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**Public Comment on
The Environmental Protection Agency (EPA) Proposed Rule:
Accidental Release Prevention Requirements: Risk Management
Programs under the Clean Air Act**

March 13, 2016

Thank you for the opportunity to submit public comments on the Environmental Protection Agency's proposed revisions to the Accidental Release Prevention Regulations under the Clean Air Act (81 FR 13637).

Public Employees for Environmental Responsibility (PEER) is a national alliance of local state and federal resource professionals. PEER works nation-wide with government scientists, land managers, environmental law enforcement agents, field specialists and other resource professionals committed to responsible management of America's public resources. Resource employees in government agencies have unique responsibilities as stewards of the environment. PEER supports those who are courageous and idealistic enough to seek a higher standard of environmental ethics and scientific integrity within their agencies. Our constituency represents one of the most crucial but underutilized resources in the conservation movement.

PEER supports the EPA's proposal to modernize various requirements of its Risk Management Program (RMP), which was first promulgated in 1996 and was designed to prevent and to reduce the consequences of catastrophic chemical accidents that threaten the public and the environment. Recent chemical process disasters such as the 2014 toxic methyl mercaptan release at the DuPont pesticide plant near Houston, the 2013 ammonium nitrate explosion at West Fertilizer, the 2010 explosion at the Tesoro refinery in Washington State, and the 2012 fire at the Chevron refinery in California all underscore the need for strengthening and revitalizing this critical program.

PEER believes that the changes proposed by the EPA its March 14, 2016, Proposed Rule are positive steps that will help reduce the frequency and severity of chemical accidents. However, PEER also believes there are significant weaknesses and omissions in the proposal that should be addressed prior to adoption of a final rule.

We do, however, have some specific comments and suggestions:

PEER Supports Proposed IST Requirements and Believes They Should Be Strengthened

PEER strongly supports the proposed change to the EPA's requirements for Process Hazard Analysis to require that companies perform a Safer Technology and Alternatives Analysis (STAA) to identify inherently safer processes, chemicals, and technologies. However, the current proposal has significant shortcomings in that the requirement would be limited to only a handful of industrial sectors rather than the entire universe of facilities covered under the RMP. The proposal would exempt whole sectors such as utilities and water treatment facilities, food and beverage manufacturers, and general manufacturers that use covered hazardous substances and thus may pose hazards to the public.

Ironically, the EPA's own proposal – by way of justification for the STAA requirement – cites examples where the agency successfully required inherently safer process changes at (a) a food processor, (b) a fertilizer facility, (c) a dairy company, and (d) a metal finishing facility (See 81 FR 13364). These changes evidently followed accidents and complaints, and associated EPA enforcement actions. Yet remarkably, none of these same facilities would be required to perform an STAA under the agency's current proposal.

Instead, the proposal unjustifiably and arbitrarily limits the STAA requirement to petroleum refineries and chemical and paper manufacturing sites. The agency presents a thin argument that facilities having these three specific NAICS codes have the highest number of accidents per facility, while making no effort to account for which sectors and facilities pose the highest risks to the public.

At a bare minimum, the EPA should use the worst-case scenario release data that it has collected over the years – and made difficult for the public to access – to require all facilities that pose a significant public risk to conduct STAAs.

Rule Should Require Implementation of Feasible IST Alternatives, Not Analysis Alone

As noted in the discussion accompanying the proposed rule, most stakeholders (including industry representatives) agree on the benefits of using inherently safer technology (IST) approaches wherever feasible. It is well established in the technical literature that IST approaches should be the first choice for accident prevention, because they are more likely to result in a permanent risk reduction (See for example Kletz, T.A.; Amyotte, P. *Process Plants: A Handbook for Inherently Safer Design*, 2nd Ed. CRC Press: Boca Raton, FL, 2010).

In fact, adopting IST wherever feasible is likely to be more effective and less costly in the long run than many of the procedural and administrative safeguards that regulatory systems like the RMP otherwise require or encourage.

Other industrial nations have already made IST requirements a centerpiece of their regulatory systems for high hazard facilities (See U.S. Chemical Safety and Hazard

Investigation Board (CSB), *Regulatory Report—Chevron Richmond Refinery Pipe Rupture and Fire*, Report No. 2012-03-I-CA, 2014). Moreover, other nations have gone much further in this regard, for example by requiring facilities to show that they have appropriately analyzed and adopted IST approaches as part of written “safety case” that must be reviewed and accepted by government regulators as a condition of operating. Risks must be quantified and driven down to an appropriate level such as ALARP or “as low as reasonably practicable,” preferably through adoption of IST-based design changes.

