



CREATING GOOD JOBS, A CLEAN ENVIRONMENT, AND A FAIR AND THRIVING ECONOMY

August 23, 2018

Comments on Proposed Rule: Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act

Docket ID No.: EPA-HQ-OEM-2015-0725-0890

The BlueGreen Alliance, a coalition of the nation's largest labor unions and environmental organizations, collectively representing millions of members and supporters, urges the Environmental Protection Agency (EPA) to stand up for industrial workers, first responders, and fence-line communities by withdrawing its proposal to rescind crucial amendments to the successful Risk Management Program and immediately implement the original Chemical Disaster Rule.

The EPA's Risk Management Program (RMP) covers 12,500 commercial and industrial facilities that use or store large amounts of specific, highly toxic or highly flammable chemicals.¹ The Chemical Disaster Rule, finalized in January 2017, included much-needed improvements to the RMP, requiring companies to take steps to prevent chemical releases, fires, and explosions, while also working with first responders to improve emergency preparedness and coordination.²

The Chemical Disaster Rule was Needed

Data from the U.S. Environmental Protection Agency (EPA) show that serious industrial chemical accidents occur every two-and-a-half days in communities across the nation.³ In its justification for the Chemical Disaster Rule, EPA cited more than 1,500 reportable accidents, which were responsible for 58 deaths, more than 17,000 injuries or instances of medical treatment sought, almost 500,000 people evacuated or sheltered-in-place, and over \$2 billion in property damages, just in the ten years preceding the rulemaking.⁴ This calculation did not include less immediate impacts, such as damage to productivity, property values, and the

¹ U.S. Environmental Protection Agency (EPA), "Risk Management Plan (RMP) Rule Overview," 4 Apr. 2018. Available: www.epa.gov/rmp/risk-management-plan-rmp-rule-overview.

² "Another Year of Preventable Chemical Disasters for America." BlueGreen Alliance, Apr. 2018. Available: www.bluegreenalliance.org/the-latest/another-year-of-preventable-chemical-disasters-for-america/.

³ U.S. EPA, "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act," January 2017. Available: <https://www.gpo.gov/fdsys/pkg/FR-2017-01-13/pdf/2016-31426.pdf>.

⁴ U.S. EPA, "EPA Activities Under EO 13650: Risk Management Program (RMP) Final Rule Questions & Answers," Aug. 2017. Available: www.epa.gov/sites/production/files/2017-08/documents/rmp_final_rule_qs_and_as_8-02-17.pdf.

environment; contraction of regional economies; expenses incurred by public agencies; and long-term health effects among workers and community members.⁵ The EPA at the time understood that the “changes to the RMP rule [would] help protect local first responders, community members, and employees from death or injury due to chemical facility accidents.”⁶

These incidents have the potential to affect the lives of millions of Americans. Today, at least one in three schoolchildren in America attends a school in the vulnerability zone of a hazardous facility, meaning they are in harm’s way in the event of a chemical release, fire, or explosion. At least 50 percent of students in the states of Utah, Rhode Island, Texas, Louisiana, Nevada, Delaware, and Florida attend school in these danger zones.⁷ Moreover, a review by the Agency for Toxic Substances and Disease Registry (ATSDR) found that students accounted for 11 percent of reported injuries caused by industrial chemical releases during the period of 1999 to 2008.⁸ The EPA reports that over 175 million Americans live in the worst-case scenario zones for chemical disasters.⁹ There are of course countless workers at industrial facilities whose lives are placed in danger simply by coming to work. And when a chemical release, fire, or explosion does occur, we turn to first responders, who often do not have the information or training they need to respond effectively and safely to the incident.

Certain populations are disproportionately impacted by this threat. The percentage of African Americans living in fence-line zones around 3,433 of the most dangerous facilities is 75 percent greater than for the United States as a whole, while the percentage of Latinos in these zones is 60 percent greater.¹⁰ Further, the poverty rate in these areas is 50 percent greater than the country as a whole. In fact, the Center for Effective Government found that people of color make up almost half of the total population living within a one-mile fence-line zone near these facilities, and that

⁵“Proposed Rollback of Risk Management Program,” *Save EPA*, 25 July 2018. Available: www.saveepaalums.info/RMP.

