Comments of the International Union, UAW

on

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

(83 Fed. Reg. 24, 850; May 30, 2018)
Docket No. EPA-HQ-OEM-2015-0725

Submitted by

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Background

On May 30, 2018, the Environmental Protection Agency (EPA) published a proposed rule entitled "Accidental Release Prevention Requirements: Risk Management Programs Under the Clean Air Act," (83 Fed. Reg. 24, 850). This rule would rescind or weaken almost all 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).

UAW Opposes Proposed Rule

The International Union, UAW, represents about one million active and retired members in the automobile, aerospace and agricultural industries. A number of UAW members work in food manufacturing, paint and chemical plants which are often facilities that are required to file EPA risk management plans (RMPs). Among these are a chemical manufacturer in Adrian, MI, and a wastewater facility in Detroit, both of which use chlorine, as well as a brewery in Trenton, OH which uses anhydrous ammonia. Many of our members live and work in the vulnerability zone of the Detroit wastewater facility, which includes over 2 million people. We oppose the proposed rule, which would repeal many protections against chemical disasters and weaken many others. In doing so it would endanger the lives of those who work in and live near RMP covered facilities, including UAW members and retirees. We call on EPA to implement the 2017 Chemical Disaster Rule without further delay or weakening and to drop its proposed rule.

The UAW opposes this proposed rule. Among the provisions that the agency has proposed to rescind that raise concerns are:

- A requirement for 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)
- Expanded safety training requirements that include supervisors and all others involved in operation of process. (40 C.F.R. §§ 68.54 and 68.71; 83 Fed. Reg. at 24,857-58.)
- A requirement to keep process safety information up to date. (40 C.F.R. § 68.65(a); 83 Fed. Reg. at 24,857-58.)
- A requirement 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 third-party audit requirement (40 C.F.R. §§ 68.59, 68.80; 83 Fed. Reg. at 24,857-58)
- Several provisions related to investigations including requirements to:
    - Investigate even those cases in which the affected process was decommissioned or destroyed. (40 C.F.R. §§ 68.60(a)(1), 68.81(a)(1); 83 Fed. Reg. at 24,857-58.)

- Investigate “near misses” 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 24,857-58.)
- Conduct a “root cause analysis” as part of every investigation. (40 C.F.R. § 68.60(d)(7), 68.81(d)(7); 83 Fed. Reg. at 24,857-58.)
- Include at least one person knowledgeable about the process in each investigation; Complete each investigation within 12-months; 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 24,857-58.)
- Consider findings from incident investigations in the hazard review and analysis processes. (40 C.F.R. § 68.50(a)(2), 68.67(c)(2); 83 Fed. Reg. at 24,857-58.)

We also oppose EPA’s proposals to delay compliance dates for provisions that are not repealed.

Flaws in EPA’s Analysis

EPA justifies its proposal by stating:

> 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. Thus, we recommend rescinding them in accordance with the direction reflected in E.O. 13777. (83 Federal Register 24873)

In the first instance, the UAW does not believe that the Clean Air Act permits EPA to rescind the chemical disaster regulations based on cost. EPA does not cite an authority to consider cost at all. We urge the agency to use a more rigorous form of analysis with quantitative results that are transparent to all stakeholders.

The Agency’s assertion that costs exceed benefits is based on what it describes as a “low and declining accident rate.” EPA’s assertion that the rate is “low and declining” is based on exhibit 3-7 on p.34 of the Reconsideration RIA[1] (reproduced above). Unfortunately, Exhibit 3-7 shows no rates at all, but rather shows the calendar year and the number of impact

Exhibit 3-7: RMP Reportable (Impact) Accidents by Year, 2004 – 2016

Year	Impact Accidents
2004	197
2005	152
2006	140
2007	204
2008	168
2009	149
2010	128
2011	138
2012	118
2013	123
2014	128*
2015	113*
2016	99*
Total (2004 – 2013)	**1,517**
Total (2005 – 2014)	**1,448**
Total (2006 – 2015)	**1,409**
Total (2007 – 2016)	**1,368**
Average/Year (2004 – 2013)	**152**
Average/Year (2005 – 2014)	**145**
Average/Year (2006 – 2015)	**141**
Average/Year (2007 – 2016)	**137**
*May increase after the 2019 RMP reporting wave occurs.	

