential for protecting communities from such attacks.

All of this evidence shows only the urgency of *strengthening* protections at covered facilities to reduce and mitigate the already existing threat of terror activities. Yet EPA considers it only for the purposes of rescinding information sharing provisions – something it does not even support, as discussed below. EPA's failure to weigh this evidence in favor of increasing, or at least maintaining, prevention measures from the Chemical Disaster Rule is arbitrary and capricious. It is also evidence that EPA is just looking for evidence to support the conclusions it wants (rescission of the Chemical Disaster Rule), and is not considering the evidence even-

<sup>&</sup>lt;sup>353</sup> EPA, *Anhydrous Ammonia Theft*, EPA-F-00-005 (March 2000), https://www.epa.gov/sites/production/files/2013-11/documents/csalert.pdf.

<sup>354</sup> https://fas.org/sgp/crs/homesec/RL31530.pdf.

<sup>&</sup>lt;sup>355</sup> See, e.g., U.S. Dep't of Justice, Report of the Attorney General's Cyber Digital Task Force at 35 (July 2018), <a href="https://www.justice.gov/ag/page/file/1076696/download">https://www.justice.gov/ag/page/file/1076696/download</a> (citing US Computer Emergency Readiness Team (US-CERT), Alert, TA18-074A, Russian Government Cyber Activity Targeting Energy and Other Critical Infrastructure Sectors (Mar. 15, 2018), <a href="https://www.us-cert.gov/ncas/alerts/TA18-074A">https://www.us-cert.gov/ncas/alerts/TA18-074A</a>).

handedly or in an effort to simply improve disaster prevention.

8. EPA's own Analysis Supports Keeping and Strengthening Incident Investigations and Auditing Requirements.

EPA "requests public comment on whether a third-party audit or root-cause analysis should be required under certain well-defined regulatory criteria," such as "requiring audits following multiple RMP-reportable accidents, or multiple regulatory violations of a particular gravity," or requiring root-cause analyses "following incidents exceeding specified severity levels." 83 Fed. Reg. at 24,872. That EPA says up front "it is not our intent at this time to adopt such provisions" shows that the agency is looking at its Risk Management Program with a one-sided perspective. *Id.* No matter what evidence is presented, the agency will consider only rescinding or weakening the current requirements.

In fact, EPA itself states studies show "a history of past accidents is a strong predictor of future accidents." *Id.* (citing Kleindorfer et al., *Accident Epidemiology and the U.S. Chemical Industry: Accident History and Worst-Case Data from RMP\*Info*, RISK ANALYSIS Vol.23, No. 5, at 865–881, 872 tbl.IV (2003);<sup>356</sup> *see also* 83 Fed. Reg. at 24,872 (citing industry data on repeat-offenders). A conditional probability calculation based on the data in EPA's 2004-2013 accident spreadsheet confirms that facilities that have had even one accident are *significantly* more likely to have a second one. *See* 2004-13 Accident Data Spreadsheet, EPA-HQ-OEM-2015-0725-0002.

These findings show the importance of retaining all of the improved investigation requirements for two reasons. First, under the pre-existing Risk Management Program, these studies and data show that facilities are not learning from their mistakes. Second, these data show that facilities that experience one problem are likely to experience more without regulatory intervention. Further, as the costs of these requirements are triggered only in response to RMP releases, EPA cannot seriously argue that these costs are unwarranted or unreasonable.

EPA also reiterated its support for third party auditing and investigation requirements during back-and-forth with OMB. When OMB asked EPA to adopt CSAG's conclusion "that having a reportable release does not mean that the facility has a systemic issue," EPA responded as follows:

EPA does not support adding this statement as it could incorrectly imply that EPA does not believe that reportable accidents may require further investigating and auditing. Many accidents usually have several causes which can be attributed to deficiencies in process safety management systems. Systemic safety issues are normally determined from doing an investigation of an incident or an audit, and not solely on the severity of the reportable release. Also, the CSAG point is weak analytically. One audits to determine whether there is a weakness in a system; one does not audit only if there is an already-determined systemic issue. It can be true that an

<sup>356</sup> https://pdfs.semanticscholar.org/f0c9/f27d670a6ea77187aeb3f78ca0ced444db8b.pdf.

audit is called for even if it ultimately does not turn up a systemic issue.

Interagency Review Communications Between OMB and EPA - Email from Gerain Cogliano of EPA to OMB (page 12 of attached table) (Apr. 12, 2018), EPA-HQ-OEM-2015-0725-0899.

The higher likelihood of future accidents at facilities that have experienced a past accident makes it especially important to investigate accidents thoroughly and to trigger steps like third party auditing after a facility has an accident – to ensure that whatever conditions allowed the first one to happen do not allow further accidents to occur.

## D. <u>EPA Must Not Weaken or Further Delay Emergency Coordination and</u> Information-Sharing Provisions

EPA's primary rationales for weakening the emergency coordination provisions are alleged national security concerns and costs. EPA also questions whether the West, Texas finding justifies weakening coordination requirements, although it specifically finds in the record that the West Fertilizer incident only *supports* these requirements, contrary to Reconsideration Petitioners' contentions to the contrary.

## 1. Weakening the Emergency Coordination Provisions Violates the Clean Air Act

As discussed above, § 112(r)(7) of the Clean Air Act requires any rule promulgated under its authority to address certain factors. As EPA admitted, the "emergency coordination and exercises provisions in" the Chemical Disaster Rule "modify existing provisions that provide for 'response to such release by the owners or operators of the sources of such releases' ([Clean Air Act] section 112(r)(7)(B)(i))." 82 Fed. Reg. at 4600. Specifically, § 7412(r)(7)(B) requires that EPA's "regulations shall include procedures and measures for emergency response after an accidental release of a regulated substance in order to protect human health and the environment." 42 U.S.C. § 7412(r)(7)(B)(i). EPA is also authorized to act pursuant to § 7412(r)(7)(A) "to prevent accidental releases of regulated substances." *Id.* § 7412(r)(7)(A).

EPA's proposal to restrict first responders' information access and to further delay the coordination requirements contravenes these statutory requirements. EPA fails to show how its proposed rule fulfills the required statutory objectives and factors, or, indeed, does anything other than undercut them.

EPA determined that its pre-existing regulations were failing to protect human health and the environment and did not adequately provide for "response to such releases." See, e.g., 82 Fed. Reg. at 4599 ("a number of ... incidents have demonstrated a significant risk to the safety of American workers and communities."). All of EPA's original findings regarding the coordination requirements remain facts in the record, as EPA has acknowledged them and in many instances even reiterated them. For example, EPA stated that "during facility inspections, EPA has often found that facilities either are not included in the community emergency plan or have not properly coordinated response actions with local authorities." 81 Fed. Reg. at 13,671. "EPA's findings" also "indicate[d] that many regulated sources have not provided for an

adequate emergency response." 81 Fed. Reg. at 13,672. By further delaying coordination, EPA is directly contradicting these findings and failing to satisfy the statutory requirements of § 112(r)(7).

Similarly, when adopting the increased information sharing provision that applies to first responders, EPA reasoned that "it is very important to ensure that LEPCs or local emergency response officials have the chemical information necessary for developing local emergency response plans." Amendments RTC at 195. In developing the Chemical Disaster Rule, EPA found that, "[t]hroughout the many public meetings and outreach efforts related to Executive Order 13650, LEPCs, first responders, and members of the public stated that chemical facility information and data-sharing efforts need significant improvement." 81 Fed. Reg. at 13,677. LEPCs and first responders stated they "want to have access to the most relevant chemical hazard and risk information for their needs, in a user-friendly format, to better support planning and preparedness efforts." *Id.* By rescinding the information-sharing provisions of the Chemical Disaster Rule, EPA is again contradicting the record and failing to satisfy the statutory requirements of § 112(r)(7).

EPA proposes to alternatively adopt language for sharing information with first responders that mirrors the Emergency Planning and Community Right-to-Know Act's ("EPCRA") requirements. The new regulation would require facilities to share with responders "other information necessary for developing and implementing the local emergency response plan." 83 Fed. Reg. at 24,853. This language would deny to first responders additional information "relevant" to their planning activities that they cannot already receive pursuant to EPCRA. More-informed first responders make for safer communities as the CSB and first-responder organizations themselves have explained. Moreover, EPA's proposed alternative would fail to address the findings EPA made when developing the Chemical Disaster Rule. Even with EPCRA in place, LEPCs and first responders told EPA that "chemical facility information and data-sharing efforts need significant improvement" and asked for more information to be made available so they could do their jobs. 81 Fed. Reg. at 13,677.

Finally, EPA also found that "[e]xercising an emergency response plan is critical to ensure that response personnel understand their roles, that local emergency responders are familiar with the hazards at the facility, and that the emergency response plan is appropriate and up-to-date." 81 Fed. Reg. at 13,674. EPA specifically found "[p]oor emergency response procedures during some recent accidents have highlighted the need for facilities to conduct periodic emergency response exercises." *Id.* EPA cited a number of concrete examples in support of this finding. *Id.* at 13,674-75. Weakening or rescinding the exercise requirements would similarly contradict the record and violate the statute's requirement that EPA provide for adequate emergency responses.

