June 16, 2021

Hon. Michael S. Regan, Administrator, United States Environmental Protection Agency

James Frederick, Acting Assistant Secretary of Labor for Occupational Safety and Health

Re: Docket ID: EPA-HQ-OLEM-2021-0312

Dear Administrator Regan and Acting Assistant Secretary Frederick:

We submit this comment in response to EPA's Notice of Virtual Public Listening Sessions regarding the EPA Risk Management Program (RMP) regulations and related goals.

In offering our views, we draw on our prior experience in government and national security roles:

- Christine Todd Whitman, former Administrator, United States Environmental Protection Agency;
- Lieutenant General Russel L. Honoré, US Army (Ret), former Commander, Joint Task Force Katrina and founder, the GreenARMY;
- Major General Randy Manner, US Army (Ret), former Acting Director and Deputy Director, Defense Threat Reduction Agency;
- Robert M. Bostock, former Assistant to the Administrator for Homeland Security, United States Environmental Protection Agency;
- David Halperin, lawyer and former staff member, National Security Council and Senate Intelligence Committee.

In summary, we believe the requirements of U.S. national security make it urgent that EPA move to issue new, strong RMP rules that adequately protect the American people against chemical plant explosions. Millions of Americans, particularly low-income people and people of color, live near hazardous chemical facilities. Accidents, storms that have been intensified by climate change, and deliberate attacks, including terrorism and cyber attacks, all pose risks of chemical explosions that could cause widespread destruction and death.

EPA should restore and build on its 2017 rule, including by requiring all RMP facilities to assess safer alternatives to existing chemical processes; requiring all these facilities to share their safer technology analyses with communities and emergency responders; and, starting with the highest risk facilities, requiring chemical facilities to substitute safer alternatives to their processes, wherever feasible, that will eliminate or significantly reduce the consequences of a catastrophic release.

In prior comments to EPA, three of us (Honoré, Manner, Halperin) collectively urged the Obama administration to implement strong RMP rules, and while that administration made important reforms, we were disappointed that the rules issued did not adequately protect the public from chemical disasters. We strongly opposed the rules issued under the Trump administration. Those rules eliminated many of the important provisions of the prior RMP rule.

The current Trump-era rules have increased dangers to U.S. national security by raising the risks of chemical explosions and releases on U.S. soil, whether from accident, natural disaster, or deliberate attack, either a physical attack or a cyber attack.

The American people need much greater protection from chemical disasters, so we urge you to strengthen safety measures, as we describe below.

For decades, our country has failed to squarely address the dangers of hazardous chemical facilities — from oil refineries to water treatment plants. An accident, natural disaster, or deliberate attack could trigger an explosion or chemical release that could kill thousands of people. Millions of our citizens live and work near these dangerous facilities.

After three years of intensive discussions with chemical companies, plant workers, affected communities, first responders and others, the EPA in January 2017 issued a rule to help protect the American people from these dangers. While not strong enough, the rule improved the federal RMP, which addresses some 12,500 facilities that use or store large quantities of highly toxic or highly flammable chemicals.

The principles of that rule need to be restored and strengthened.

Let’s be clear about what’s at stake.

The world was outraged in 2017 by a chemical attack in Syria that led to terrible suffering and death.[1]

Yet across our own country, hazardous chemical facilities are, in effect, as Senator Barack Obama said in 2006, "stationary weapons of mass destruction" — capable, if triggered, of causing the same kinds of harm as chemical weapons.[2]

This is a national security issue. National security concerns compel a stronger RMP rule now.

Our country knows the risk because there have been major incidents, like the 2013 West, Texas, ammonium nitrate explosion at an RMP facility. That tragedy killed 15 Americans and injured 160 more. There have been thousands of other serious and deadly chemical incidents at facilities regulated by the RMP program — including fatal explosions and fires at refineries in Washington and Texas, the 2012 massive Chevron Richmond refinery fire, and the fatal 2013 Geismar, Louisiana, Olefins plant explosion.