⁶ U.S. EPA, “EPA Activities Under EO 13650: Risk Management Program (RMP) Final Rule Questions & Answers,” Aug. 2017. Available: www.epa.gov/sites/production/files/2017-08/documents/rmp_final_rule_qs_and_as_8-02-17.pdf.

⁷ Frank, Amanda, and Sean Moulton. “Kids in Danger Zones.” Center for Effective Government, Sept. 2014. Available: www.foreffectivegov.org/sites/default/files/kids-in-danger-zones-report.pdf.

⁸ Arnold, Carrie. “A Strong Case for Prudent School Siting: The West Fertilizer Company Explosion,” National Institute of Environmental Health Sciences, U.S. Department of Health and Human Services, Oct. 2016, Available: <http://ehp.niehs.nih.gov/124-a187/>.

⁹ “Another Year of Preventable Chemical Disasters,” *Earthjustice*, 3 Apr. 2018. Available: www.earthjustice.org/news/press/2018/another-year-of-preventable-chemical-disasters.

¹⁰ Orum, Paul, et al. “Who’s In Danger? Race, Poverty, and Chemical Disasters,” *Coming Clean*, May 2014. Available: www.comingcleaninc.org/assets/media/images/Reports/Who's%20in%20Danger%20Report%20FINAL.pdf.

they are about twice as likely as white individuals to live in these zones.¹¹ Another study found that chemical incidents are more likely to occur in counties housing larger black populations.¹²

Additionally, low income *children* of color are among the most vulnerable, being more than twice as likely to live in fence-line zones as their counterparts above the poverty line. It is well-recognized that infants and children are uniquely vulnerable to toxic chemical exposures, which can result in lifelong damage to the developing brain and other organ systems.¹³

EPA Put in Place Common-Sense Protections with the Chemical Disaster Rule

Among the major industrial chemical incidents that occur each year in our nation, the need to update the RMP standards became particularly clear in 2012 at the Richmond, California, refinery, when an 8-inch diameter pipe carrying fuel oil ruptured, releasing flammable vapors that quickly expanded 100 yards in all directions, engulfing 19 refinery workers. Less than two minutes later, the vapor cloud ignited into a massive fireball and plume of smoke that spread over the northeastern Bay Area.¹⁴

During that brief window, 18 of the Chevron employees crawled to safety; the last worker, a Chevron firefighter, climbed into the cab of his engine moments before the flames rolled over it. Thankfully, he survived. But the disaster was not confined to the plant: in the following hours, some 15,000 people in the communities downwind of the plant sought medical attention for symptoms of exposure to smoke and fire gases. According to the U.S. Chemical Safety and Hazard Investigation Board (CSB), among the reported health effects were chest pain, shortness of breath, headaches, and sore throat; about 20 people were admitted to hospitals for treatment.¹⁵

According to the CSB, in the years leading up to the fire, Chevron's managers had learned from their own engineers in at least six different reports that pipes in the plant's crude unit were corroding and needed inspection and replacement. Managers ignored those warnings, even after a corroded pipe failed in 2007, causing a fire that injured a Chevron employee. By 2009, Chevron engineers warned of the potential for a "catastrophic failure," and yet still managers

¹¹ Starbuck, Amanda, and Ronald White. "Poverty, Race, and Unequal Chemical Facility Hazards," *Center for Effective Government*, Jan. 2016. Available: www.foreffectivegov.org/sites/default/files/shadow-of-danger-highrespdf.pdf.

¹² White, Ronald, "Double Jeopardy in Houston: Acute and Chronic Chemical Exposures Pose Disproportionate Risks for Marginalized Communities," *Union of Concerned Scientists*, Oct. 2016. Available: <https://www.ucusa.org/sites/default/files/attach/2016/10/ucs-double-jeopardy-in-houston-full-report-2016.pdf>.

¹³ Starbuck, Amanda, and Ronald White. "Poverty, Race, and Unequal Chemical Facility Hazards." Center for Effective Government, Jan. 2016. Available: www.foreffectivegov.org/sites/default/files/shadow-of-danger-highrespdf.pdf.