[1] EPA April 2018. *Regulatory Impact Analysis - Reconsideration of the 2017 Amendments to the Accidental Release*

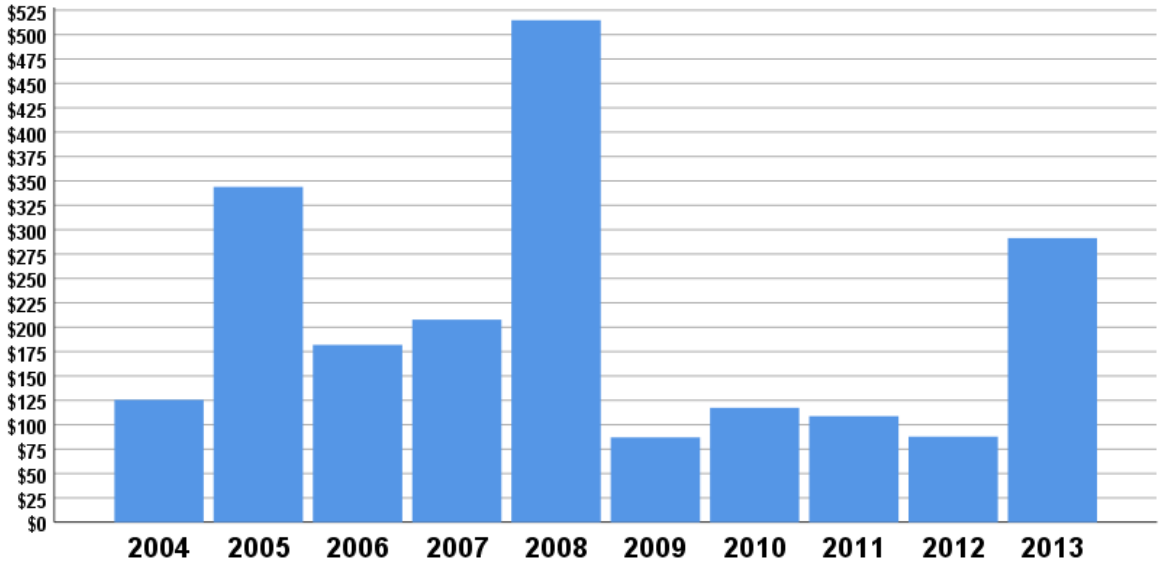
accidents that occurred in that year, as well as some totals and averages. The accident rate is the number of accidents that occurred in a year divided by the number of facilities that could have had an accident during the year. Nowhere in the RIA does EPA appear to have calculated rates.

It is important to look at rates and not just numbers. Around 2008, the economy took a turn for the worse. It is possible that a significant number of facilities closed and did not re-open. If this is what happened, the 138 accidents in 2011 might represent *a significantly higher rate* than the 140 accidents in 2006. We cannot know whether or not that is the case based only on the data that the agency has presented. The burden of proof is on the Agency to substantiate its assertion that that the rate is declining.

Property Damage, Injuries, Illnesses, Evacuations, Shelter and Deaths Tell a Different Story

Chart 1

Total on- and off-site Property Damage (in millions of dollars) due to Reportable RMP Events by Year



The number, or even the rate of RMP-reportable events, may not be the most important statistic to examine. If, instead, we use the data provided by EPA in the docket[2] to look at the total on- and off-site property damage[3] done by RMP-reportable events we see in

