



Docket ID No. EPA-HQ-OEM-2014-0328
October 29, 2014

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OSWER Docket
EPA Docket Center
Mail Code 2822-1T
Environmental Protection Agency
1200 Pennsylvania Avenue, N.W.
Washington, D.C. 20460
Attention: Docket ID No. EPA-HQ-OEM-2014-0328

Re: Request For Information on Potential Revisions to EPA's Risk Management Programs Regulation Under Section 112(r)(7) of the Clean Air Act (Corrected)

Dear Sir or Madam:

The Vinyl Institute appreciates the opportunity to provide input to EPA to assist the agency in assessing the effectiveness of its chemical safety regulations – particularly its Risk Management Programs (RMP) -- and determining what steps (e.g., rulemaking, enforcement, outreach) the agency might take to improve chemical safety in the environment. The Vinyl Institute, founded in 1982, is a U.S. trade association representing the leading manufacturers of vinyl chloride monomer, PVC resin, vinyl additives and modifiers. The Vinyl Institute is dedicated to enhancing the growth and protecting the stature of the vinyl industry.

On July 31, 2014, EPA issued the referenced Request For Information (RFI), which announced that it was considering-potential revisions to its RMP Regulation and requested public comment. In the RFI, the Agency asked for information and data on specific rulemaking and policy options that would expand either the scope of the chemicals covered by the rule or the

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requirements applicable to stationary processes covered by the rule. We are concerned that the review initiated by the RFI does not appear to be pursuing a balanced evaluation of the following critical issues:

- (a) the effectiveness of EPA's RMP Regulation;
- (b) whether the contemplated revisions are reasonably necessary and appropriate; or
- (c) whether EPA has the legal authority to adopt some of the contemplated provisions.

This initiative was triggered by Executive Order 13650, entitled "Improving Chemical Facility Safety and Security." Section 6(a) of the Order gives the following general direction to the Chemical Facility Safety and Security Working Group (Working Group), which is co-chaired by the Secretary of Homeland Security, the Administrator of the Environmental Protection Agency (EPA), and the Secretary of Labor (or their designated representatives):

Sec. 6. Policy, Regulation, and Standards Modernization.

- (a) In order to enhance safety and security in chemical facilities by modernizing key policies, regulations, and standards, the Working Group shall:
 - (i) within 90 days of the date of this order, develop options for improved chemical facility safety and security that identifies improvements to existing risk management practices through agency programs, private sector initiatives, Government guidance, outreach, standards, and regulations;
 - ii) within 90 days of developing the options described in subsection (a)(i) of this section, engage key stakeholders to discuss the options and other means to improve chemical risk management that may be available;
 - and
 - (iii) within 90 days of completing the outreach and consultation effort described in subsection (a)(ii) of this section, develop a plan for implementing practical and effective improvements to chemical risk management identified pursuant to subsections (a)(i) and (ii) of this section.

Section 6(b) of the Order directs the Secretary of Homeland Security, the Secretary of Labor, and the Secretary of Agriculture to develop a list of interventions to enhance the safety and security of operations involving ammonium nitrate.

Section 6(c) of the Order directs EPA and OSHA to determine whether the scope of the RMP Regulation and the OSHA Process Safety Management (PSM) Standard should be



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expanded **for the specific purpose of addressing additional substances and types of hazards**;¹ it was not a direction to conduct a broad review of the effectiveness of the RMP Rule (which incorporates the OSHA PSM Standard) and propose comprehensive changes. Rather separate Section 6(e)(ii) directs the Secretary of Labor to “issue a Request for Information designed to identify issues related to modernization of the PSM Standard and related standards necessary to meet the goal of preventing major chemical accidents.” There is no comparable language directing EPA to identify issues related to modernization of the RMP Rule. It is within this context that we address the issues raised by the RFI.

In the RFI, EPA states:

EPA believes the RMP regulation has been effective in preventing and mitigating chemical accidents in the United States and protecting human health and the environment from chemical hazards. However, major incidents, such as the West, Texas explosion, highlight the importance of reviewing and evaluating current practices and regulatory requirements, and applying lessons learned to advance process safety management where needed.