The thousands of incidents over recent years have underscored the failure by many in the chemical industry to minimize and safely secure toxic materials, and our government's failure to create comprehensive and fair rules to protect against such incidents.

The weight of these dangerous and sometimes fatal incidents, and the continuing threat to U.S. security, compelled President Obama to issue, on August 1, 2013, the Executive Order on Improving Chemical Facility Safety and Security (EO 13650), which directed federal agencies to act. That executive order led the EPA, after consulting with the Department of Homeland Security, the Occupational Health and Safety Administration, and other federal agencies, to issue the 2017 rule.

The EPA under the Trump administration repeatedly highlighted the 2016 finding of the Bureau of Alcohol, Tobacco, Firearms, and Explosives (BATF) that the West, Texas, explosion was set deliberately. We don't think the outcome of a debate over the cause of one chemical incident, however deadly, should be determinative of what makes sense for chemical security rules to protect our people. In fact, stronger chemical safety measures are needed whatever the explanation for West.[3]

The need for stronger provisions, and safer materials, is indeed no less critical and urgent if West was caused by sabotage. If West was a deliberate explosion, that

should only heighten our concern: We know there have been numerous chemical accidents and natural disaster incidents in the past, but now there is at least evidence of a deliberate attempt to cause harm by attacking one of these facilities — and of the vulnerability of one of our plants to such an effort.

Whatever happened at West, it is a serious concern that terrorists could trigger a chemical plant attack in our country, with devastating consequences.

We do know the April 19, 1995, Oklahoma City federal building bombing that killed 168 people was intentional. We also know that following the January 6th attack on the U.S. Capitol, the FBI has warned that domestic terrorism is now the U.S.'s greatest terrorist threat.[4]

There have been other danger signs. 9-11 hijacker Mohammed Atta, before he flew a jet into the World Trade Center, reportedly had been scouting U.S. chemical plant sites.[5]

In response to the terrorist attacks of September 11, 2001, the Environmental Protection Agency was designated the lead agency, under President George W. Bush's July 2002 National Strategy for Homeland Security, for reducing the vulnerability to deliberate attacks on the nation's Chemical Industry and Hazardous Material sectors.

Prior to the official designation as lead agency, EPA developed a "Strategy for Improving Security and Preventing Releases caused by Criminal Attack at Hazardous Chemical Facilities." The proposal, based on the General Duty clause of the Clean Air Act, would have incorporated security requirements into EPA's Risk Management Program.

Regrettably, the Office of Management and Budget declined to support this proposal, and the Bush Administration did not allow this proposal to go forward. The administrator of the EPA, Governor Whitman, subsequently requested that the EPA be removed as the lead for this sector, since it was given the responsibility but not the authority to pursue measures to improve security in this vulnerable portion of the nation's critical infrastructure.

In 2003, the government's National Infrastructure Protection Center warned that U.S. chemical plants could be terrorist targets.[6] Security experts have warned of the relative ease with which determined attackers could thwart plant security.

The EPA has identified 466 chemical facilities that each put 100,000 or more people at risk of a poison gas disaster.[7] In 2004, the Homeland Security Council projected that a major attack would kill 17,500 people and injure tens of thousands.[8]

The people most at risk are low-income people and people of color, especially poor children of color. People of color are nearly twice as likely as white people to live in the fenceline zones near hazardous chemical facilities. Children of color make up nearly two-thirds of the 5.7 million children living within a mile of a high-risk chemical facility. Poor black and Latino children are more than twice as likely to live in fenceline zones than white children living above the poverty line.[9]

The potential for cyber attacks makes the challenge even more serious.[10] The recent spate of cyber attacks on US industry, including energy and critical infrastructure facilities, highlights the heightened risk of strikes on chemical plants by attackers armed only with computers. Many U.S. chemical facilities may be dangerously unprepared for sophisticated cyber attacks,[11] let alone the massive "cyber Pearl Harbor" about which former Secretary of Defense Leon Panetta has repeatedly warned. Indeed, Panetta, as secretary and former secretary, has specifically mentioned chemical plants as vulnerable to, and targeted by, cyber attackers.[12]

Even without the threat of sabotage, we are not only at risk, but actual harm is occurring regularly under EPA's existing framework.