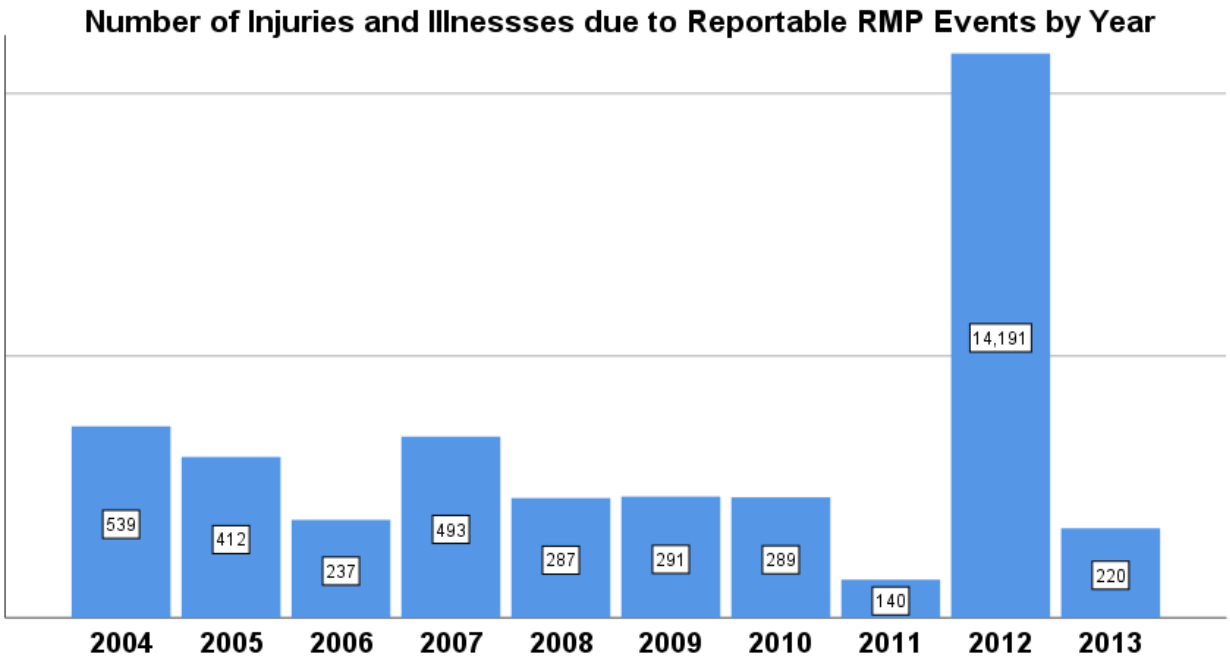
[2] EPA. February 2016. *Risk Management Plan (RMP) Facility Accident Data, 2004-2013.* Office of Land and Emergency Management, US Environmental Protection Agency, Washington, DC. Docket ID: EPA-HQ-OEM-2015-0725-0002.

[3] This is calculated by adding Onsite Property Damage (Column AD in the above cited spreadsheet) to Offsite Property Damage (Column AJ)

Chart 1 (above) that 2013 was the most expensive year since 2008. RMP-reportable events did almost $ 3 hundred million worth of damage in 2013[4].

Another informative statistic, called “injuries and illnesses” can be calculated by adding up on-site and off-site injuries, hospitalizations and outpatient medical care[5]. We can see that 2012 had more than 10 times as many as injuries and illnesses as any other year going back to 2004. As Chart 2 indicates, there were over 14,000 in 2012 and fewer than 500 in any other year between 2004 and 2013.

