

October 29, 2014

Comments submitted on-line to: <http://www.regulations.gov>:

OSWER Docket  
EPA Docket Center, MC 2822-1T  
U.S. Environmental Protection Agency  
1200 Pennsylvania Avenue NW.  
Washington, DC 20460

Re: Accidental Release Prevention Requirements: Risk Management  
Programs Under the Clean Air Act, Section 112(r)(7)

Attn: Docket ID No. EPA-HQ-OEM-2014-0328

On July 31, 2014, the U.S. Environmental Protection Agency (“EPA”) issued a Request for Information (“RFI”) seeking public comment on potential changes to its 40 CFR Part 68 regulations implementing Section 112(r)(7) of the Clean Air Act.<sup>1</sup> These regulations establish a comprehensive Risk Management Program (“RMP”) aimed at preventing or minimizing the consequences of accidental chemical releases. The Semiconductor Industry Association (“SIA”) appreciates this opportunity to comment on this RFI.

SIA is the voice of the U.S. semiconductor industry. Semiconductors are the micro-circuits (sometimes referred to as “chips” or “computer chips”) that are the enabling technology for all modern electronics found in computers and cell phones, transportation and health care devices, information and communications systems, and numerous aspects of our national defense. Because semiconductors are a foundational technology for virtually all areas of our economy, continued U.S. leadership in semiconductor technology is essential to America’s continued global economic leadership and our national security. Semiconductors are one of the nation’s top exports<sup>2</sup> and the industry directly employs about 250,000 employees and supports approximately 1 million indirect jobs.<sup>3</sup>

As noted in the RFI, the impetus for EPA’s consideration of modifications to the RMP regulations is Executive Order 13650, issued on August 1, 2013. Under this Order, the

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<sup>1</sup> 79 Fed. Reg 44604 (July 31, 2014).

<sup>2</sup> During the period 2008-12, semiconductors were the second largest export from the U.S., after aircraft. *Source: U.S. International Trade Commission. Industry Defined By: NAIC Codes 336411 (Aircraft); 334413 (Semiconductors); 336111 (Automobiles); 324110 (Petroleum Refinery Products), Based from total exports revenue.*

<sup>3</sup> [http://www.semiconductors.org/clientuploads/Jobs%20Rollout/Jobs%20Issue%20Paper\\_April\\_2013.pdf](http://www.semiconductors.org/clientuploads/Jobs%20Rollout/Jobs%20Issue%20Paper_April_2013.pdf).

President has directed several federal agencies responsible for prevention and response to chemical accidents to consider further actions they can take to improve chemical safety and security.

The RFI issued by EPA discusses a wide range of potential changes to the RMP regulations. In many of these areas, the proposals will need to be refined into more specific requirements before it will be possible for SIA to offer useful comments. At this stage of the regulatory process, we would offer the following perspective on the direction and approach for modification of the current regulations:

### ***1. Maximizing alignment between the RMP regulations and the Process Safety Management (“PSM”) Standard***

Section II.C. of the RFI outlines a set of possible changes to the RMP regulations that are “the same or related to” changes to the PSM standard that are now under consideration by the Occupational Safety and Health Administration (“OSHA”). This was a helpful way for EPA to present the issues in the RFI.

Clearly there is substantial overlap between the RMP regulations and the PSM standard. OSHA has separately issued an RFI of its own on potential changes to the PSM standard.<sup>4</sup> SIA filed comments on that document and we incorporate by reference those comments for EPA’s consideration (document attached). Those comments address specific areas in the PSM standard; any parallel provisions in the RMP regulations will be of continuing interest to the semiconductor industry. To cite just one example, EPA raises third party compliance audits, and SIA commented on that same issue on page 5 of our submission to OSHA.