Thus at a minimum, the EPA should require STAA’s for all covered facilities that pose a significant risk to the public, not just a handful of cherry-picked sectors. In addition the rule should place the burden on covered facilities to *implement* any IST approaches that are determined to be feasible, in at least the same manner that the existing rule requires that facilities implement the recommendations from a conventional process hazard analysis.

IST Analyses Should Be Subject to Public Scrutiny

As currently drafted, the STAA appears to be largely a paper exercise – like a take-home exam that is passed out to students but never collected or graded, and where there is no real-world consequence for any answer.

The EPA proposal falls far short of even the existing regulatory requirements under California’s Contra Costa County Industrial Safety Ordinance, which directs companies to “select and implement each inherently safer system identified in the [inherently safety systems analysis] report to the greatest extent feasible and as soon as administratively practicable.” In addition Contra Costa County has prudently required companies to conduct these analyses whenever major process changes are proposed and in the aftermath of accidents, when there are often significant opportunities for making process improvements as equipment is rebuilt or repaired.

The State of California’s Department of Industrial Relations is currently considering similar requirements for refineries throughout the state, directing each facility to “implement all recommendations” from inherent safety analyses, unless the facility can demonstrate that a recommendation is factually flawed or infeasible on grounds other than cost alone. PEER believes these provisions are superior to EPA’s current proposal and that EPA should model its requirements on these existing and emerging state and local programs.

A vital provision of the Contra Costa County program is that each facility’s analyses of inherently safer systems become part of a written safety plan that is submitted for review to county regulators. The county’s health department, which administers the program, then schedules a public meeting to present the safety plan (omitting any bona fide trade secrets), and to initiate a 45-day period of public comments. The department is obliged to respond to public comments on the plan.

If the EPA wants to seriously advance the implementation of IST, it is essential to require companies to make their STAAs public, with reasonable protections for genuine

confidential business information and trade secrets. Without appropriate public discussion and oversight, there is little likelihood that companies will make any significant process safety changes based on analyses that are prepared in secret and then quietly deposited away in a file drawer.

Proposal Fails to Address Reactive Hazards, Unsafe Siting that Caused West Fertilizer Disaster

PEER supports other requirements contained within the proposed rule, such as a new requirements for third-party auditing, expanding the required scope of company investigations of incidents, and requiring additional emergency response preparation. While these are all modest steps in the right direction, PEER believes that the overall proposal nonetheless overlooks a number of serious issues that have been raised concerning the federal regulation of process safety.

As the EPA noted, the genesis of the current regulatory proposal was President Obama's Executive Order 13650, issued in the wake of the 2013 West Fertilizer ammonium nitrate explosion that killed 15, including two members of the public, and caused extensive off-site destruction in the town of West, Texas. However, nothing in the current proposal addresses the danger to the public from incidents involving ammonium nitrate or other reactive chemicals.

The 2002 recommendation from the U.S. Chemical Safety Board – calling on EPA to cover reactive chemical processes under the Risk Management Program – remains unaddressed and unfulfilled under the current proposal. Likewise the CSB has urged the EPA to address facility siting issues, noting for example that the unfortunate siting of schools, a nursing home, residences and apartments near West Fertilizer plant greatly contributed to the severe impacts from the 2013 explosion.

A more recent study by the nonprofit Center for Effective Government, *Kids in the Danger Zone*, noted that 19.6 million children attend schools located within the vulnerability zones of RMP-covered chemical facilities. This risk is hardly hypothetical – in West, Texas, three schools were destroyed or heavily damaged by the explosion, and hundreds of student deaths and injuries might have occurred had the explosion happened during the school day. A subsequent report from the Center for Effective Government found that across the country, the fence-line risk from chemical sites disproportionately affects the poor and people of color.

Nothing in the EPA proposal, however, addresses facility siting – an issue that falls squarely within the EPA's responsibility to protect public health and safety.

Given that the proposed rule is the first major change to the Risk Management Program in 20 years – and any actions deferred now will perhaps take another 20 years to achieve – PEER believes that the EPA should take this opportunity to address the serious issues of reactive hazards and unsafe facility siting that endanger the public. It would be inadvisable to wait another generation to act on this demonstrable risk.