Chart 2



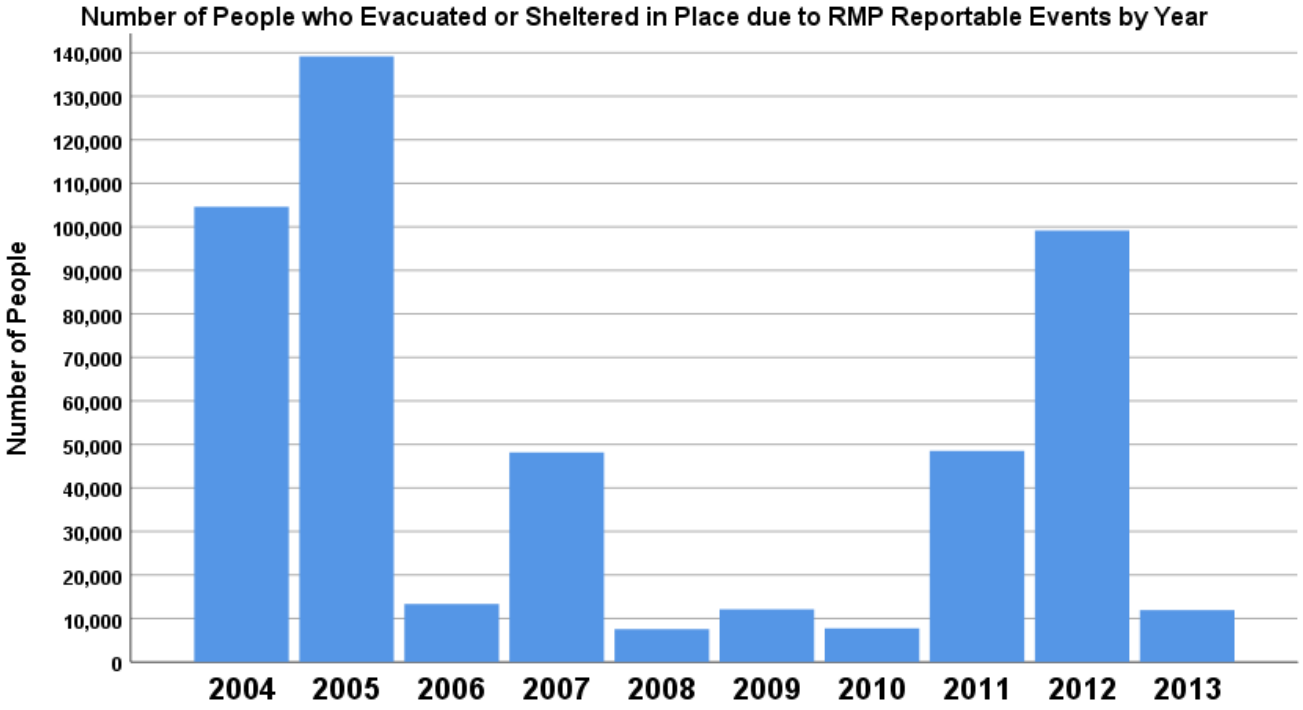
Of the 14,191 reported injuries and illnesses associated with RMP-reportable events in 2012, 14,003 resulted from a pipe rupture that caused a fire by releasing flammable gas at the Chevron refinery in Richmond, California on August 6, 2012. The associated medical conditions included breathing problems, chest pain, shortness of breath, sore throat, and headaches. These data illustrate the difficulty of identifying trends when one is dealing with low-probability/high-consequence events. Without the Chevron Richmond event, there might have been mild declining trend in injuries and illnesses, but it is difficult to attribute importance to a trend when a single event can destroy it. Unless hazards are eliminated, there is always the possibility that such a single event can occur.

[4] EPA indicates that 2013 is the most recent year for which complete data are available.

[5] Columns from Docket ID EPA-HQ-OEM-2015-0725-0002 added to make this calculation are: Injuries - Workers/Contractors (AA), Injuries - Public responders (AB), Injuries – Public (AC), Offsite Hospitalizations (AF), and Offsite - Other Medical Treatments (AG).

A third useful statistic can be calculated by adding the number of people who evacuated to the number of people who sheltered in place[6]. Chart 3 shows that 2012 had the highest number since 2005. Almost 100,000 people had to evacuate or to shelter in place due to RMP reportable events in 2012. In this case, two events were responsible for 98,000 of the 99,000 plus people who had to evacuate or shelter that year. One was the Chevron Richmond, CA refinery event described above. The second was a gas release from the Blanchard Refining Company in Texas City, TX on March 27, 2012.