¹⁴ U.S. Chemical Safety and Hazard Investigation Board, "Final Investigation Report: Chevron Richmond Refinery Pipe Rupture and Fire," August 6, 2012. Available: https://www.csb.gov/assets/1/17/chevron_final_investigation_report_2015-01-28.pdf?15397.

¹⁵ Ibid.

deferred action. By 2012, the crude unit piping failed exactly where the engineers had predicted it would.¹⁶

The Chevron incident illustrated that these incidents are preventable.

In response to this and several other incidents, the EPA developed several new guidelines to ensure companies take steps to prevent chemical releases, fires, and explosions, while also working with first responders to improve emergency preparedness and coordination. Following a three-year process that included three separate public comment periods, EPA adopted a modest set of changes to the RMP, focused on preventing catastrophes and ensuring that first responders are informed and protected. Chief among these amendments were:

- 1) Improving coordination among facilities, first responders, and Local Emergency Planning Committees (LEPCs). For example, facilities must coordinate response needs with local emergency management officials, and ensure that local response agencies, such as fire departments, are aware of hazardous substances.¹⁷ Specifically, facilities must share their emergency response plan, emergency action plan, updated emergency contact information, and any other information that local emergency planning and response organizations deem relevant for planning.¹⁸

EPA acknowledged that, despite existing requirements of the Emergency Planning and Community Right-to-know Act (EPCRA), there existed a lack of coordination between facilities and first responders, which creates a lack of situational awareness; confusion regarding responsibilities; equipment inadequacy; and ultimately, injuries and deaths. The RMP amendments had the potential to result in a more efficient allocation of public resources by improving the ability of planners and responders to make more appropriate and informed decisions with regard to equipment, training, and procedures.¹⁹

The existing RMP requires that emergency planning information be made available to the public, but this information is hardly available in practice, primarily because access is limited to Federal Reading Rooms or through Freedom of Information Act, or FOIA requests, which can take years to fulfill. EPA, in writing its broadened RMP information-sharing amendment, argued that the amendment struck the “appropriate balance between

¹⁶ Ibid.

¹⁷ U.S. EPA, “EPA Activities Under EO 13650: Risk Management Program (RMP) Final Rule Questions & Answers,” Aug. 2017. Available: www.epa.gov/sites/production/files/2017-08/documents/rmp_final_rule_qs_and_as_8-02-17.pdf.

¹⁸ Ibid.

¹⁹ Ibid.

various concerns, including information availability, community right-to-know, minimizing facility burden, and minimizing information security risks.”²⁰

- 2) Ensuring that lessons are learned from serious accidents. For example, the RMP amendments require when a facility experiences a major incident—or a “near miss”—the facility must identify the “root cause” of the incident. Such facilities have a year from the incident to draft a report that includes the cause, any consequences of the accident, and any emergency response actions that have taken place.²¹

The U.S. Chemical Safety and Hazard Investigation Board (CSB), in its comments to EPA during the rule’s proposal stage, argued that “investigating the root causes of incidents is a valuable tool for using lessons learned to prevent future incidents” and “agree[d] with the information EPA outlines for inclusion in the incident investigation report.”²²

- 3) Requiring that qualified, independent third-party audits be conducted any time a facility has an incident, so that the cause of the incident can be addressed.²³
- 4) Identifying safety opportunities by requiring facilities in industrial sectors with the worst accident records to perform a safer technology alternatives assessment, or STAA, in order to determine if the most serious industrial hazards could be reduced or eliminated through changes in technology, processes, or chemicals. The STAA would determine whether high-risk facilities—those deemed “Program 2” and “Program 3” —could reasonably adopt these changes as a way to drive down their chemical risks and help prevent future chemical disasters.²⁴

²⁰Ibid.

²¹Ibid.