- 2. EPA's Concerns About National Security Risks are not a Lawful or Rational Ground to Weaken the Coordination Requirements.
  - a. EPA is Weakening Emergency Coordination Based Primarily on its "National Security Risks" Rationale

EPA's proposed changes to the coordination and information-sharing requirements

(including those that apply to first response organizations and to community members) are based on what EPA describes as "security concerns." 83 Fed. Reg. 24,865. EPA states that it finds meritorious the concerns raised by petitioners for reconsideration regarding potential risks from the "open-ended" nature of § 68.93's provision allowing responders to request "any other information that local emergency planning and response organizations identify as relevant to local emergency response planning." *Id.* at 24,866. But this is still not based on any evidence or rational determination, and thus, it is just as arbitrary as the D.C. Circuit found in vacating the Delay Rule in *Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018). EPA speculates that there was a risk that "EPA may have inadvertently opened the door to local emergency officials requesting and receiving security-sensitive information even beyond the specific items included in § 68.205 of the proposed RMP Amendments about which petitioners and others had raised concerns" during notice and comment on the proposed Chemical Disaster Rule. 83 Fed. Reg. at 24,866. EPA also notes that "by locating the final rule's local responder information availability provision in § 68.93, EPA removed any protections for CBI." *Id.* 

EPA concedes that the protections for classified information in § 68.210(f) "would ... apply to all provisions of the RMP rule, including disclosures under § 68.93(b)." *Id.* EPA does not explain why this protection is insufficient to address security concerns. Nevertheless, EPA proposes to "replicate the classified information provisions of § 68.210(f) of the final RMP Amendments rule in § 68.93" to ensure security of such information. *Id.* EPA does not explain why this fix is not alone sufficient to alleviate the agency's concerns about first responders handling sensitive information.

Finally, EPA also proposes to change the specific RMP reporting requirements in § 68.180(a)(1) based on security concerns. The proposed changes would reduce the amount of emergency response organizations' contact information included in Risk Management Plans. EPA states this change "could help avoid criminals or terrorists targeting individual emergency responders through identifying them using the publicly available portions of facility's RMPs." *Id.* at 24,868.

b. EPA's National Security Risks Rationale is Unfounded and not Based on any Specific Evidence Showing a Need to Weaken the Emergency Response Coordination Requirements.

EPA still has provided no evidence that sharing information with first responders or emergency response organizations poses a security risk. EPA's proposal to act without any evidence, based only on speculation about a hypothetical risk, is arbitrary and capricious. *Horsehead Res. Dev. Co. v. Browner*, 16 F.3d 1246, 1269 (D.C. Cir. 1994) ("speculation is an inadequate replacement for the agency's duty to undertake an examination of the relevant data and reasoned analysis"); *see also Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018).

The evidence of security and crime risks that EPA does cite is not specific in any way to the changes to the emergency coordination requirements that EPA proposes – not one of the incidents EPA mentions involved a first responder or LEPC member. Furthermore, *all* of the events EPA cites occurred under pre-existing Risk Management Program regulations. Not one was due to information sharing with first response organizations similar to what that rule would

require.

On the other hand, EPA's evidence does support that chemical facilities may in general be targets for terrorist or criminal activity. EPA itself acknowledges, that its examples illustrate general security risks at chemical facilities, "not necessarily risks posed by information disclosure" or any other part of the Chemical Disaster Rule that EPA proposes to rescind. But this supports *increased* information sharing. Rollback RIA at 68. As EPA found, if a disaster occurs, there is a clear benefit to ensuring first-responders will be prepared to protect people most effectively. Without any evidence that hiding this information will actually help protect people, EPA is taking away a critical tool that first responders will need when responding to such events.

Additionally, EPA is not acting based on information from DHS or any other national security agency or expert body suggesting that sharing information with first responders poses a threat that would outweigh the benefits of better coordination. When OMB asked to include a statement that DHS had "repeatedly" raised concerns, EPA declined and stated "EPA reviewed all of the handouts on the Reginfo website for the EO 12866 meetings on the proposed and final Amendments rules, and did not see anything indicating that DHS had raised 'repeated' concerns." Summary of Interagency Working Comments on Draft Language under EO12866/13563 Interagency Review at ¶ 4 (Apr. 12, 2018), EPA-HQ-OEM-2015-0725-0899.

EPA is acting primarily based on *industry's* concerns about national security. But EPA fails to consider the possibility that industry may use national security as an excuse to hide information that would lead to bad publicity or allow for public debate regarding their safety practices. Industry has provided EPA with no actual evidence of a national security threat from sharing information with communities or with first responders, as shown by the paucity of evidence in the record. On the other hand, there is concrete evidence that industry has previously used national security to shield bad practices from public scrutiny. For example, Bayer "admitted that it began using [the Sensitive Security Information (SSI)] label in part to prevent negative publicity and stymie public debate about the safety of its processes" during a 2008 CSB investigation. Hearing Before The Subcommittee On Oversight And Investigations Of The Committee On Energy And Commerce, House Of Representatives, No. 111-28, at 3 (Apr. 21, 2009) (statement of Rep. Stupak).<sup>357</sup> As explained in Congressional testimony on the issue:

William Buckner, the president and CEO of Bayer CropScience, says in his written testimony for today's hearing that Bayer invoked SSI out of "a desire to limit negative publicity, generally, about the company or the Institute facility to avoid public pressure to reduce the volume of MIC that is produced and stored at the Institute by changing to alternative technologies." [In] [o]ne document Bayer produced to the subcommittee, company counsel instructed that the assertion of sensitive security information should be liberal and should strike any references to any piece of equipment, piping or document involving MIC or chlorine, a process that resulted in the marking of thousands of pages of documents.

Id.

<sup>357</sup> https://www.gpo.gov/fdsys/pkg/CHRG-111hhrg67825/pdf/CHRG-111hhrg67825.pdf.

It is arbitrary and capricious for EPA to give undue weight to industry's unsupported statements, especially when there is no evidence from any expert national security body. To the contrary, national security experts in the record have submitted multiple comments supporting the Chemical Disaster Rule, including its information-sharing provisions. *See*, *e.g.*, Comment Submitted by Russel L. Honor et al. (Apr. 27, 2017), EPA-HQ-OEM-2015-0725-0778; Hrg. Transcript, Testimony of David Halperin at 46 *et seq.* (Apr. 19, 2017), EPA-HQ-OEM-2015-0725-0798.

EPA previously considered and rejected all of the concerns raised regarding informationsharing and national security. *See* Amendments RTC at 195-96, 199-200, 247-48 (rejecting security risk allegations); *id.* at 247-48 (rejecting idea that rulemaking should be suspended because of Bureau's report on the West, Texas explosion).

EPA may revisit those conclusions, but regulation based on hypothetical what-ifs is not reasoned decisionmaking – EPA needs to actually consider its prior findings, look at the evidence before it, and "cogently explain why it has exercised its discretion in a given manner." *Steed*, 733 F.2d at 98. EPA has provided no evidence that an actual threat exists based on the information-sharing provisions of the Chemical Disaster Rule. It certainly has not shown that the threat outweighs the benefits of sharing more information with responders.

Rather, as emergency officials stated in the record, "fire departments [and] law enforcement agencies ... are very familiar with how to handle sensitive information." 2017 Pub. Hrg. Tr. at 13, Gablehouse Testimony, EPA-HQ-OEM-2014-0725-0798. EPA ignores that the Department of Homeland Security ("DHS") has emphasized the importance of strengthening information sharing with first responders to better prepare for terror events. See DHS, Chemical Facility Anti-Terrorism Standards: The Role of Emergency Responders (June 2017) ("Including first responders when developing an emergency plan and conducting exercises establishes relationships, improves the responders' understanding of the facility's layout, and enables both the facility and local law enforcement to take quick and decisive action in the case of an event.")<sup>358</sup> DHS has also emphasized the importance of enhanced training at facilities covered by its Chemical Facility Anti-Terrorisms Standards ("CFATS") regulations. See id. ("Security plans for CFATS-covered facilities must address not only cyber and physical security measures, but also training, standard operating procedures, and response capabilities."). DHS recognizes that "[w]hile the majority of information needed by emergency responders is not [Chemical Vulnerability Information ("CVI")], certain situations may arise where CFATS-covered facilities would need to share some CVI with emergency responders." Id. DHS provides trainings for emergency responders who need access to such information. Id.; see also DHS, CVI Authorized User Training (last updated Aug. 14, 2018), https://www.dhs.gov/cvi-authorized-user-training. Depriving first responders of this information jeopardizes their safety and impairs their ability to keep communities and facilities safe.

To the extent EPA has real concerns about security, EPA fails to consider ways to better protect national security while still ensuring that response organizations have the information they need. For example, EPA could require response organizations take the DHS CVI training

<sup>358</sup> https://content.govdelivery.com/attachments/USDHSCIKR/2017/11/15/file\_attachments/913703/CFAT S\_Emergency%2BResponders.pdf.

mentioned above before receiving information. Hiding critical information from first responders creates more problems than it solves.

3. EPA's Proposal to Weaken Emergency Coordination Requirements is Arbitrary and Capricious.

First, as discussed above, EPA's proposal to rescind and weaken emergency coordination requirements is at odds with EPA's own record. Because EPA contradicts its prior fact-findings, a "more detailed" rationale is needed to justify the agency's change of heart. *Fox*, 556 U.S. at 515. But EPA fails even under the *State Farm* standard, because it does not even acknowledge many of these prior determinations or facts. EPA has failed to draw a "rational connection between the facts found and the choice made." *State Farm*, 463 U.S. at 43.