More broadly, SIA would emphasize the importance of making the RMP and PSM requirements as consistent as possible. It is most helpful for our industry when EPA and OSHA speak with one voice in defining obligations for preventing, and minimizing the effect from, chemical accidents. Consistency in these policies provides predictable expectations as well as efficiency in implementation strategy. Specifically, we believe the RMP and PSM requirements should be aligned comprehensively, including matters related to regulatory scope, approach, terminology, substantive obligations, reporting and recordkeeping. As a further step, we recommend that EPA regulations state explicitly where implementation of the PSM requirements in 29 CFR 1910.119 will satisfy related Part 68 obligations.

### ***2. Giving priority to completion of the RMP/PSM overlap issues before turning to other matters***

Section II.D. of the RFI discusses additional possible modifications to the Part 68 regulations that extend beyond matters that were also covered in the OSHA RFI. This section of EPA’s RFI raises several important policy changes that would need to be considered carefully. In response to EPA’s request about the relative priority of the

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<sup>4</sup> 78 Fed. Reg. 73756 (December 9, 2013).

issues raised in the RFI,<sup>5</sup> SIA recommends that the Agency complete its coordinated work with OSHA, addressing the issues in Section II.C of the RFI, before undertaking additional changes to Part 68.

Our industry has a strong interest in seeing that EPA and OSHA address the overlapping issues in the RMP and PSM regulations and decide upon a common approach. As noted above, such coordinated action should provide greater predictability and efficiency. Taken as a whole, the array of issues presented in the EPA RFI is quite extensive, and it will likely take a long time for EPA to analyze and make decisions on all of the issues presented. SIA hopes the agencies will avoid a result where OSHA proceeds with a new PSM standard while EPA's related RMP requirements are delayed because the Agency is completing work on regulatory issues that are unrelated to the PSM standard. Such a result could easily occur if EPA attempts to address all of the issues identified in the RFI in one rulemaking action. Accordingly, SIA recommends that EPA proceed in two steps:

- (a) A coordinated set of rulemaking actions with OSHA covering the overlapping areas between the RMP and PSM regulations; and
- (b) A follow-on EPA action to address any further issues that are unique to EPA policy interests.

### ***3. Targeting new requirements to the situations that warrant further controls***

EPA's Part 68 RMP regulations were first issued in 1994.<sup>6</sup> Since that time EPA has had considerable experience with chemical accident prevention and response measures, and thus is in a strong position to identify types of operations and facilities that are most likely to present accident risks.

It is further clear that Executive Order 13650 was issued in response to recent chemical accidents that have occurred in the country. Section 1 of the Order itself refers to "past and recent tragedies" involving the handling and storage of chemicals that "are not without risk" and need to be addressed through "additional measures" by federal agencies. The Fact Sheet issued by the Administration at the time of the Executive Order is more specific, noting the "devastating explosion at a fertilizer plant in West, Texas" as the type of serious risk "that must be addressed."<sup>7</sup>

The RFI itself makes reference to accidents at specific facilities in explaining why it is considering particular policy changes to the RMP program. The facilities cited by EPA as the basis for its concerns and the justification for possible policy change fall into specific categories: explosives manufacture and disposal; fertilizer manufacture,

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<sup>5</sup> 79 Fed. Reg. at 44606.

<sup>6</sup> 59 Fed. Reg. 4493 (January 31, 1994).

<sup>7</sup> "FACT SHEET: Executive Order on Improving Chemical Facility Safety and Security", The White House Office of the Press Secretary (August 1, 2013).

storage and transport; oil refining; chemical manufacture; hazardous waste disposal; and contained gas distribution. Large segments of industry in the United States are not on this list and would be expected to have substantially different operations. For example, requirements to provide additional public disclosure on operations at a facility should be commensurate with the risk of incidents at that facility. Additional disclosure may be appropriate for the categories of facilities with a past record of incidents; imposing additional disclosure requirements on other categories of facilities, such as semiconductor fabs, would simply increase the risk of disclosure of confidential information without providing significant benefit to the public.