²²Sutherland, Vanessa Allen, Manny Ehrlich, Jr., Rick Engler, and Kristen Kulinowski, “Attention: Docket No. EPA-HQ-OEM-2015-0725, Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act, Section 112(r)(7),” *U.S. Chemical Safety and Hazard Investigation Board*, May 10, 2016. Available: https://www.csb.gov/assets/1/6/csb_comments_epa-hq-oem-2015-0725_51020161.pdf.

²³U.S. EPA, “EPA Activities Under EO 13650: Risk Management Program (RMP) Final Rule Questions & Answers,” Aug. 2017. Available: www.epa.gov/sites/production/files/2017-08/documents/rmp_final_rule_qs_and_as_8-02-17.pdf.

²⁴Ibid.

EPA's Efforts to Rescind These Requirements Puts Workers, Communities, and First-Responders at Risk

EPA's proposal to rescind crucial elements of the Chemical Disaster Rule puts families, fence-line communities, and first responders in danger. Provisions of the proposal of particular concern include:

- First responder coordination: Rolling back requirements for at-risk hazardous chemical facilities to coordinate with first responders;
- Root cause analysis: Eliminating the requirement for facilities to assess potential mitigation techniques for future disasters by examining what went wrong during accidents or near-accidents;
- Audits: Taking back the requirement for third-party, independent audits to examine facilities after serious accidents;
- Safer technologies: Striking the requirement for extremely dangerous facilities to consider inherently safer practices and technologies;
- Information sharing: Eliminating the requirement to share basic information with local communities and first responders about potential hazards, evacuation procedures, and emergency preparedness.

The EPA stated that greater enforcement of existing regulations can make up for any reduction in public health and environmental protections that might occur from easing new regulations. This argument, however, is belied by the fact that EPA's enforcement programs have been hindered by multiple budget cuts. Even given more enforcement, the record illustrates the existing RMP rules are insufficient to motivate companies to invest in safer facilities and prevent the next major chemical disaster.²⁵ More generally, enforcement is a reactive strategy that does not effectively place responsibility for prevention of industrial accidents where it belongs—on the facilities handling these chemicals.²⁶

Incidents that have occurred before and since the Chemical Disaster Rule was put in place underscore the need for these provisions. On April 17, 2013, firefighters responded to a report of a structure fire at the West Fertilizer Co. in West, Texas. They were standing in the blast zone when a stockpile of 50 tons of fertilizer grade ammonium nitrate detonated—they didn't know it was there. There was no law that effectively required the transmission of that information from the company managers who knew about it, to the first responders who needed to know about it. As a result, 12 first responders and 3 local residents died and 260 other people were injured.²⁷ More recently, following an explosion at the Arkema chemical facility in the wake of Hurricane

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²⁶“Proposed Rollback of Risk Management Program.” *Save EPA*, 25 July 2018, www.saveepaalums.info/RMP.

²⁷“West Fertilizer Explosion and Fire.” *U.S. Chemical Safety and Hazard Investigation Board*, January 2016, <https://www.csb.gov/west-fertilizer-explosion-and-fire/>.

Harvey in 2017, several first responders were exposed and sickened after entering the plant area, having with no knowledge of the chemicals housed within the plant or their potential health effects.²⁸

Since the EPA put the Chemical Disaster Rule on hold, many American communities have experienced a serious industrial chemical release, fire or explosion. In fact, since the beginning of 2018, 32 known chemical disasters have occurred, resulting in deaths and injuries that might have been prevented had the Chemical Disaster Rule been in place. Nearly 60 publicly known chemical disasters have occurred since this rule was delayed. In June, for example, we were reminded of the need for the Chemical Disaster Rule, when an ammonia leak resulted in the hospitalization of two employees at the Saputo Cheese Plant in Tulare, California. Not two weeks prior to the Tulare incident, in Baton Rouge, Louisiana, sulfuric acid was released at the ExxonMobil Baton Rouge Chemical Plant, leading to injuries in three employees.²⁹

Because the Chemical Disaster Rule has been delayed, over 12,500 industrial facilities have continued operations without being required to take concrete steps to prevent chemical disasters that place Americans at risk every year.³⁰ And if the rule is rescinded entirely, workers, first responders, and the millions of Americans who live in the vulnerability zone of an industrial chemical release will remain at risk. It is clear from the publicly known chemical disasters that have occurred just since the delay of the rule that the existing 1992 RMP protections are not sufficient.