Chart 3



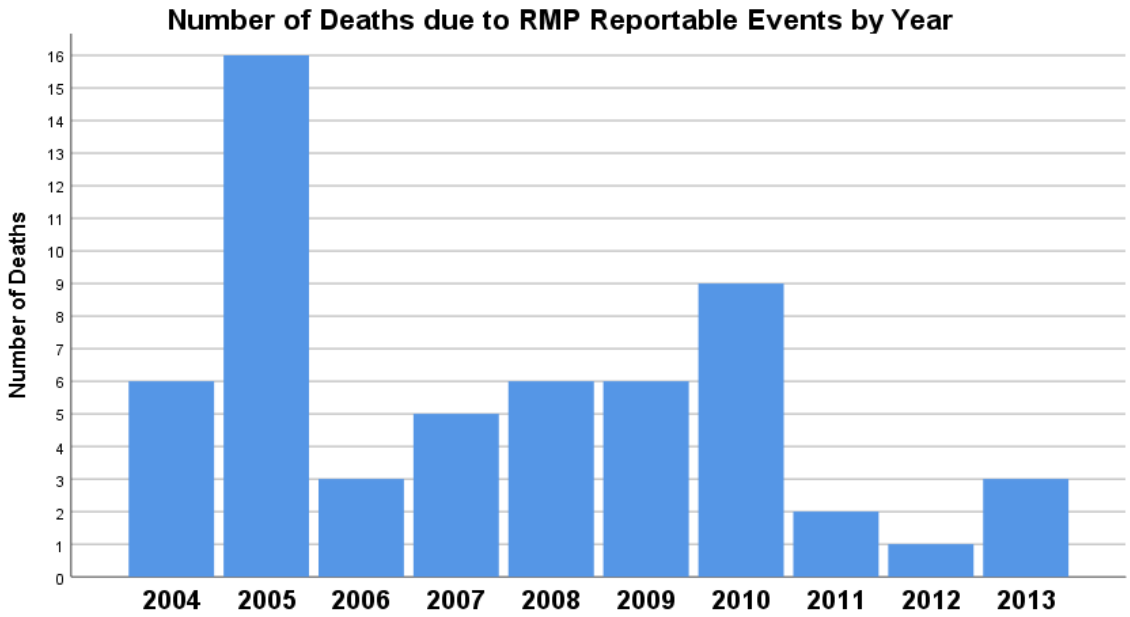
This again illustrates that there is not a declining trend and that the picture can be changed significantly by one or two major events. The only solution is hazard elimination.

The number of deaths is a potentially useful statistic as well[7]. Fortunately, the number of deaths to due RMP-reportable events is relatively small. This means that there may not be statistical significance to any time-related trend in deaths. Still, the 57 deaths due to RMP events that occurred between 2004 and 2013 are 57 too many. There is no declining trend. While it is good news that since 2005, the number of deaths due to RMP have not surpassed 16, Chart 4 shows a steady increase from 2006-2010 and 2013 saw more deaths than 2011 and 2012.

[6] This is simply the sum of Offsite Evacuated (AH) with Offsite Sheltered in Place (AI).

[7] This statistic sums Onsite Deaths - Workers/Contractors (X), Onsite Deaths - Public responders (Y), Onsite Deaths – Public (Z), and Offsite Deaths (AE)

Chart 4



Not only has EPA incorrectly asserted a "low and declining accident rate," despite having declined to calculate rates, but EPA has also cherry-picked the numbers it did present. The Agency showed the number of "accidents" which appeared to support its case. It did not show property damage, injuries and illnesses, deaths or people who evacuated or sheltered in place. The Agency has failed to meet its burden of proof.

STAA vs. An "Enforcement-Led" Approach

EPA proposes to rescind a requirement in § 68.67(c)(8) for each facility with Program 3 regulated processes that is covered by NAICS[8] code 322 (paper manufacturing), 324 (petroleum and coal products manufacturing), or 325 (chemical manufacturing) to conduct a safer technology and alternatives analysis (STAA) that addressing measures applicable to eliminating or reducing risk from process hazards. Facilities are directed to consider the following in order of preference: inherently safer technologies, passive measures, active measures and procedural measures. They are directed to evaluate the practicability of any inherently safer technologies and designs considered. EPA proposes to replace this requirement with an "enforcement-led" approach in which facility owners and operators would enter into consent agreements involving implementation of safer alternatives *after* a disaster has taken place.