EPA's proposed weakening of emergency coordination requirements is also contrary to guidance from the U.S. Fire Association, which has emphasized the importance of facility exercises and preparedness. *See, e.g.*, U.S. Fire Administration, InfoGram: Preparing for and responding to chemical threats (Nov. 16, 2017) ("Chemical threats are one of the most deadly faced by first responders. Your department should know the chemicals used by industries in your jurisdiction, the dangers they pose, the layout of the facilities and you should run regular drills and exercises to prepare for accidents, fires, spills or man-made threats."). GAO has also encouraged "bolster[ing] chemical information sharing between facilities and communities," and has stated its "biggest concern from the safety perspective" is whether "first responders ... have access to everything that is at [the] facility." Rebecca Rainey, "As RMP Rollback Looms, GAO Raises Concerns Over Chemical Data Sharing," *Inside EPA* (June 13, 2018), <a href="https://insideepa.com/daily-news/rmp-rollback-looms-gao-raises-concerns-over-chemical-data-sharing">https://insideepa.com/daily-news/rmp-rollback-looms-gao-raises-concerns-over-chemical-data-sharing</a> (quoting Christopher Currie, director of the homeland security and justice team at GAO).

EPA even contradicts its own contemporaneous statements by proposing to restrict information that first-responders will be able to request. When Tribes asked whether "not having the chemical hazard information as readily available preclude local emergency planners from obtaining this information," EPA responded that "[t]he [proposed] rule is meant to make it *easier* to the local authorities to get chemical emergency information." RMP Reconsideration Rule Tribal Consultation Calls at 2 (June 25 and 26, 2018), EPA-HQ-OEM-2015-0725-0982 (emphasis added). But EPA is plainly proposing to make it *harder* for authorities to get information by rescinding regulatory language that would let them request "information that local emergency planning and response organizations identify as relevant to local emergency response planning" from 40 C.F.R. § 68.93. 83 Fed. Reg. at 24,859.

Second, it is arbitrary and capricious to weaken the exercise requirements based on cost. EPA claims it "is not certain that it properly assessed the actual demands of these provisions or the increased burden on LEPCs in the final rule." *Id.* at 24,874. In response to the petitions for review, EPA says it now "agrees that these provisions, and particularly the emergency exercise provisions, would place substantial burdens on regulated facilities and local responders." *Id.* EPA "believes that any of" the alternatives it proposes in the Rollback Rule "would reduce the regulatory burden on both facilities and local responders." *Id.* But EPA's analysis shows that its

<sup>359</sup> https://www.usfa.fema.gov/operations/infograms/111617.html.

main proposal for weakening exercise requirements would yield *zero* cost savings. *See* Rollback RIA at 48-49 ("EPA is assuming no cost savings associated with these proposed changes.").

EPA "continues to believe that it is important to prepare an evaluation report for each exercise in order to identify lessons learned and share results with others involved in responding to releases, the Agency believes it may be reasonable to allow owners and operators discretion on the contents of the report." 83 Fed. Reg. at 24,874. Weakening a requirement that the agency found had concrete benefits, without citing any benefits from the change, is arbitrary and capricious. All EPA claims is that the change will increase flexibility, but if this flexibility increase is so small that it produces zero cost savings then it can hardly justify weakening the rule (even if EPA could consider and rely on costs, which is not lawful, as discussed earlier in these comments).

To be clear, EPA's alternative proposal to fully rescind the exercise requirements is even more arbitrary. As discussed above, removing (or weakening) these provisions is at odds with EPA's record findings and violates the statutory mandate to provide for adequate responses to chemical disasters.

4. The Coordination & Exercise Requirements are not an "Unfunded Mandate"

EPA seeks comment regarding the argument of Reconsideration Petitioner States and the Chemical Safety Advocacy Group (an industry association) that the emergency response coordination and exercise requirements are "unfunded mandates." 83 Fed. Reg. at 24,877. By failing to subject the agency's own findings on this to notice and comment, EPA renders any final action based on this rationale unlawful. If EPA wishes to act based on this rationale, it will need to issue a new proposal and take comment as required by the Clean Air Act. *See*, *e.g.*, 42 U.S.C. § 7607(d)(3)-(6), (h).

In this notice, EPA is not proposing to change its prior view that the Chemical Disaster Rule does not contain any such mandate, nor does EPA propose to find any unfunded mandate concerns regarding the parts of that rule that EPA proposes to retain in the Rollback Rule. Commenters support EPA's recognition that EPA should retain the emergency response coordination and exercise requirements (although as discussed elsewhere, Commenters oppose the proposals to weaken and delay them). EPA cannot and should not determine that there is any unfunded mandate problem with retaining these provisions. Nor should EPA change its determination that there was no such problem with the Chemical Disaster Rule.

For the Chemical Disaster Rule, which EPA anticipated could in total cost \$100 million to the private sector in one year, EPA performed the process and assessment required, and created the written statement required by the Unfunded Mandates Reform Act ("UMRA"). *See, e.g.*, Amendments RTC at 165-67, 185-86, 238; Amendments RIA at 128, 136-139 (app. C).

As EPA states, these "same objections were raised" during the comment period for the Chemical Disaster Rule, and EPA previously responded to the comments, and then found no concerns with unfunded mandates in finalizing the final Chemical Disaster Rule. 83 Fed. Reg. at 24,877 (citing Amendments RTC, EPA-HQ-OEM-2015-0725-0729). EPA does not suggest that

it is changing its prior conclusion and it could not, because there is no valid basis for the unfunded mandates argument regarding the emergency response coordination or exercise requirements. To change such a determination, EPA would have to acknowledge the change and provide the requisite explanation, here a "more detailed" one, due to the fact that it would contradict EPA's prior fact-finding on this issue. *See, e.g., Fox,* 556 U.S. at 515; *see also State Farm,* 463 U.S. at 42.

Rather, as EPA properly states in the proposed Rollback Rule: "This action does not contain any unfunded mandate as described in UMRA [the Unfunded Mandates Reform Act], 2 U.S.C. 1531-1538, and does not significantly or uniquely affect small governments. The action imposes no enforceable duty on any state, local, or tribal governments or the private sector." 83 Fed. Reg. at 24,880. The record supports that determination.

First, there is no mandate for first-responders in the original final rule or in the proposed Rollback Rule. Rather, as EPA found originally: "The final rule will not require local responders to participate in exercises or exercise planning." Amendments RTC at 185. The only mandate applies to facilities. See 40 C.F.R. § 68.93. <sup>360</sup> EPA found, and the record shows, that first-responders are likely to participate and that LEPCs generally support the emergency response coordination requirement to assure they can request information they need, and that facilities engage in emergency planning, for similar reasons that EPA and the CSB have found these are likely to help reduce and prevent harm to public health and safety. See, e.g., Gablehouse Testimony, 2018 Public Hearing Tr. at 23-27 (June 14, 2018), EPA-HQ-OEM-2015-0725-0985; Gablehouse Testimony, 2017 Delay Rule Hearing (Apr. 19, 2017), EPA-HQ-OEM-2015-0725-0798; Comment submitted by Harold A. Schaitberger, General President, International Association of Fire Fighters (IAFF) (May 19, 2017), EPA-HQ-OEM-2015-0725-0834; see also supra Pt. III.B.2 (describing CSB recommendations on emergency response coordination); supra Pt. III.B.2 (describing EPA findings that these provisions are necessary).

Second, there is no requirement for first-responders to incur costs in a way that might otherwise qualify as an unfunded mandate. The Unfunded Mandates Reform Act requires agencies, unless prohibited by law, to conduct a cost-benefit analysis of any rulemaking that may impose a net cost of \$100 million or more for state, local, and tribal governments, in the aggregate, or the private sector in any one year. 2 U.S.C. § 1532. No petitioner has provided evidence showing that the coordination and exercise requirements in the Chemical Disaster Rule or the proposed rollback provisions – even if they included an LEPC mandate – would impose

\_

<sup>&</sup>lt;sup>360</sup> As EPA explained, "while the final [Chemical Disaster Rule] will require the owner or operator to coordinate with local public responders to establish field and tabletop exercise frequencies and plan exercises, and invite local emergency responders to participate in exercises, the final rule will not require local responders to participate in any of these activities." Amendments RTC at 185. EPA further explained that if a local responder needed to limit its participation in exercises "because of limitations on their available time and resources," or was "unable or unwilling to participate in these activities," then the regulatory requirement would still apply to ensure that, at least, "the owner or operator unilaterally establish appropriate exercise frequencies and plans, and if necessary hold exercises without the participation of local responders." *Id*.

such a net cost on these governmental entities or on local emergency response planning committees or organizations.