Specifically, the semiconductor industry does not fit the profile of the facilities identified in the RFI that have triggered consideration of new RMP requirements. In fact, the semiconductor industry has established an excellent record of workplace safety and strong process controls.. The highly controlled systems in a fab include enclosed processes, automation, and chemical delivery systems, and the industry has been a leader in phasing out substances of concern<sup>8</sup> and reducing already low levels of emissions.<sup>9</sup>

Similarly, these same process controls have helped the semiconductor industry reduce the potential for chemical accidents. As documented in the online resource The Right to Know Network (“RTKNet.org”), EPA’s data on accidents in the semiconductor industry (NAICS Code 334413) show no accidents over the last five years.<sup>10</sup>

Thus, the record of chemical accidents in the United States now presents a compelling policy rationale for EPA to differentiate among various operations and industries when considering additional control measures under the RMP. The situations that have justified Executive Order 13650 and EPA’s RFI proposals are drawn from specific segments of industry. Those segments should be the subject of any additional controls,

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<sup>8</sup> The semiconductor industry has a long history of leadership of substituting chemicals of concern with more benign substances. For example, the industry replaced the use of chlorinated solvents with rubbing alcohol, phased-out glycol ethers with propylene, and was one of the first industries to eliminate the use of ozone depleting substances (ODSs). More recently, in response to concerns of the environmental and health community associated with the use of perfluorooctanyl sulfonates (PFOS), the semiconductor industry has eliminated the use of PFOS in most applications and emissions have been reduced by 99 percent since 2005. See World Semiconductor Council (2011 Joint Statement) available at: [http://www.semiconductorcouncil.org/wsc/uploads/WSC\\_2011\\_Joint\\_Statement.pdf](http://www.semiconductorcouncil.org/wsc/uploads/WSC_2011_Joint_Statement.pdf).

<sup>9</sup> According to data in the Toxics Release Inventory (TRI), the entire sector within the Computers/Electronics Products category (334) contributes just 0.1 percent of the total of TRI releases for all industries. The TRI emissions for this sector amounts to 4.459 million pounds out of a total of over 4 billion pounds from all industries, and the semiconductor industry (NAICS code 334413) is just one subset of this larger sector. See <http://www.epa.gov/tri/tridata/tri10/nationalanalysis/index.htm>. In terms of greenhouse gas emissions, the semiconductor industry contributes 0.08 percent of total emissions in the U.S. EPA data show that out of 6.7 billion metric tons of CO<sub>2</sub>-equivalents emitted in the entire US, only 5.4 million metric tons is emitted by the industry. <http://www.epa.gov/climatechange/Downloads/ghgemissions/US-GHG-Inventory-2013-Main-Text.pdf>. The global industry has an ongoing voluntary program to further reduce its emissions of a group of greenhouse gases known as perfluorinated compounds (PFCs). See World Semiconductor Council (2011 Joint Statement) available at: [http://www.semiconductorcouncil.org/wsc/uploads/WSC\\_2011\\_Joint\\_Statement.pdf](http://www.semiconductorcouncil.org/wsc/uploads/WSC_2011_Joint_Statement.pdf).

<sup>10</sup> EPA maintains records on accident history reported under the RMP in its database RMP\*Info. While that database is not accessible online, RTKNet.org compiles its data on accidents from EPA’s RMP\*Info. The current report on the semiconductor industry in RTKNet.org is based on data released by EPA on May 13, 2013.

as appropriate. In contrast, imposing additional controls, with associated costs and administrative burdens, on industries that have had strong records regarding prevention and response to chemical accidents over the last twenty years does not make sense as a policy matter. This is certainly true for the semiconductor industry. Accordingly, SIA strongly recommends that EPA target any new RMP requirements under consideration to the operations and industries where a pattern of problematic circumstances and behaviors justify those requirements.

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SIA thanks EPA for conducting its policy review on these issues in a transparent manner, and we appreciate the opportunity to comment on the RFI.