From 2004 to 2013 there were some 1,500 U.S. chemical releases or explosions with reportable harm[13], causing 17,000 injuries and 58 deaths. There have been hundreds more incidents since then, with more casualties.

We know the dangers, also, from the 1984 pesticide plant disaster at Bhopal, India, which caused 20,000 deaths. The Bhopal plant was owned by a U.S. company, Union Carbide. If that plant had been located in the U.S. and 20,000 people had died here, we would have fixed this problem long ago.

Our country received another serious warning in the wake of Hurricane Harvey in 2017, when a flooded organic peroxides manufacturing plant, operated by the French company Arkema, in Crosby, Texas, 20 miles from Houston, burned, as a result of the plant losing power and refrigerated materials decomposing.[14] Brock Long, then the Federal Emergency Management Agency head, said that the "the plume is incredibly dangerous."[15] Residents around the area were evacuated. At least 15 first responders

were treated at the hospital. Some of the emergency workers sued the plant[16], as did Harris County, Texas[17], and in 2018, a grand jury criminally indicted Arkema North America and two of its executives, charging that they recklessly released chemicals and put residents and first responders at risk of serious injury.[18] After a Texas judge acquitted all defendants in October 2020, a spokesman for the Harris County district attorney said, "Today's ruling by a judge doesn't change the fact that dangerous chemicals on Arkema property ignited and were belched in a cloud of toxic smoke over the surrounding communities, and a first responder there protecting people is now on a lung-transplant list."[19]

Hurricane Harvey was the largest recorded storm in U.S. history in terms of peak rainfall. Global climate change is helping to produce more intense storms across our country, increasing the risk of chemical incidents triggered by violent weather. Harvey helped reveal the vulnerabilities of our communities to these storms, including the chemical plants near U.S. coastlines.[20]

The 2017 EPA rule would have required plants like Arkema's to engage in more coordination with local first responders to plan for incidents by sharing information that first responders need to protect communities, and make it easier for community members to learn about plant dangers. The rule also would have required such plants to evaluate whether they need greater safety improvements and emergency preparedness, such as storing fewer chemicals, improving storage safety, and strengthening backup power so electricity would be maintained in a storm, and devising other ways to operate more safely and reduce hazards before foreseeable hurricane winds, flooding, or earthquakes hit. And the rule would have required the 12% of RMP facilities with the most serious accident records — refineries and coal products manufacturers, paper mills, and chemical manufacturers — to analyze whether it was feasible to move to safer technologies and materials.

Chemical industry lobbying kept important protections out of the 2017 RMP rule. In particular, community, labor, and environmental groups had strongly urged -- and we urge today -- that plants be required to move to safer technologies where feasible[21], as some responsible companies, such as Clorox and hundreds of publicly owned water treatment facilities already have done voluntarily.[22]

But, as noted, the 2017 RMP rule did provide for some critical, common-sense reforms: enhancing emergency preparedness; improving investigations of near-miss

incidents and actual releases; instituting third-party audit requirements; increasing public access to chemical hazard information; and requiring safer technology analyses (STAAs) including, for example, improving plant design to protect against chemical terrorism. EPA found in issuing the 2017 rule that it would reduce deaths, injuries, and other harm from RMP facility incidents involving both RMP-covered and non-RMP covered chemicals, as well as lead to "prevention of rare but extremely high consequence events," such as a major Bhopal-level catastrophe.

Instead of heeding these concerns, the EPA during the Trump administration cancelled all of the essential prevention measures — including inherently safer technology assessments, incident investigation improvements, and training — and most of the information measures, while weakening and postponing the other common sense emergency response measures, such as annual coordination with first responders, disaster drills and exercises, and even public meetings after a chemical disaster. This is an enormous abdication of the government's responsibility to protect our nation and our people.