Instead, according to EPA, the Chemical Disaster Rule's initial and annual cost (not just for exercises and coordination) was far less than that, and the cost of the proposed rollback rule which would retain these provisions is less than \$900,000, with most of that falling on the facilities, and thus are not costs that LEPCs involved in coordination or exercises would incur (if they voluntarily participate). *See, e.g.*, Rollback RIA at 60 (total annual cost of proposed rule is \$762,000-891,000; total "averted" annual costs from original Chemical Disaster Rule are estimated at \$88.6-89.3 million, with none of those connected to emergency response coordination or exercises); *see also* Amendments RTC at 238 ("EPA *disagrees that this final rule will add to the burden* to LEPCs and local emergency response organizations.") (emphasis added); *id.* at 167 ("EPA notes that the final rule's emergency response coordination requirements are intended to be a straightforward information exchange for both regulated sources and local response organizations, and therefore *should not be highly burdensome* for either party. Also, the regulatory requirements for coordination will be placed on the owner or operator, rather than local emergency planning and response organizations.") (emphasis added).<sup>361</sup>

## E. EPA Should Not Weaken or Rescind Community Informational Provisions

1. EPA's Rationale for Rescinding Community Information Access is Arbitrary and Capricious.

EPA also cites "security concerns" as a reason to rescind the community information access requirements in § 68.210. EPA notes that petitioners for reconsideration "remain concerned about the potential for the information made available under § 68.210 of the RMP Amendments rule to be used by criminals or terrorists to target facilities for attack." 83 Fed. Reg. at 24,867.

EPA also says it is now "considering ... whether the synthesis of the required information disclosure elements could create an additional security risk for facilities." *Id.* EPA now "believes that the synthesis of the required chemical hazard and facility information may present a more comprehensive picture of the vulnerabilities of a facility than would be apparent from any individual element, and that therefore requiring it to be made more easily available to the public from a single source (i.e., the facility itself) could increase the risk of a terrorist attack on some

regulation would require them to incur significant costs that they do not wish to expend to fulfill their independent local public health and safety obligations.

<sup>&</sup>lt;sup>361</sup> Originally, EPA found the cost to LEPCs for rule familiarization (a one-time cost) was far less – \$665,037. Amendments RIA at 53. EPA found that the time for their voluntary participation in information review and exercises would "generally require less than 8 hours of any participant's time or considerably less than one percent of any person's annual working hours," and that "[r]eviewing information disclosed would take only one to four hours per facility," and this "would not impose significant costs" unless the same entity had a substantial number of RMP facilities. Amendments RIA at 105. No entity with a substantial number of such facilities has presented information showing that the

facilities." Id. EPA cites no evidence to support this theory.

When it adopted the community information access requirements, EPA reasoned that "increased public information" would "help[] to minimize the impacts of accidents on the offsite public" and "may also lead to more efficient property markets in areas near RMP facilities." Amendments RIA at 73. EPA believed that "providing this notification to the general public would allow people that live or work near a regulated facility to gather the information they need to improve their awareness of risks to the community and to prepare to protect themselves in the event of an accidental release." 82 Fed. Reg. at 4670. EPA also found that "[h]aving the source provide the information set out in § 68.210 directly to the public promotes accident prevention by facilitating public participation at the local level." *Id.* at 4668.

As a representative of the National Association of SARA Title III Program Officials ("NASTTPO") put it during EPA's hearing on the Rollback Rule, "the entire community is responsible for preparedness to deal with incidents." EPA, Written Transcript of Public Hearing on Risk Management Program (RMP) Reconsideration Proposed Rule at 25 (June 14, 2018), EPA-HQ-OEM-2015-0725-0985. The "entire community needs to understand the capabilities, and more importantly, they need to understand the risks that are present in the community and the implications of those risks to the ability of the community to prepare itself." *Id*.

This is consistent with guidance from the Federal Emergency Management Agency ("FEMA"). FEMA has explained that "[r]esidents and all sectors of the community have a critical role and shared responsibility to take appropriate actions to protect themselves, their families and organizations, and their properties" during emergencies. FEMA, *Comprehensive Preparedness Guide (CPG) 101* at 1-1 (Nov. 2010).<sup>362</sup> FEMA guidance states that "[p]lanning must be community-based, representing the whole population and its needs." *Id*.

EPA's proposal to rescind the community information-sharing provisions is arbitrary and capricious because it is unsupported by the facts before the agency and because it contradicts the agency's prior findings. EPA has no evidence that the "synthesis" of information it describes poses any kind of a security threat. Further, in proposing to rescind these provisions, EPA does not account for the benefits it previously identified from sharing more information with the public.

2. EPA's Assertion that These Provisions are Redundant or have no Benefit is Mistaken

The community information provision is essential for many communities around the country that have inadequate information about the threats in their own backyards. For many fenceline communities, the greatest threats are the ones they cannot see or hear – toxic air pollutants that escape during accidental releases and "near miss" events. The community information provision in § 68.210 would help assure that community members could become

\_

https://www.fema.gov/media-library-data/20130726-1828-25045-0014/cpg\_101\_comprehensive\_preparedness\_guide\_developing\_and\_maintaining\_emergency\_operations\_plans\_2010.pdf.

aware of what threats they face, to prepare and protect themselves.

Often, community members are not even told when they are exposed to toxic air pollution as the result of a release – much less what the ongoing risks and threats they face are. If they ever find out, it is years later when an EPA enforcement action is settled and a press release is published about a particular event.

EPA says it is reassessing the benefits and costs of the information availability provision designed to facilitate community awareness and access. EPA now asserts it "overlooked the apparent redundancy of requiring the public to obtain a facility's RMP in order to find out how to request the information authorized for disclosure under § 68.210(b)." 83 Fed. Reg. at 24,874. EPA argues that members of the public would "need to access the facility's RMP submission to determine how to obtain the" information, and that the RMP submission itself contains much of that information already. *Id.* at 24,873. EPA states information available under § 68.210 but not in the RMP submission can be obtained using EPCRA.

EPA admits that the Chemical Disaster Rule "required the regulated facility to provide ongoing notification on a company website, social media platforms, or through other publicly accessible means for instructions on how to request the information" available under § 68.210. *Id.* Nevertheless, EPA argues that because of this "redundancy," and because some of the information may be available through EPCRA, "EPA now believes that the additional burden for facilities to provide these information elements directly to the public is not justified and that these provisions are good candidates for rescission to further the policies reflected in Executive Orders 13771 and 13777." *Id.* at 24,873-74.

EPA's rationale is arbitrary and capricious. EPA required that regulated entities "provide ongoing notification on a company Web site, social media platforms, or through other publicly accessible means" for instructions on how to request the information, specifically so that it would be easy for communities to find this information. 82 Fed. Reg. at 4705. The purpose of this provision was "to ensur[e] that chemical hazard information is available to the public in an easily accessible manner." *Id.* at 4670. The idea that a community member would need to access a facility's Risk Management Plan to figure out where to find this information on a companies' website is absurd and runs contrary to the entire point of the provision.

EPA also suggests that the community information provision is redundant because community members can access information about nearby facilities through their LEPC or through a federal reading room. In practice, neither of these avenues is a reliable alternative. Federal reading rooms are sometimes hundreds of miles away from fenceline communities. EPA, Federal Reading Rooms for Risk Management Plans (RMP) (Dec. 27, 2016), EPA-HQ-OEM-2015-0725-0925, <a href="https://www.epa.gov/rmp/federal-reading-rooms-risk-management-plans-rmp">https://www.epa.gov/rmp/federal-reading-rooms-risk-management-plans-rmp</a>,. For example, the only reading room in Texas is in Dallas, which is hours away from Houston, Port Arthur, and other highly-industrialized areas along the ship channel where the need for this information is especially high. Reading rooms can also be difficult to work with, and community members can require expert assistance to make appointments and identify the facility ID numbers needed to request information. For example, one commenter was asked by a reading room for the specific EPAFacilityID number used to identify facilities they were interested in (*i.e.*, the identifying key from the Risk Management Program database).

LEPCs are also an ineffective means for communities to request information. For a number of communities, LEPCs feel entirely absent. No one is aware of any emergency plan, there have never been exercises or instructions on how to handle a major release, there is no public alert system in place, and no one knows who they would need to contact to request information or how to do that.

Even where they do exist, many LEPCs have no information on their websites about how to request information. *See, e.g.*, Galena Park LEPC, <a href="http://gparklepc.wixsite.com/galena-parklepc">http://gparklepc.wixsite.com/galena-parklepc</a>; Deer Park LEPC, <a href="http://deerparklepc.org">http://deerparklepc.org</a>. Additionally, LEPCs can also be difficult to work with, and some community groups have found that they appear to distance themselves from community groups due to local politics and other times they can be simply obtuse or inaccessible. Some community members have experienced LEPCs refusing to share information, citing security concerns.

In some places, LEPCs delegate responsibility for responding to public information requests to even smaller local entities, which can vary even more in terms of reliability and accessibility of information. *See, e.g.*, California Unified Program Regulatory Directory, <a href="http://cersapps.calepa.ca.gov/Public/Directory">http://cersapps.calepa.ca.gov/Public/Directory</a> (many Certified Unified Program Agencies do not appear to have websites at all; others have limited office hours). Elsewhere, LEPCs rely on the state public information law to handle information requests – and typically such requests have fees attached. *See, e.g.*, Louisiana LEPC Handbook at 54, <a href="http://gohsep.la.gov/Portals/0/Documents/Publications/WebLEPC Handbook Layout\_v75\_01-30-15\_915a.pdf">http://gohsep.la.gov/Portals/0/Documents/Publications/WebLEPC Handbook Layout\_v75\_01-30-15\_915a.pdf</a> (requiring written requests for Tier II information); Tex. Comm'n on Envtl. Quality, *Requesting Tier II Reports and Records* (last modified Dec. 19, 2017), <a href="https://www.tceq.texas.gov/permitting/tier2/requesting-tier-ii-reports-and-records">https://www.tceq.texas.gov/permitting/tier2/requesting-tier-ii-reports-and-records</a>. Submitting a request is no guarantee that the information will be released, either.