EPA supports its proposal by arguing that the data as analyzed by the American Chemistry Council (ACC) demonstrate

[8] North American Industrial Classification System

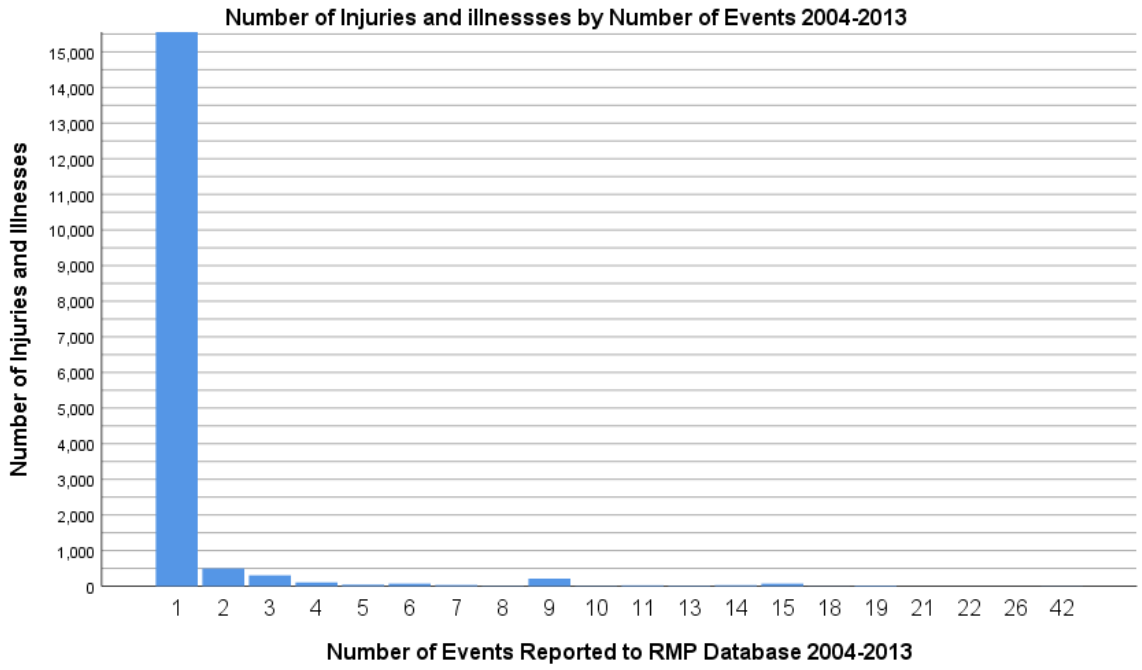
> …that accidents, and especially patterns of multiple accidents, are concentrated in very few facilities. Of the approximately 1500 reportable accidents in EPA's RMP database from the years 2004 to 2013, only 8% of the 12,500 facilities subject to the RMP rule reported any accidental releases, while the less than 2% of facilities that reported multiple releases in that time frame were responsible for nearly half (48%) of reportable accidents from all types of facilities. (83 Federal Register 24872)

EPA further states:

> Several commenters during the rulemaking asked that EPA emphasize enforcement rather than amend the RMP rule. The data (as analyzed by ACC in its petition) tend to support the reasonableness of an enforcement-led approach to strengthening accident prevention that focuses on problematic facilities rather than broader regulatory mandates…
>
> Given the small numbers of problematic facilities, the reasonableness of an enforcement-led approach to the prevention programs under the RMP rule in lieu of the RMP Amendments leads us to believe that the prevention program provisions in the RMP Amendments place an unnecessary and undue burden on regulated entities. In 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. (83 Federal Register 24872-3).

A closer look at the data shows that they do not support the arguments made by ACC and EPA. Of all the injuries and illnesses reported to the RMP database 2004-2013, 15,654, approximately 92%, occurred at facilities that reported *one event* during that time period (Chart 5). Of the 57 deaths reported to the database, 30 (53%) occurred at facilities that reported exactly one event. This means that any enforcement measure that does not take place until after the first event has occurred is too late to prevent the overwhelming majority of injuries and illnesses and the majority of the deaths. In addition, more than 128 thousand people evacuated or sheltered in place, due to events at facilities that had exactly one event. This is more than one quarter of the total for the years 2004-2013. $400 million worth of property damage resulted from such events, over 19% of the total. None of this is preventable by an enforcement-led approach that targets facilities only after a disaster has occurred.