If the Trump-era rule is not replaced, it will likely cost our country a great deal of money over time in recovery expenses from a greater frequency of chemical explosions — far more than the cost of implementing the 2017 rule.[23] And it could lead to extensive, and even catastrophic, loss of lives.

The provisions in the Trump-era regulations to reduce public access to information about chemical hazards at U.S. facilities are of particular concern to us.

EPA under the Trump administration used national security as an attempted justification to weaken the informational access for first responders, but EPA offered no evidence or gave no justification for why such public servants are not or cannot be adequately trained to keep such information safe. Nor did EPA provide any evidence that allowing a community member to request certain information from a facility would increase the likelihood that a terrorist would attack a facility.

In fact, evidence supports the need for the people most affected by a chemical incident to have information before it happens, so they can adequately prepare to protect themselves.[24]

Determined attackers will be able to discover, through diligent research, where hazardous materials are stored, regardless of what EPA mandates; thus, there's no

good reason to leave first responders or community members in the dark, when informing them could improve public protection.

Instead of keeping the Trump-era rule, EPA should restore and build on the 2017 rule, including by:

— Requiring all RMP facilities to assess safer alternatives to existing chemical processes, alternatives that will eliminate or dramatically reduce the consequences of a catastrophic release of an acutely toxic substance. The 2017 rule exempted 78% of the 12,500 Risk Management Plan chemical facilities from requirements to conduct STAAs. The exempted facilities include, for example, water treatment plants, some of which put major cities at risk of a catastrophic release of chlorine gas.

— Requiring all these RMP facilities to send their STAAs to the EPA and readily share the information with nearby communities and other interested parties, such as emergency responders, vendors of safer technologies, facility employees and contractors, and safety researchers.

— Establishing a publicly accessible clearinghouse of safer available alternatives that could encourage and support the adoption of safer alternatives by more facilities as soon as practicable.

— Starting with the highest risk facilities, requiring chemical facilities to substitute safer alternatives to their processes, wherever feasible, that will eliminate or significantly reduce the consequences of a catastrophic release. The coalition of community, worker, and environmental groups that has engaged the EPA on these issues[25] has recommended that EPA at the very least begin a pilot program to require IST implementation in a subset of RMP facility categories, such as waste water and drinking water treatment plants, bleach plants and hydrogen fluoride refineries, and for those facilities among the 2,000 high-risk facilities cited in the EPA's National Enforcement Initiative (NEI) 2017-19 proposal.

-- Factoring into RMP regulations and permits the vulnerability of chemical facilities to natural disasters and common-sense prevention and safety measures to protect communities and workers from the double threat of chemical disasters hurricanes, floods, and other "natech" incidents where there is a domino effect of natural and technological disasters, including: safer shutdown/startup; back-up power; real time monitoring; worker involvement & community notification.

-- Expand the universe of substances regulated by the RMP program to include ammonium nitrate, reactives and other hazardous chemicals and expand the categories of facilities covered.

These provisions to improve chemical security are urgently needed to protect the American people. EPA should cancel the current Trump proposed rule, implement the 2017 rule, and build on it with the new provisions listed above to further strengthen chemical plant security.

That is the only responsible course if we are to protect the American people.

We would be pleased to discuss these matters further with you.