EPA should also consider that many community members may experience communication challenges with LEPCs and federal reading rooms. These can be staffed by expert personnel without training to communicate in lay terms, and who often may not be proficient in languages other than English. EPA needs to ensure that non-experts and community members who speak English as a second-language are able to request and use information as well. Currently, the fact that people cannot make copies of files at EPA Reading Rooms, for example, makes it extremely challenging for non-experts or non-native speakers to obtain information and then find an expert or a translator to help them better understand it, if needed. Having information available directly from facilities, where it would be easier for community members to access it, would be a step towards fixing these shortcomings.

People living on the fence-lines of chemical facilities around the country are denied information about the dangers in their communities. Without this information they cannot protect themselves. In areas with multiple refineries and chemical plants, community members frequently hear alarms or see smoke and other danger signals, but are unable to find out what is happening. One commenter reported asking for a meeting with facilities to better understand what the alarms mean, and were only told the alarms were for "internal purposes" with no explanation of what that meant. So-called "internal" incidents often harm community members, too, because of the pollution released and the risk of triggering a more catastrophic event. When alarms are going off all the time, people cannot feel safe. This also harms property values, and

impairs quality of life.

EPA's alternative proposal of keeping only the exercise schedule information in § 68.210 is better than nothing but largely misses the original purpose of this provision. Community members need information about the risks they face – not just the exercise schedule at a given facility – in order to adequately prepare themselves for an emergency. Sharing the exercise schedule will be important for accountability purposes, especially if EPA removes the minimum frequency requirements for those exercises (as it proposes). But much more is needed to help prevent and mitigate disasters.

The community information provisions of the Chemical Disaster Rule will significantly facilitate the ability of community members to understand the hazards to which they are being exposed. Being able to ask facilities directly for information will be easier, faster, cheaper, and more reliable than going through federal Reading Rooms or LEPCs.

3. EPA Should Shorten the Time Period for Public Meetings After Incidents Occur and Should Ensure Public Meetings Apply to Near Misses, as well.

Commenters support the proposal to shorten the timeline for public meetings that occur after chemical releases. Information after a release is essential for community members to understand what risks they have been exposed to. Knowing what chemicals were released, especially during an air release, is important as members of the public often end up breathing in this pollution and need to be informed of the risks they face and whether precautionary steps are advisable (like seeing a doctor). The sooner the meeting can happen, the better, and in no event should facilities be able to delay the meeting for more than 30 days after an incident. It is also essential, for reasons discussed in the hearing by Say Yang, for example, for translation to be required at public meetings where there is a significant population who speaks an additional language or languages other than English.

Additionally, Commenters ask EPA to expand the meeting requirement to apply to near misses and non-reportable releases, as well – including such incidents as Arkema, and West, which EPA has attempted to contend are not covered incidents. Many such events still involve the release of air pollution or other chemical releases (*i.e.*, into water or soil) and thereby harm community members and expose them to toxic pollution. All of EPA's rationales for supporting public meetings after an RMP-reportable release also support sharing information with the public promptly after other releases covered directly or indirectly by the Risk Management Program. It is arbitrary and capricious to exclude from the meeting requirement such events. Additionally, EPA has failed to explain why it is not including such events in the requirement – especially if it is rescinding the requirement to conduct investigations of near miss events (and is therefore freeing up post-accident resources).

EPA also asks if "members of communities surrounding RMP facilities [would] be less likely to attend post-accident public meetings if the accident had no offsite public or environmental impacts?" 83 Fed. Reg. at 24,869. No, EPA should not attempt to speculate on this. Meetings should be offered to affected communities so they can decide whether to participate. The fact is, if facilities do not share information with the public many members of

the public will not know they have been exposed to toxic air pollution or other harms at all. This makes it critical to have meetings after all incidents, including near misses and non-reportable RMP releases. Sharing information with the public after such events is the only way to ensure members of the public are aware of the risks they are facing and aware of potential exposures to toxic chemicals, smoke, or other harms. Furthermore, even if members of the public do not attend a meeting, the notice of the meeting itself provides valuable information. Such notices need to appear in a central and easily accessible location – far too often, public notices are buried in the auto sections of local newspapers or elsewhere where it will be hard to actually spot them. EPA should ensure that such notices briefly explain what occurred, so that members of the public understand the purpose of the meeting and so that the notices themselves can help inform community members of their exposure to pollution or other risks.

Commenters support EPA's proposal to require sharing additional information about a facility's five-year accident history during public meetings. This information would be useful to community members seeking to better understand the risks in their communities, and what they may have been exposed to during prior incidents. As discussed above, fence-line communities have a tremendous need for information about the hazards at nearby facilities.

Commenters oppose EPA's proposal to remove the language requiring facilitates to share "other relevant chemical hazard information" at these meetings, as well. 83 Fed. Reg. at 24,868. Such language is not overbroad and would only require facilities to share information "relevant" to the "chemical hazard[s]" that members of the community face due to an accidental release or near miss. This kind of information is critically important to community members, to enable them to protect themselves, to assess risks to their health, and to understand the kinds of threats they face at home and in their neighborhood. EPA's rationale, that this language "could be interpreted to be an overly broad requirement," is arbitrary and capricious. *Id.* If EPA is truly concerned about how facilities will interpret the language, it can clarify the requirement or provide examples of the types of information that would need to be shared – simply deleting the language is throwing out the baby with the bathwater and deprives communities of information that EPA itself determined was valuable for them to know.

# F. The BATF's West, Texas Finding Does Not Support Making Any Changes to the Chemical Disaster Rule

When it granted reconsideration of the Chemical Disaster Rule, EPA based this on petitioners' argument that "it was impracticable for commenters to address in their comments the significance of the May 11, 2016 determination by the Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATF) that the fire and explosion at the West Fertilizer facility was caused by an intentional, criminal act." 83 Fed. Reg. at 24,869.

Rather than find that the West Fertilizer incident shows the need to repeal or weaken any part of the Chemical Disaster Rule, EPA continues to "maintain[] that the incident still highlighted the need for better coordination between facility staff and local emergency responders" and concedes that the Chemical Disaster Rule "acknowledged the BATF finding." *Id.* at 24,870. EPA "reaffirm[s]" this determination, and is basing its conclusion to preserve the emergency response coordination enhancements of the Chemical Disaster Rule on the West finding. *Id.* 

EPA does not "primarily justif[y]" the proposed rescissions and modifications to the prevention requirements of the Chemical Disaster Rule on the BATF finding, because it could not do so. *Id.* Nevertheless, EPA states that "the BATF finding informs EPA's concern, expressed above, that the Amendments may not have struck the appropriate balance between multiple policy considerations, including but not limited to information security and community right to know." *Id.* Rather than provide its own reasoning for how the BATF finding might support its action, EPA solicits comment on whether this rationale provides any justification for the actions EPA proposes:

Does the BATF finding provide additional justification for EPA rescinding the STAA, third-party audit, incident investigation, and information availability provisions of the RMP Amendments rule? Do EPA's proposed changes to the emergency response coordination provisions preserve the Agency's goal of better coordination between facility staff and local emergency responders that it sought in the final RMP Amendments rule while resolving petitioners' security concerns? Does the BATF finding have any significance for EPA's proposed revisions to the emergency exercise provisions, or alternatively, their rescission?

*Id.* By requesting comment on whether additional rationales support its proposal, EPA admits that its proposed Rollback Rule is a proposal in search of a rationale. This is antithetical to reasoned decision-making and also to notice-and-comment rulemaking – both require that EPA have reasons for its proposal, which can then be subjected to notice and comment.

EPA cannot rely on the BATF finding to rollback or weaken the Chemical Disaster Rule because the D.C. Circuit has just rejected EPA's ability to rely on that finding as reason to delay, or rescind the rule for 20 months – and the same reasoning applies to show that this finding cannot ground EPA's proposal to repeal or further delay the same provisions for any period of time. *Air Alliance Houston*, Slip Op. at 35-36. As the Court found, this is just one of the incidents on which EPA relied. It has no relevance at all to EPA's proposal on prevention measures. And, if anything, it shows the need for the emergency-response and information-sharing provisions, not the reverse. *Id.* As the court explained: "Given that twelve of the fifteen fatalities in the West, Texas disaster were local volunteer firefighters and other first responders, this [*i.e.*, the BATF arson findings] would be a fairly weak explanation for delaying provisions that EPA previously determined would help keep first responders safe and informed about emergency-response planning." *Id.* at 36.