Chart 5



In contrast, as can be seen in the table below, during the period 2004-2013, more than 90% those who had to evacuate or shelter in place had to do so due to events at Program Level 3 facilities in NAICS codes 322, 324 and 325. These facilities were associated with about 90%, of the injuries and illnesses 84% of the property damage, and almost three-quarters of the deaths. Whereas targeting facilities for action only *after* an event occurs would miss more than 90% of the injuries and illnesses and over half the deaths, targeting Program Level 3 facilities in these NAICS codes would capture the vast majority of impacts.

Impact of Events at STAA-Covered Facilities and Other Facilities 2004-2013			
	STAA	**Other**	**Percent of Total due to Events at STAA-Covered Facilities**
Evacuation/Shelter	445,525	46,729	**91%**
Injuries/Illnesses	15,361	1,738	**90%**
Property Damage (millions of dollars)	$1,728	$339	**84%**
Deaths	42	15	**74%**

Because of this, we believe that it would be ill-advised to rescind the STAA provisions of the 2017 RMP rule and replace them with enforcement that occurs after one or more events have taken place.

Trigger for Third-Party Audits and Root-Cause Analysis

EPA made the following request for public comment:

> While EPA believes an enforcement-led approach is preferable to a uniform regulatory standard for third party audits and root cause analyses, the Agency requests public comment on whether a third-party audit or root-cause analysis should be required under certain well-defined regulatory criteria. For third party audits, such criteria might include requiring audits following multiple RMP-reportable accidents… Although it is not our intent at this time to adopt such provisions, we invite parties to suggest appropriate regulatory criteria for third party audits and root-cause analyses… Should third party audits only be mandated for facilities with multiple incidents?

The UAW opposes any rescission of the third-party audit and root-cause analysis provisions, which are related to investigations that occur after an RMP-reportable event. We are strongly opposed to waiting until after a second event has occurred before these requirements would be put in place. During the period 2004-2013, *second* RMP-reportable events led almost 80,000 people to evacuate or shelter-in-place, and resulted in almost $690 million in property damage, 386 injuries and illnesses and 6 deaths. None of this damage can be prevented by an audit or root-cause analysis if it is not conducted after the first event.

Conclusion

The UAW opposes the proposed rule which would repeal many protections against chemical disasters and weaken many others. In doing so it would endanger the lives of those who work in and live near RMP covered facilities, including UAW members and retirees. We urge the EPA to implement the 2017 Chemical Disaster Rule without further delay or weakening and to drop its proposed rule. We oppose all of EPA's proposed rescissions and seek to retain all of the provisions of the 2017 RMP rule including STAA, safety training, maintenance and sharing of information, third-party audits, and all the provisions related to investigations. We oppose proposals to delay compliance dates as well.

EPA asserted that there is a "low and declining accident rate at RMP facilities under the existing RMP rule," but failed to calculate or report any rates. Other relevant statistics do not show a decline. 2013, the most recent year for which complete data are available saw more property damage due to RMP events than any year since 2008. 2012 saw more injuries and illnesses than any other year between 2004 and 2013. It also saw more people evacuating or sheltering in place than any year since 2005.

EPA argued that an enforcement-led approach, based on targeting facilities that have already had one or more RMP-reportable events can be just as effective as the provisions of the 2017 rule that it proposes to rescind. The data show that this assertion is simply false. Between 2004 and 2013 more than 15,000 injuries and illnesses, over

90% of the total occurred at facilities that reported exactly one event. None of these could have been prevented by an enforcement-led approach *triggered after the first event*. In contrast, RMP-reportable events at Program Level 3 facilities in NAICS codes 322, 324 and 325 were associated with impacts ranging from 74% of deaths to 91% of people who had to evacuate or shelter in place. Eliminating regulatory prevention measures aimed at these facilities, such as STAA, makes it difficult or impossible to prevent these impacts.

Finally, EPA asked whether third party audits and root-cause analysis should be limited to facilities with multiple events. We believe that audits should not be limited in this manner. During the period 2004-2013, *second* RMP-reportable events led almost 80,000 people to evacuate or shelter-in-place, and resulted in almost $690 million in property damage, 386 injuries and illnesses and 6 deaths. None of this damage can be prevented by an audit or root-cause analysis if it is not conducted after the first event.