VI recognizes that the consequences of an uncontrolled release of highly hazardous chemicals can lead to catastrophic consequences. However, the fact that one consequence of a chemical release can be a catastrophic event and that catastrophic events sometimes occur does not mean further regulation is justified. As EPA acknowledged in 1996 in adopting the RMP Rule: “EPA recognizes that regulatory requirements, by themselves, will not guarantee safety.”

¹ This section provides as follows:

Within 90 days of the date of this order, the Administrator of EPA and the Secretary of Labor shall review the chemical hazards covered by the Risk Management Program (RMP) and the Process Safety Management Standard (PSM) and determine if the RMP or PSM can and should be expanded to address additional regulated substances and types of hazards. In addition, the EPA and the Department of Labor shall develop a plan, including a timeline and resource requirements, to expand, implement, and enforce the RMP and PSM in a manner that addresses the additional regulated substances and types of hazards.

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EPA and OSHA are not subject to the same rulemaking criteria or the same standard of judicial review. Pursuant to Sections 3(8) and 6(b) of the Occupational Safety and Health Act (OSH Act), in order to adopt an amendment to any standard, OSHA must establish, through substantial evidence in the record as a whole that:

- (1) employees are exposed to a significant risk of harm in the workplace;
- (2) the proposed measures will eliminate or significantly reduce that risk;
- (3) the proposed measures are technically and economically feasible;
- (4) the costs of the proposed measures are reasonably related to the benefits; and
- (5) the proposed measures are the most cost-effective means of achieving the reduction in risk.

In order to adopt an amendment to its PSM Standard, OSHA must establish, through substantial evidence in the record as a whole that the risk of concern is not merely a significant risk of harm, but a risk of catastrophic harm. In other words, every significant risk that may be posed by chemicals does not pose the type of catastrophic risk that would justify coverage under the PSM Standard. Furthermore, even if there was a significant catastrophic risk with respect to a particular chemical not currently covered by the PSM Standard, that does not mean there is a significant residual catastrophic risk for all other chemicals covered by the PSM Standard that would justify expanding the requirements of the PSM Standard applicable to all covered chemicals. Finally, given the rulemaking requirements applicable to OSHA, we do not believe it would be appropriate for EPA to, in effect, attempt to circumvent the rulemaking requirements that Congress determined were appropriate for OSHA with respect to this issue through amendments to the RMP Rule.

What also appears to be missing from the RFI discussion is an analysis of the overall effectiveness of the current chemical safety regulatory regime, why major incidents continue to occur, and what is the best mechanism for minimizing their frequency and severity in the most cost-effective manner consistent with EPA's and OSHA's statutory authorities. Unfortunately, it appears that EPA and OSHA are relying on the Order and anecdotes from stakeholder meetings to prejudge the issues create a presumption that there is a need for a material expansion in the scope and requirements of the RMP Rule and the PSM Standard.²

² For example, we are concerned with language in EPA's May 2014 Report for the President on Executive Order 13650, which suggests that EPA has already prejudged the issues raised by this RFI:

3.4.1. Modernizing OSHA's PSM Standard to Improve Safety and Enforcement

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Any expansion of the EPA and OSHA chemical regulatory scheme must be based on findings that: (1) there are material gaps or deficiencies in the scope or requirements of the existing rules; (2) those gaps pose a significant risk of not only material harm, but catastrophic harm, to employees and the environment; (3) those gaps cannot otherwise be effectively addressed through, for example, outreach or prudent use of the General Duty Clause; and (4) any changes in those rules are reasonably necessary or appropriate to remedy those gaps.

Section 5 of the Order directs the affected agencies to streamline reporting requirements and reduce duplicative collection of information:

.....

Using lessons learned from incident investigations, enforcement experience, and comparison with industry practices and regulatory requirements of other States, counties, and countries, OSHA determined that a stronger PSM standard can more effectively prevent incidents and protect workers. OSHA's enforcement experience over the past two decades suggests that a number of potential regulatory and policy improvements would improve PSM compliance as well as enforcement and oversight of facilities covered by the PSM standard. Modifications to PSM would also address the failure of some chemical facilities and local emergency responders to plan and prepare adequately for accidental releases. To begin the PSM standard modernization process, OSHA issued a Request for Information (RFI), the first step of a rulemaking process that will include multiple additional opportunities for public input.