The Chemical Disaster Rule Was Based on a Robust Public Record and Enjoys Widespread Support

On August 18, 2018, the U.S. Court of Appeals for the D.C. Circuit ruled EPA acted outside the law in delaying implementation of the Chemical Disaster Rule.³¹ In addition to its legal transgressions, the EPA proposed the delay and roll-back in the face of a robust record of support for the original Chemical Disaster Rule, including overwhelming public support. Survey data showed that almost three-quarters of Americans (74 percent, including large majorities of Republicans, Democrats, and Independents) support new safety standards for hazardous facilities. Many businesses and professional organizations supported the amendments to the

²⁸ “A Disaster in the Making.” *Earthjustice*, April 2018, <https://earthjustice.org/features/toxic-catastrophes-texas-national-chemical-disaster-rule>

²⁹ *Ibid.*

³⁰ U.S. EPA, “Risk Management Plan (RMP) Rule Overview,” 4 Apr. 2018. Available: www.epa.gov/rmp/risk-management-plan-rmp-rule-overview.

³¹ BlueGreen Alliance, “BlueGreen Alliance Statement on Chemical Disaster Rule Court Decision,” August 17, 2018. Available: <https://www.bluegreenalliance.org/the-latest/bluegreen-alliance-statement-on-chemical-disaster-rule-court-decision/>.

RMP rule, along with over 150 diverse organizations representing fence-line communities, facility workers, medical and health professionals, security experts, and others.³²

The chemical process industry itself recognizes that the existing RMP regulations are deeply lagging behind advancements in industrial process safety that the industry has made since the regulations were first adopted 25 years ago. The industry's 700-page text on this topic is entitled *Guidelines for Risk Based Process Safety* and published by the Center for Chemical Process Safety (CCPS) of the American Institute of Chemical Engineers. Nearly every important petrochemical company in America is represented on the text's advisory committee. The document concludes that the effectiveness of process safety management programs in U.S. companies has plateaued or declined since 1992, and that the result has been a continuing record of chemical releases, fires, and explosions that often occur for the same underlying reason.³³

The industry professionals who understand process safety recognize the need for reform. The modest revisions to the RMP rules were developed with extensive input from many of these experts, and they reflected the industry's own interests in broadly improving process safety. While the revisions were intended to protect the safety of workers, first responders, and communities, there is no question that they will also help ensure the integrity and operation of the nation's critical industrial infrastructure.

The review process for these crucial yet modest amendments spanned over three years and included an extensive stakeholder consultation process conducted jointly with other agencies, including the Department of Homeland Security (DHS) and Department of Labor (DOL). This process included public listening sessions across the country, a public request for information, a Small Business Advocacy Review panel, and a two-month public comment period where thousands of individuals and organizations provided written comment on the merits of the rule. The process included:

- A multi-agency stakeholder input process, including eight public listening sessions around the country and two national webinars, conducted jointly by EPA, the Department of Homeland Security (DHS), and the Department of Labor (DOL);
- A three-month public Request for Information with over 100,000 comments (more than 200 to which EPA directly responded);
- Review by a Small Business Advocacy Review (SBAR) panel;
- A 147-page Regulatory Impact Analysis of the proposed rule and alternatives;

³² Coalition to Prevent Chemical Disasters, "Poll Shows Bi-Partisan Support for New Rules to Prevent Chemical Disasters But Will EPA Fall Short?" October 8, 2015. Available: [www.http://preventchemicaldisasters.org/resources/113-2/](http://preventchemicaldisasters.org/resources/113-2/).

³³ Center for Chemical Process Safety of the American Institute of Chemical Engineers, *Guidelines for Risk Based Process Safety*, March 2007. Available: <https://www.aiche.org/ccps/resources/publications/books/guidelines-risk-based-process-safety>.