EPA's inability to tie the West, Texas rationale to any concrete part of its proposal shows this issue to be a red herring. EPA cannot justify any change in the proposal based on West, Texas. Rather, the BATF's West, Texas finding only supports the need for *increased* prevention measures and better coordination with first responders. EPA itself continues to "maintain[] that the incident still highlighted the need for better coordination between facility staff and local emergency responders" and concedes that the Chemical Disaster Rule "acknowledged the BATF finding." 83 Fed. Reg. at 24,870. EPA "reaffirm[s]" this determination, and is basing its conclusion to preserve the emergency response coordination enhancements of the Chemical Disaster Rule on the West, Texas finding. *Id.* at 24,870.

The West, Texas finding cannot support weakening or rescinding any protections in the

Chemical Disaster Rule because the rule was not designed to address that particular type of incident. EPA did not seek to address *any* particular cause, and specifically left it to facilities themselves to identify the causes of incidents and how to best address them. *See*, *e.g.*, 40 C.F.R. §§ 68.60, 68.81 (incident investigations); *id.* §§ 68.58, 68.79 (compliance auditing); *id.* §§ 68.50, 68.67 (hazard review and process hazard analysis). The rule does not contain prescriptive requirements meant to address only one single event or type of disaster. Instead, based on the thousands of incidents EPA evaluated in the record, the Chemical Disaster Rule contains revisions to the pre-existing RMP program meant to better address the consequences of unanticipated chemical releases regardless of cause.<sup>363</sup>

Furthermore, EPA admits it was well aware of BATF's announcement while deciding what action to take in the Chemical Disaster Rule. 83 Fed. Reg. at 24,870. The findings were publicized two days before the end of the comment period, on May 13, 2016.<sup>364</sup> At least eight separate groups included this announcement in their comments,<sup>365</sup> and EPA responded to these comments and found that "it would be inappropriate to suspend the rulemaking based on outcomes of the incident investigation of the West Fertilizer explosion." Amendments RTC at 248–49. The BATF finding is not new information for EPA or the public. *See also* the OMB-EPA record of interagency communications (describing the possibility of intentional action at West as something considered publicly for a long time before the finding was made).

Finally, if anything, the West, Texas fertilizer disaster only shows that EPA's substantial accident database is a significant *underestimate* of the harm occurring under EPA's existing RMP regulatory program. EPA did not count the incident, the 15 deaths, or other injuries, exposures, or harm from West, Texas in its incident totals at all. The incident also does not appear in EPA's 2004-2013 incident database. This is because, as EPA made clear in the RIA, it was ignoring all incidents that occurred at RMP-covered facilities that did not include a known release of an RMP-covered chemical, even though improvements in this rule would indeed, as EPA found, reduce such non-RMP covered chemical incidents and deaths, as well as RMP-covered chemical incidents and deaths. Thus, EPA contends on the one hand that it relied too much on this incident – when in fact it did not even count the incident. Regardless, once it is considered, the facts of this incident show precisely why the type of incident EPA calls a "near miss" for RMP-covered chemicals is so important to prevent and reduce, alongside RMP-

<sup>&</sup>lt;sup>363</sup> The Clean Air Act defines "accidental release" as "an unanticipated emission of a regulated substance or other extremely hazardous substance into the ambient air from a stationary source." 42 U.S.C. § 7412(r)(2)(A).

<sup>&</sup>lt;sup>364</sup> ATF, "ATF, SFMO Announce Origin and Cause in West, Texas Fatality Fire" (May 9, 2016), <a href="https://www.atf.gov/houston-field-division/pr/atf-sfmo-announce-origin-and-cause-west-texas-fatality-fire">https://www.atf.gov/houston-field-division/pr/atf-sfmo-announce-origin-and-cause-west-texas-fatality-fire</a>.

<sup>&</sup>lt;sup>365</sup> See, e.g., Comments of SOCMA at 3 (May 13, 2016), EPA-HQ-OEM-2015-0725-0555; Comments of the Fertilizer Inst. at 4 n.5 (May 13, 2016), EPA-HQ-OEM-2015-0725-0598; Comments of American Forest & Paper Association at 3 (May 13, 2016), EPA-HQ-OEM-2015-0725-0551; Comments of National Oilseed Processors Ass'n & Corn Refiners Ass'n at 2-3 (May 13, 2016), EPA-HQ-OEM-2015-0725-0550; Comments of Enter. Products at 2 (May 13, 2016), EPA-HQ-OEM-2015-0725-0492; Comments of C. DeMott at 1 (May 13, 2016), EPA-HQ-OEM-2015-0725-0590; Comments of the Chem. Indus. Council at 1 (May 13, 2016), EPA-HQ-OEM-2015-0725-0491; Comments of Chem. Safety Advisory Grp. at 4 (May 13, 2016), EPA-HQ-OEM-2015-0725-0594.

chemical releases, and why such requirements as the "near miss" provisions EPA added in the Chemical Disaster Rule are so important. For all of these reasons, for EPA to propose to repeal and weaken the Chemical Disaster Rule by contending that it relied too heavily on this incident is a classic example of arbitrary and capricious agency action.

## G. <u>Delaying the Compliance Dates For Provisions EPA Proposes To Retain Is</u> Unlawful And Arbitrary.

It is both unlawful and arbitrary for EPA to further delay these compliance dates for reasons the D.C. Circuit found in vacating the Delay Rule and because, overall, EPA's delay now is simply again due to reconsideration. *See generally Air Alliance Houston v. EPA*, No. 17-1155 (D.C. Cir. Aug. 17, 2018) (on which Commenters rely even though, due to EPA's refusal to extend the comment deadline, there was insufficient time to include additional cites throughout these comments). EPA uses its prior unlawful delays of the Chemical Disaster Rule, including the Delay Rule, as justification to further delay the rule through compliance date extensions. 83 Fed. Reg. at 24,875. EPA argues that – with small exceptions – it should "toll the compliance dates established under the" Chemical Disaster Rule, and "establish[] ... new compliance dates relative to the future effective date of a final rule resulting from this proposal." *Id.* EPA also "agrees" with the petitioners for reconsideration that "sources and local responders should not be expected to expend resources complying with rule provisions that may change, and that owners and operators will require this additional time to familiarize themselves with the revised rule and implement appropriate programmatic changes." *Id.* 

### 1. Delaying the Compliance Dates is Unlawful

The Chemical Disaster Rule, and EPA's proposed delay of the Rule, amends regulations EPA promulgated subject to a statutory deadline that expired 25 years ago, in 1993. 82 Fed. Reg. at 4600 (citing § 7412(r)(7) generally, and § 7412(r)(7)(B) specifically); see 42 U.S.C. § 7412(r)(7)(B)(i) (providing statutory deadline for EPA's regulations). Having determined the prior regulations are insufficient, EPA must bring its amendments into effect as quickly as possible to fulfill Congress's directive to protect Americans from accidental releases. See, e.g., 81 Fed. Reg. at 13,648, 13,655, 13,663, 13,671, 13,673, 13,675, 13,677-78 (finding pre-existing Risk Management Program ineffective); see also id. at 13,648-49 (listing examples of disasters prior rule failed to prevent), 13,655-56 (same), 13,671 (same), 13,674-75 (same), 13,678 (same).

Regulations under § 7412(r)(7)(B) "shall be applicable to a stationary source 3 years after the date of promulgation." 42 U.S.C. § 7412(r)(7)(B)(i). Further postponing provisions of the Chemical Disaster Rule means pushing compliance deadlines far beyond three years, and such delay would thus flout the Act's directive – and Congress's express intent – that regulations under § 7412(r)(7)(B) become effective promptly. See 82 Fed. Reg. at 4678 tbl.6 (listing compliance dates). Congress intended this deadline to apply when EPA first promulgated regulations under § 7412(r)(7)(B) in the 1990s – giving sources three years to come into compliance with an entirely new program. This three-year limit is thus an upper bound of what Congress thought appropriate, and compliance with the Chemical Disaster Rule's amendments should be achievable in less time. Regardless, the statute was clear that sources needed to be in compliance with regulations providing "to the greatest extent practicable" for the prevention of disasters no later than 1996 (i.e., the statutory deadline plus three years for compliance). Having

found that the pre-existing Risk Management Program is not providing the requisite protections, EPA should set deadlines that ensure facilities muster every resource available to ensure sources come into compliance as expeditiously as possible with the fixes it promulgated in the Chemical Disaster Rule. Under the statutory framework, these are protections that should have been in place 25 years ago.

Finally, the Rollback Rule also fails to meet the requirements for action pursuant to § 7412(r)(7)(A), which also governs the Chemical Disaster Rule and this action. *Id.* at 4600; *see also* Amendments RTC at 17 (explaining that the Rule relies on "all of paragraph (7) as authority," including subparagraph (A)). That provision requires that any such regulations "prevent accidental releases" and "shall have an effective date, as determined by the Administrator, assuring compliance as expeditiously as practicable." 42 U.S.C. § 7412(r)(7)(A); *see* 82 Fed. Reg. at 4600 (citing § 7412(r)(7) generally). EPA has failed to show how the proposed delay meets this statutory test. Indeed, it cannot do so. EPA has not provided any evidence showing that the proposed 20-month delay is "as expeditiously as practicable." In particular, EPA has failed to show faster compliance would be *impracticable*.