Stakeholder comments at listening sessions, comments received through the RFI, and the EO Section 6 Options document confirmed the need for OSHA to modernize the PSM standard as well as associated enforcement policy. The Working Group concluded that OSHA should act to address improvements in the content and enforcement of the standard and to incorporate lessons learned over the past two decades. [p. 33.]

.....

3.4.2. Modernizing EPA's RMP Regulation

.....

Stakeholders at EO listening sessions and public comments received on the EO options documents **identified the need for EPA to modernize the RMP regulation**. In order to gather the information necessary to proceed with regulatory modernization and retain close coordination with OSHA on its implementation of the PSM standard, EPA will seek public input on process safety and risk management issues relevant to the RMP regulation through publication of an RFI in summer 2014. [Emphasis added.]

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Sec. 5. *Enhanced Information Collection and Sharing.* In order to enhance information collection by and sharing across agencies to support more informed decisionmaking, streamline reporting requirements, and reduce duplicative efforts:

.....

(c) Within 180 days of the date of this order, the Working Group shall identify and recommend possible changes to streamline and otherwise improve data collection to meet the needs of the public and Federal, State, local, and tribal agencies (including those charged with protecting workers and the public), consistent with the Paperwork Reduction Act and other relevant authorities, including opportunities to lessen the reporting burden on regulated industries. To the extent feasible, efforts shall minimize the duplicative collection of information while ensuring that pertinent information is shared with all key entities.

The efforts by EPA and OSHA, reflected in their respective RFIs, to adopt and enforce new and redundant PSM/RMP requirements appear to clearly conflict with Section 5 of the Order.

A. Overlapping RMP and PSM Issues

Item 1.a. Updating the list of covered chemicals in the RMP Rule and the PSM Standard

The proposal to update the lists of covered chemicals in the RMP Rule and the PSM Standard appears to infer that a sufficient number of episodes or situations have occurred with respect to a particular chemical or type of identifiable chemical to require expansion of the rules to include them. Other than the discussion of ammonium nitrate, we do not see evidence of this in the RFI and are not familiar with any other data that would support the inclusion of another other named chemical.

Item 1.d Adding Reactive Substances and Reactivity Hazards

The first question is to determine whether it is possible to develop a definition of “highly reactive chemical” that would be appropriate for use by EPA and OSHA in identifying, on a



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chemical by chemical basis and not on a generic basis, covered chemicals for purposes of a chemical safety rule designed to prevent catastrophic events. That definition should be based primarily on incident data rather than a theoretical analysis of how a chemical might react under varying conditions, or reliance on the chemical classifications in NFPA 400 or some other hazardous chemicals standard.

The second question should be whether the RMP Rule and the PSM Standard, either in their current forms or as they might be revised, are the appropriate types of rules to apply to those reactive chemicals. Aside from highly toxic materials and flammable liquids and gases in excess of 10,000 pounds, the current RMP Rule and PSM Standard are list-based rules, which include chemicals that are strongly self-reactive, or react violently with air and or water. Any attempt to significantly improve reactive chemical hazard management would require that both regulators and industry address the hazards from combinations of chemicals and process-specific conditions rather than focus exclusively on the inherent properties of individual chemicals. This would appear to require a fundamentally different approach from that of the current RMP Rule and PSM Standard. It would require the use of a threshold analysis to determine whether coverage was appropriate, and a management of change provision limited in scope to ensuring that there is no change in the process that would change the threshold determination and trigger coverage. It would not be a simple matter of adding chemicals to a list.

Rather than a one-size fits all approach to ensure adequate protection of workers and the environment, it may be more useful to identify and educate industry on chemicals, processes, and design that may create a suspect situation and allow the potential industry sector the opportunity to mitigate or obviate potential risk through performance-driven principles.