- A two-month public comment docket on the proposed RMP amendments, which received over 44,000 public comments;
- A 259-page response to public comments on the proposed rule; and
- Review of both the proposed rule and the final rule by the Office of Information and Regulatory Affairs (OIRA).³⁴

It is extraordinary that EPA chose to delay and dismantle the proposed RMP amendments in the face of this extensive consultation, input, and demonstrated need.

California Shows that Industrial Safety Regulations Work and Can be Cost-Effective

California, the nation's third largest refining state, has taken an innovative approach to chemical safety. In 2017, the state put in place a comprehensive new refinery process safety management (PSM) rule that requires refiners to implement many of the industry's own best engineering and management practices. Established five years after the disastrous 2012 explosion and fire at Chevron's oil refinery in Richmond, the new regulations have the potential to save lives and money, and are now in force.

As part of developing the new rule, a RAND economic analysis showed that implementing the new requirements would cost the state's 14 refineries about \$58 million in total each year, but that the median cost of a single major incident was \$220 million, not including costs associated with worker injuries or fatalities, or damage to the company's reputation, or costs incurred by local communities. RAND concluded that the new California rules were cost effective for the state's refineries and for regional economies.³⁵ Moreover, RAND found that the regulations would help prevent the statewide economic disruptions that have occurred in the state after major refinery incidents, such as the 2015 ExxonMobil explosion in Torrance, California, which caused a \$6.9 billion contraction in the state's economy in the first six months following the incident. Across the U.S., almost ninety percent of facilities surveyed by the Center for American Progress that had switched to safer processes reported that the switch cost the facility \$1 million or less.³⁶

In closing, it should be noted that we are debating the utility of the Chemical Disaster Rule shortly after the official start of the hurricane season. As was underscored by the Arkema plant explosion in Houston, Texas, last year in the wake of Hurricane Harvey, the frequency and

³⁴ U.S. EPA, "EPA Activities Under EO 13650: Risk Management Program (RMP) Final Rule Questions & Answers," Aug. 2017. Available: www.epa.gov/sites/production/files/2017-08/documents/rmp_final_rule_qs_and_as_8-02-17.pdf.

³⁵ Gonzalez, Gulden and Hoyle, "Cost-benefit Analysis of Proposed California Oil and Gas Refinery Regulations," RAND Corporation, 2016.

³⁶ Rushing, Reece, and Paul Orum, "New Survey Shows Improved Chemical Security Makes Millions Safer," *Center for American Progress*, March 2, 2010.

Available: <https://www.americanprogress.org/press/release/2010/03/02/15246/new-survey-shows-improved-chemical-security-makes-millions-safer/>.

magnitude of industrial chemical releases (and the threat of fires and explosions) increase during hurricane season in Gulf states, where many oil refineries and chemical facilities are concentrated. The damage inflicted on the first responders and fence-line community in the wake of the Arkema explosion would undoubtedly have been mitigated if the Chemical Disaster Rule had been implemented prior to the last hurricane season.³⁷ Now, as we enter the 2018 hurricane season, it is time to strengthen our industrial safety protections, not weaken them.

Finally, the Chemical Disaster Rule contains elements that will improve the safety of workers, communities, and our industrial infrastructure from an act of industrial terrorism. As Christine Todd Whitman, former EPA Administrator under President Bush and Governor of New Jersey, explained, attempts to rollback or weaken the amendments to the RMP “would weaken our country’s already inadequate defenses against a deliberate attack on thousands of chemical facilities across the country, potentially putting hundreds of thousands of Americans at risk.”³⁸

Too many Americans have had to evacuate, shelter in place, or race to pick up their children from school as an industrial fire burns or a chemical release heads their way. We request that you take action to protect first responders, industrial workers, communities, and our nation’s infrastructure by withdrawing the proposed rescission of these important improvements. Thank you.

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³⁷ Union of Concerned Scientists, “Post-Harvey, the Arkema Disaster Reveals Chemical Safety Risks Were Preventable,” October 2017. Available: <https://blog.ucsusa.org/charise-johnson/post-harvey-the-arkema-disaster-reveals-chemical-safety-risks-were-preventable>.

³⁸Christine Todd Whitman letter to Speaker Ryan and Majority Leader McConnell, March 29, 2017, pg. 2