RMP Program Lacks Adequate Enforcement

Significantly, the proposal does not address several key issues that undermine the effectiveness of the Risk Management Program. A 2009 report by the EPA's Office of Inspector General illustrated how the EPA has not obtained or dedicated adequate resources to the enforcement of RMP requirements at chemical sites (U.S. Environmental Protection Agency Office of Inspector General, *EPA Can Improve Implementation of the Risk Management Program for Airborne Chemical Releases*, Report No. 09-P-0092, 2009). The report found that "over 65 percent of all active RMP facilities had not received an on-site inspection or audit since [the] inception of the Risk Management Program in 1999." (*Ibid.*, p. 15) The inspection rates for high-risk facilities, i.e. those impacting more than 100,000 people in a worst-case release, were likewise "generally low" according to the EPA auditors. Inspection rates were also low even at facilities that had experienced accidents.

The OIG cited among other causes "the relatively low number of EPA inspectors available to conduct oversight" which the OIG found was just over 24 full time equivalents (FTEs) who were tasked with enforcement at some 11,529 covered facilities (*Ibid.*, p. 21), which include thousands of large and complex oil and chemical processing sites.

Similarly, in a response to hearing questions from Senator Frank Lautenberg in 2007, the EPA admitted that the total administrative fines levied for RMP violations across the country were usually less than \$1 million per year. In the oil refinery sector (one which the current proposal singles out for heightened oversight based on the number of reported accidents), entire years passed where not a single refinery paid a dollar in fines for RMP violations. (See U.S. Environmental Protection Agency, Letter of Associate Administrator Christopher P. Bliley to the Honorable Barbara Boxer, Chairman of the Senate Committee on Environment and Public Works, October 17, 2007).

This severe resource shortage and lack of enforcement muscle, if left uncorrected, will greatly vitiate the impact of any positive regulatory changes undertaken by the agency, however well intentioned.

Proposal Heavily Relies on Unfunded Local Volunteer Committees for Implementation

According to the EPA's own economic analysis, the costliest single requirement of the proposed rule are new provisions for emergency response and notification exercises, including both field and tabletop exercises. By their nature, these exercises will require a high level of involvement and investment from local emergency responders and local emergency planning committees (LEPCs). Indeed, LEPCs would play a central role in the proposed rule, not only in supporting facility preparedness exercises but also as the recipients and the repositories for extensive new information such as accident histories, investigation reports, third-party audit reports, and IST analyses.

Nothing in the proposal – or any other recent EPA initiative – would address the historical weaknesses in the system of LEPCs, which were mandated by Congress in

1986 but never provided with any source of federal funding and are generally staffed only by volunteers. The proposed rule only adds to the unfunded mandate facing LEPCs across the country.

The EPA's most recent survey of the nation's LEPCs, conducted in 2008, found among other things that:

- More than 59% of LEPCs do not have an operating budget
- Only a third of LEPCs use Risk Management Program information at all, and the majority "never" or only rarely visit the website for the EPA's Office of Emergency Management, which administers the RMP program
- Only about 24% of LEPCs had a web site of their own
- The majority of LEPCs received no public inquiries in the previous 12 months

[See U.S. Environmental Protection Agency, *2008 Nationwide Survey of Local Emergency Planning Committees (LEPCs)*, 2008.]

CSB investigations of chemical disasters that had severe offsite impacts, such as the West explosion and a 2004 airborne toxic chemical release in Dalton, Georgia, found that LEPCs had either never been established or were minimally active.

In addition, the EPA has no apparent authority or ability to directly support the functioning of LEPCs, or to sanction state or local governments whose LEPCs are inactive or even nonexistent.

Given all these constraints, PEER believes that the proposed rule is unrealistic to the extent it expects LEPCs to play an expanded, central role in facilities' accident prevention programs and to be the principal government organizations receiving certain key information, such as inherent safety analyses.

While local oversight can certainly be effective in reducing accident rates – as in California's Contra Costa County – this is only true where local agencies have adequate funding and technical expertise. In Contra Costa County, each covered facility pays a substantial fee to the county government to support its oversight activities; a 2011 report by the county noted these annual fees totaled more than \$700,000, which were used to support a full-time staff of county engineers tasked with implementing the county's chemical safety program.

No such resources or technical expertise are available to the vast majority of LEPCs, which essentially have no budget and no paid employees, and have no direct regulatory authority over chemical facilities. The current proposed rule adds substantially to LEPCs tasks and responsibilities, while once again providing no funding mechanism or meaningful federal oversight for the system.

In closing, thank you once again for moving forward with changes and improvements to

the Risk Management Program; PEER supports these changes and believes they should be made substantially stronger and more comprehensive.

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