Sincerely,

Christine Todd Whitman

Lieutenant General Russel L Honoré, US Army (Ret)

Major General Randy Manner, US Army (Ret)

Robert M. Bostock

David Halperin

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[1] "Syrian air force used deadly chemical weapons in 2017 attacks, global watchdog finds," UN News, April 8, 2020, https://news.un.org/en/story/2020/04/1061402

[2] Remarks of Senator Barack Obama, Improving Chemical Plant Security, March 29, 2006 http://obamaspeeches.com/059-Improving-Chemical-Plant-Security-Obama-Podcast.htm

[3] The EPA under the previous administration recognized that, regardless of cause, the West incident shows the need for stronger emergency response coordination than has existed. 83 Fed. Reg. at 24,870 ("EPA reaffirms [its] view [that the West incident still highlighted the need for better coordination between facility staff and local emergency responders.") Similarly, the D.C. Circuit Court of Appeals held that the BATF finding did not justify delaying the effective date of the 2017 rule ("EPA cited many more incidents than just the West, Texas disaster throughout the development and promulgation of the rule…. Even were the court to agree for purposes of argument that the cause of the West, Texas disaster being arson is relevant to some of the accident- prevention provisions of the Chemical Disaster Rule, it is irrelevant to the emergency-response and information-sharing provisions…).

https://www.documentcloud.org/documents/4775225-180817-Air-Alliance-Houston-et-al-v-EPA-OPINION.html slip op. at 35-36.

[4] Homeland Security Digital Library, "Joint FBI and DHS Report Warns of "Lone Offender" Terrorist Threat," https://www.hsdl.org/c/fbi-dhs-lone-offender/

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[8] Testimony of Paul Orum, Blue Green Chemical Security Coalition/Independent Consultant to Center for American Progress, Before the Committee on Environment and Public Works, United States Senate, July 28, 2010, https://www.epw.senate.gov/public/_cache/files/2a4a3b95-5710-4231-b9f5-82227e8ad904/orumtestimonycombined.pdf

[9] Center for Effective Government, Living in the Shadow of Danger, January 2016, https://www.foreffectivegov.org/sites/default/files/shadow-of-danger-highrespdf.pdf

[10] Report Of the Attorney General's Cyber Digital Task Force, July 2, 2018, https://web.archive.org/web/20210116164256/https://www.justice.gov/ag/page/file/1076696/download

[11] U.S. Cybersecurity and Infrastructure Security Agency, Chemical Sector Landscape, August 2019, https://www.cisa.gov/sites/default/files/publications/Chemical%20Sector%20Landscape_compliant.pdf ; Katrina Kramer, "US chemical plants risk disastrous cyberattacks relying on guidance a decade out of date,"Chemistry World, June 8, 2020, https://www.chemistryworld.com/news/us-chemical-plants-risk-disastrous-cyberattacks-relying-on-guidance-a-decade-out-of-date/4011915.article.

[12] Remarks by Secretary Panetta on Cybersecurity to the Business Executives for National Security, New York City, October 12, 2012, https://content.govdelivery.com/accounts/USDOD/bulletins/571813 ; Jeff Erickson, "The Possibility Of A Cyber Pearl Harbor Remains Real, Says Former CIA Director," Forbes, March 13, 2019, https://www.forbes.com/sites/oracle/2019/03/13/the-possibility-of-a-cyber-pearl-harbor-remains-real-says-former-cia-director/?sh=311b00459fb4 .

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[24] See, e.g.: Department of Homeland Security, CFATS: RBPS 9 – Response, Fact Sheet (https://www.dhs.gov/sites/default/files/publications/rbps-9-fs-508.pdf) and Guidance (https://www.dhs.gov/sites/default/files/publications/CFATS-Risk-Based-Performance-Standards-508.pdf); Department of Homeland Security, "Chemical Sector Security Awareness Guide" (Sept. 2012) ("The underlying message of the guide stresses the importance of communication, not only within the facility, but also with local law enforcement agencies and emergency response personnel. A quick and coordinated response is an important factor in addressing and eliminating security threats" (p.1)) https://www.dhs.gov/sites/default/files/publications/DHS-Chemical-Sector-Security-Guide-Sept-2012-508.pdf ; Partnership for A Secure America, "Chemical Terrorism: U.S. Policies to Reduce the Chemical Terror Threat" ("Invest in training and materials for first responders. Risk communication to the public.") http://www.psaonline.org/2008/09/01/chemical-terrorism/

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