## 2. It is Arbitrary and Capricious to Extend the Compliance Dates

Even if EPA had tried to make a showing of impracticability, the agency would need to explain its about-face and provide a "detailed explanation" of its about-face. Fox, 556 U.S. at 515. EPA previously found it practicable for the Chemical Disaster Rule's provisions to be brought into effect more quickly, EPA's proposed delay contradicts its prior findings on this requirement as well. See 82 Fed. Reg. at 4675-80 (discussing compliance dates). EPA fails to acknowledge or explain this change of position.

EPA also has not justified abandoning its prior finding that the previously-determined effective and compliance dates represented the most expeditious as practicable schedule to implement the Chemical Disaster Rule. *Id.* at 4676. None of the speculative allegations or other reconsideration-based factors on which EPA relies is relevant to, much less shows why February 19, 2019, instead of March 14, 2017, is the effective date assuring compliance as expeditiously as practicable. EPA's rationale has no basis in facilities' ability to comply with safety measures. Instead, EPA "disregard[s]" its own findings "that underlay" the Chemical Disaster Rule's original effective date. *Fox*, 556 U.S. at 516; *Steed*, 733 F.2d at 100 (agency could not overcome "presumption ... *against* changes in current policy that are not justified by the rulemaking record" (emphasis original)). Further, by citing matters inextricable from its own reconsideration process, EPA "has relied on factors which Congress has not intended it to consider," and has failed to provide even the most basic reasoned explanation. *State Farm*, 463 U.S. at 43.

### **CONCLUSION**

For all of the reasons provided in the record, in the D.C. Circuit's August 17, 2018 decision, and submitted by other commenters opposing EPA's proposal, EPA should withdraw the proposed Rollback Rule and implement the Chemical Disaster Rule immediately. If EPA considers any changes, it should do so to *strengthen not weaken* the regulations that facilities

must follow pursuant to the Risk Management Program.<sup>366</sup> Commenters urge EPA to evaluate additional CSB and other expert recommendations to prevent and reduce chemical disasters and the harm they cause.

EPA has a fundamental responsibility to the American public and legal obligations under the Clean Air Act to drop the proposed Rollback Rule. EPA must follow the law, and not allow facilities to operate unsafely, putting millions of Americans at greater risk. EPA must not let serious harm to workers, first-responders, and communities living near the fence-lines of industrial facilities continue unchecked.

Thank you for your time and consideration of these comments. For additional information, please contact any of the undersigned organizations, or at Earthjustice: attorneys Gordon Sommers (gsommers@earthjustice.org, (202) 797-5254) or Emma Cheuse (echeuse@earthjustice.org, (202) 745-5220), or staff scientist Michelle Mabson (mmabson@earthjustice.org, or (202) 797-5254).

### **Submitted By:**

Air Alliance Houston	Community In-Power & Development Association	People Concerned About Chemical Safety
California Communities Against Toxics	Del Amo Action Committee	Sierra Club
Clean Air Council	Earthjustice	Texas Environmental Justice Advocacy Services
Clean Wisconsin	Environmental Integrity	110.00009 201.1000
Coalition For A Safe	Project	Union of Concerned Scientists
Environment	Environmental Justice Health	
Colorado Latino Forum	Alliance for Chemical Policy Reform	Utah Physicians for a Healthy Environment
Coming Clean	Louisiana Bucket Brigade	Western Resource Advocates
	Ohio Valley Environmental Coalition	

3,

<sup>&</sup>lt;sup>366</sup> See, e.g., Comment submitted by Steve Taylor on behalf of Coalition to Prevent Chemical Disasters (Oct. 29, 2014), EPA-HQ-OEM-2014-0328-0644; Comment submitted by Michele Roberts, Environmental Justice and Health Alliance (Oct. 29, 2014), EPA-HQ-OEM-2014-0328-0683; Petition to EPA To Exercise Its Authority Under Section 112(r) of the Clean Air Act to Prevent Chemical Facility Disasters Through The Use of Safer Chemical Processes, Of Greenpeace, United Steelworkers, Sierra Club, Texas Environmental Justice Advocacy Services, Louisiana Bucket Brigade, Air Alliance Houston (July 25, 2012), EPA-HQ-OEM-2015-0725-0249, <a href="https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0249">https://www.regulations.gov/document?D=EPA-HQ-OEM-2015-0725-0249</a>.

# APPENDIX A: SUMMARY OF ROLLBACKS AND CHANGES IN THE PROPOSED ROLLBACK RULE

TABLE 1: PREVENTION REQUIREMENTS

Chemical Disaster Rule – Prevention Requirements	Rollback Rule
Requires facilities in the petroleum refining and coal products manufacturing, chemical manufacturing, and pulp and paper industries to conduct an assessment of safer technologies and alternatives to their hazardous processes that could be used to reduce the risk or impact of a disaster and determine whether practicable to implement. 40 C.F.R. § 68.67(c)(8).	EPA is proposing to rescind this requirement fully.
Requires facilities to have an independent third party do their next compliance audit (every 3 years), if either: they had an accidental release that caused harm; or the (state) agency implementing the RMP program identified conditions at the source that could lead to an accidental release. §§ 68.58 and 68.79; §§ 68.59 and 68.80.	EPA is proposing to rescind this requirement fully.
Revises the Risk Management Program to ensure facilities audit "each covered process" and not just a sample of processes. §§ 68.58(a) and 68.79(a).	EPA is proposing to rescind this requirement fully.
Revises the hazard review and analysis processes to require consideration of findings from incident investigations. § 68.67(c)(2).	EPA is proposing to rescind this requirement fully.
Requires a "root cause analysis" as part of all incident investigations, to ensure sources identified all facts that led to the release. §§ 68.60(d)(7) and 68.81(d)(7).	EPA is proposing to rescind this requirement fully.
Further revises the incident investigation process to require team members to have at least one person knowledgeable about the process; a 12-month deadline for investigations to be completed and produce a report of findings; and a requirement to develop a schedule for addressing recommendations. §§ 68.59(b) and 68.80(b); §§ 68.58(h) and 68.79(h).	EPA is proposing to rescind these requirements. EPA would retain a minimal requirement to produce some "report" (for high risk processes in Program 3) or a "summary" (for other processes) of investigation findings.

Chemical Disaster Rule – Prevention Requirements	Rollback Rule
	EPA is considering not rescinding some of these requirements as an alternative proposal & requests comment.
Requires facilities to investigate accidents where the affected process was decommissioned or destroyed during a disaster (currently these are not investigated). § 68.60(a)(1).	EPA is proposing to rescind this requirement fully.
Requires facilities to investigate near misses, including fires, explosions, or other dangerous situations that could have led to release of a listed chemical but did not. § 68.60(a)(2); § 68.81(a)(2).	EPA is proposing to rescind this requirement fully.
Expands the safety training requirements to include supervisors and all others involved in operation of process. § 68.71(d).	EPA is proposing to rescind this requirement fully.  EPA is considering not rescinding this as an alternative proposal.
Requirement to keep process safety information up to date. § 68.65(a).	EPA is proposing to rescind this requirement fully.

TABLE 2: EMERGENCY RESPONSE (MITIGATION AND HARM REDUCTION)

Chemical Disaster Rule – Emergency Response	Rollback Rule
Requires facilities to coordinate at least once yearly with local emergency responders. § 68.93(a).	EPA proposes to <u>retain</u> but <u>weaken</u> & delay this requirement (see below).
Requires that facilities share information with first responders that the responders' identified as "relevant" to their needs.  Requires sources to provide response organizations with the source's emergency response plan (if one exists), emergency action plan, and updated emergency contact information. § 68.93(b).	EPA is proposing to weaken & either delete this requirement, or change the language to limit how much information can be shared to be similar to EPCRA (information "necessary" for developing and implementing an emergency response plan.). EPA is also proposing to limit sharing of confidential or classified information.

Chemical Disaster Rule – Emergency Response	Rollback Rule
Requires facilities to conduct the following types of emergency response exercises:  • Notification exercises, to test emergency notification systems (at least once every year)  • Tabletop emergency response exercises (at least once every 3 years)	For field exercises, EPA is proposing to weaken & remove the minimum frequency. Alternatively, EPA proposes to fully rescind the requirement.
• Field emergency response exercises (at least once every 10 years)  Facilities would coordinate with the response organizations to schedule these exercises, and could schedule them more frequently than the above minimums. § 68.96(b).	For field and tabletop exercises, EPA also proposes to remove the minimum requirements (turning them into recommendations instead).  The minimum frequency for tabletop exercises would remain at three years, but EPA alternatively proposes to fully rescind this requirement, too.
	EPA would <u>retain</u> the notification exercise requirement.  Documentation of exercises would still be required.

TABLE 3: COMMUNITY INFORMATION REQUIREMENTS

Chemical Disaster Rule – Community Information	Rollback Rule
Requires facilities to provide information directly to affected community members. This would not be "new" information, but would make it easier for community members to access information that is currently hard to obtain. § 68.210(a), (b).	EPA is proposing to rescind this requirement fully.
Requires public meetings to occur up to 90 days after an accident. § 68.210(e).	EPA proposes to retain this requirement and is considering alternative timelines that could be shorter (i.e., meeting within 30/45 days).

TABLE 4: COMPLIANCE DATES

### **Chemical Disaster Rule - Dates**

Certain provisions were to have been effective immediately (*i.e.*, would have been when promulgated, March 14, 2017 – including training, process safety, compliance audits for each covered process, near miss investigations and other investigation reporting requirements, improved process hazard analysis). 40 C.F.R. § 68.10(a)(4); 82 Fed. Reg. at 4676-78.

Annual emergency response coordination and relevant information-sharing: March 17, 2018. §§ 68.93; 68.10(b).

Additional emergency response measures (exercises): 3 years (March 17, 2020).

STAA and other prevention and public information measures (*e.g.*, third-party audit, RCA, informational provisions): 4 years (March 17, 2021).

RMP Plan updates: 5 years.

EPA had delayed the effective date for all of these measures through February 2019 but the D.C. Circuit ruled that the delay was unlawful and arbitrary and capricious.

#### Rollback Rule

EPA proposes to further delay all the compliance dates in the Chemical Disaster Rule to assure that no compliance efforts are required during the period of delay. Starting when a new final rule takes effect, facilities will again have the full amount (or more) of the original time EPA determined was needed to prepare for and comply with any provisions of the rule that are not rescinded.

EPA would give facilities one additional year to perform their first notification drill beyond the four-year compliance timeline already in place (i.e., first drill by 2024), up to three additional years for their first tabletop exercise, and no deadline at all for their first field exercise.

## APPENDIX B: CHARTS AND GRAPHS RELATED TO STATE PROGRAMS

# CHART A: BENEFITS EXPERIENCED AS A RESULT OF IMPLEMENTING TURP PROJECTS IN THE PERIOD 2000-2009<sup>367</sup>

Benefit	Responses	Percentage
		(of 196
		Respondents)
Increased management attention to environmental practices	108	55%
Improved worker health and safety	99	51%
Financial savings	81	41%
Compliance with other state or federal regulations	64	33%
Improvements in production efficiency	57	29%
Improved product marketing	41	21%
Improvements in product quality	33	17%
Improvements in technology and physical infrastructure	30	15%
Compliance with international standards	22	11%
Improved worker-management relations	21	11%
Other	18	9%
Improved community relations	16	8%
Retention of a product line	12	6%

-

<sup>&</sup>lt;sup>367</sup> Toxic Use Reduction Inst., Toxics Use Reduction Act Program Assessment, Executive Summary 6 (June 2009).

CHART B: EXAMPLE BENEFITS FROM TURP

Company Name	Description	Toxic Use Reduction/Benefits
Allston Collison Center  Analog Devices	"[T]hird generation family-owned auto body shop "368  "[W]orld leader in the design, manufacture, and marketing of a broad portfolio of high performance analog, mixed-signal, and digital signal processing integrated circuits used in virtually all types of	<ul> <li>Installed onsite solvent recycling machine to recycle paint thinner<sup>369</sup></li> <li>Diverted 160 gallons of paint thinner from being disposed as hazardous waste each year<sup>370</sup></li> <li>Saved almost \$2000 annually in purchasing and disposal costs<sup>371</sup></li> <li>Reduced use of hydrochloric acid and sodium hydroxide<sup>373</sup></li> <li>Reduced use of both chemicals by approximately 1100 gallons</li> <li>Saved \$35,000 a year in chemistry, water, and maintenance costs</li> </ul>
ChemGenes	electronic equipment" <sup>372</sup> Small to mid-scale	Paduard hazardous wasta production by
Corporation	chemical manufacturer supplying products to the biotechnology industry <sup>374</sup>	Reduced hazardous waste production by installing solvent recycling system <sup>375</sup> Resulted in yearly savings of \$1973 <sup>376</sup>
		Reduced volatile organic compounds <sup>377</sup>

<sup>&</sup>lt;sup>368</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Allston Collison Center: Auto Body Shop Switches to Water-Based Paints 1 (Mar. 2015),

https://www.mass.gov/files/allston\_collision\_center\_case\_study\_-\_final\_3.pdf.

https://www.turi.org/content/download/10039/169929/file/Case%20Study%20Analog%20Devices.%202015.pdf.

<sup>&</sup>lt;sup>369</sup>*Id*.

<sup>&</sup>lt;sup>370</sup> *Id.* at 1.

<sup>&</sup>lt;sup>371</sup> *Id.* at 2

<sup>&</sup>lt;sup>372</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Innovative Solutions to Conservation: New Approach to High Purity Water Treatment 2,

<sup>&</sup>lt;sup>373</sup> *Id*.

<sup>&</sup>lt;sup>374</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Solvent Recovery and Recycling Case Study 1 (2013),

https://www.turi.org/content/download/8702/145250/file/Case%20Study%20ChemGenes%202013.pdf.

<sup>&</sup>lt;sup>375</sup> *Id.* at 2. <sup>376</sup> *Id.* at 3.

<sup>&</sup>lt;sup>377</sup> *Id.* at 1.

		<ul> <li>From 2005 to 2013, reduce use of chloroform by 55% and hexane by 35%<sup>378</sup></li> <li>Resulted in net savings of \$215,000<sup>379</sup></li> </ul>
Ohir Optics	"[D]esign[] and produce[] a full range of high performance Infra- red optical lenses and elements" <sup>380</sup>	Reduced volatile organic compounds by 70% 381  • Yearly saving of \$15,000 <sup>382</sup> Reduced quantity of hazardous waste shipped by about 2/3 <sup>383</sup> • \$60,000 in savings from 2010–2015 <sup>384</sup>
Shawmut Corporation	Produce coated and laminated performance materials for "automotive, medical, protective/performance wear, military, hospitality, and filtration industries" 385	<ul> <li>Eliminated use of Volatile Organic         Compounds<sup>386</sup> <ul> <li>Saved \$1 million per year in material costs and waste disposal fees</li> </ul> </li> <li>Eliminated use of trichloroethylene<sup>387</sup> <ul> <li>Resulted in \$750,000 annual savings</li> </ul> </li> <li>Other Benefits<sup>388</sup> <ul> <li>Improved quality of products</li> <li>Elimination of TCE produced greater acceptance in marketplace</li> <li>Company is proud to have become a "greener company"</li> </ul> </li> </ul>
Stainless Steel Coatings	Manufacturer of "STEEL-IT, a rugged, industrial coating used in	Reduced used of volatile organic compounds <sup>390</sup> Reduced use of xylene by at least 57%  Reduced use of hexavalent chromium by 100%

<sup>&</sup>lt;sup>378</sup> *Id*.

<sup>379</sup> Id

<sup>&</sup>lt;sup>380</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Ophir Optics: Toxic Use Reduction through Lean Manufacturing and Six Sigma 1 (Mar. 2015),

 $https://www.turi.org/content/download/6334/66558/file/Case\%20Study\%20Ophir\%20Optics\%202011.pd\ f.$ 

<sup>&</sup>lt;sup>381</sup> *Id.* at 2.

<sup>&</sup>lt;sup>382</sup> *Id*.

<sup>&</sup>lt;sup>383</sup> *Id.* at 3.

 $<sup>^{384}</sup>$  *Id.* at 4.

<sup>&</sup>lt;sup>385</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Shawmut Corporation: Eliminating TCE USE by Switching to a Hot-melt Adhesive Process 1 (Apr. 2015),

https://www.turi.org/content/download/9880/168489/file/CaseStudyShawmutCorporationOTA.2015.pdf. <sup>386</sup> *Id.* at 2–3.

<sup>&</sup>lt;sup>387</sup> *Id*.

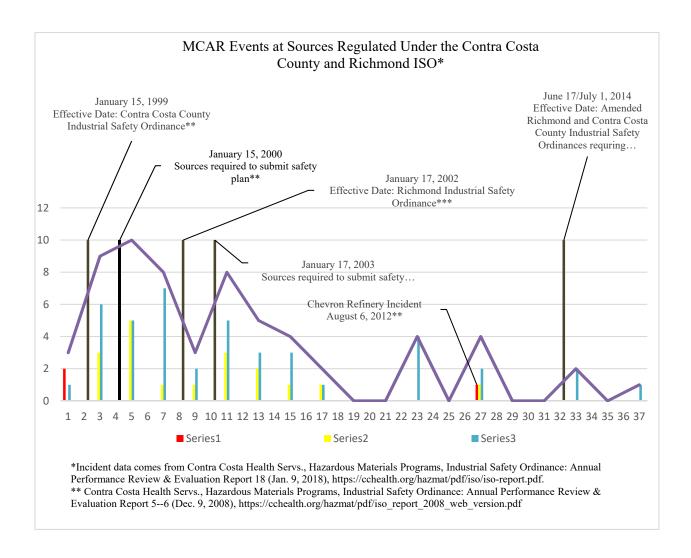
<sup>&</sup>lt;sup>388</sup> *Id.* at 4.

<sup>&</sup>lt;sup>390</sup> *Id.* at 2–3.

corrosive and high-
impact applications",389

Produced 52% less hazardous waste, saving \$15,160 annually in waste disposal

### EXHIBIT 1: CONTRA COSTA COUNTY PREVENTION PROGRAM EFFECTIVENESS



<sup>&</sup>lt;sup>389</sup> Office of Tech. Assistance, Mass. Exec. Office of Energy & Envtl. Affairs, Stainless Steel Coatings, Inc.: Toxic Use Reduction, Energy Efficiency, and Worker Safety 1 (Mar. 2015), https://www.mass.gov/files/stainless\_steel\_coatings\_case\_study\_25th\_final.pdf.