Item 1.e Adding Other Categories of Substances

Among the questions raised in this section was whether EPA should consider adding combustible dusts to the RMP list. For three reasons, we believe the answer is clearly “no”:

- (1) At this time, the federal agency with the greatest expertise in the hazards of combustible dust (OSHA) has been working on this issue for over five years and has determined that responsible development and adoption of an appropriate standard by OSHA will take



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almost another five years.³ Implicit in that OSHA determination is a determination that application of the OSHA PSM Standard or the EPA RMP Rule to combustible dust would be inappropriate. Underlying that determination is a recognition by OSHA that there is no consensus on:

- a. The meaning of the critical term “combustible dust”
 - b. An appropriate threshold quantity and whether it would vary according to the material, nature of the activity, etc; or
 - c. The meaning of the critical term “recognized and generally accepted good engineering practices” (see 29 CFR 1910.119(d)(3)(ii)) with respect to combustible dust in the various sectors that might be subject to such a rule.
- (2) The NFPA Technical Committee on the Fundamentals of Combustible Dust, currently developing NFPA 652, has clearly stated its intent that the Dust Hazards Analysis that would be required under the standard for combustible dust operations would NOT require compliance with the Process Hazards Analysis required under the OSHA PSM Standard.

³ Just within the United States, the control of combustible dust hazards has been the subject of numerous initiatives involving Congress, the Occupational Safety and Health Administration (OSHA), and the National Fire Protection Association (NFPA), and we are a long way off from clearly defining the term “combustible dust” in any practical way, determining an appropriate threshold quantity, and determining how the hazard should be controlled. These initiatives include:

- (1) Legislation introduced in the U.S. House of Representatives and the U.S. Senate, and passed by the House;
- (2) Congressional hearings;
- (3) Six primary standards on the control of various types of combustible dust, which are under continuous development by five technical committees and one technical correlating committee of the National Fire Protection Association (NFPA);
- (4) Numerous supplementary NFPA standards addressing various measures (e.g., venting, suppression) for the control of combustible dust hazards;
- (5) An initial (in 2007) and revised (in 2008) special enforcement program, known as a National Emphasis Program, implemented by the Occupational Safety and Health Administration (OSHA) to attempt to address the workplace combustible dust hazard in a comprehensive way through existing OSHA standards and the General Duty Clause of the OSH Act; and
- (6) An official OSHA-sponsored Panel of Experts on Combustible Dust.

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- (3) Except in very rare and extraordinary cases, the consequences of a combustible dust event would be entirely within OSHA's jurisdiction and have a negligible impact on people or environmental conditions beyond the property line of the affected facility.

Despite all of the resources devoted to this issue, there is no agreed-upon and effective definition of the term "combustible dust," and no inkling as to what would be an appropriate threshold quantity, and significant doubts as to whether one threshold quantity would be appropriate for all combustible dusts in all situations. One member of the OSHA Panel of Experts suggested a threshold quantity of five pounds for regulatory coverage. The impact of that low threshold would be breathtaking. In addition to covering virtually every manufacturing facility and construction site in the United States, often at many locations within each facility, it would encompass virtually every restaurant, grocery store, feed store, wood shop, print shop and solid waste facility in the United States. It could also include every large vacuum cleaner in the United States.

Some have suggested developing a combustible dust standard similar to the OSHA PSM Standard and the EPA RMP Rule. There are some principles and ideas that may be borrowed from the PSM Standard and the RMP Rule. However, the OSHA PSM Standard and the EPA RMP Rule were developed to address the unique risks to the workplace and the surrounding community posed by a release of a threshold quantity of a highly hazardous substance. The PSM standard is the most resource-intensive of any horizontal OSHA standard and its application to combustible dust directly or through the RMP Rule would impose huge and unnecessary compliance costs on U.S. employers and the U.S. economy. Furthermore, except in very rare and extraordinary cases, a combustible dust event would have a negligible impact on people or environmental conditions beyond the property line of the affected facility. It would be inappropriate for EPA to regulate stationary sources throughout virtually the entire U.S. commercial sector (e.g., manufacturing; construction; mining; institutional – schools, cafeterias, wood shops; all food service) simply because of the potential for a very rare and extraordinary event that might have an effect on personnel and the environment beyond the fence line of the affected facility.

OSHA has been working on the combustible dust issue since at least 2006. However, earlier this year, explicitly recognizing the complexity of the issue and the inherent shortcomings of the NFPA standards, Dr. David Michaels, Assistant Secretary for Occupational Safety and Health, stated that an OSHA standard on combustible dust was five years away. One of the



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inherent shortcomings of the NFPA standards is that coverage is not tied to a threshold significant risk determination. A second inherent shortcoming of the NFPA standards is that they do not consider technical or economic feasibility. In other words, the current NFPA standards do not reflect recognized and generally accepted good engineering practices (RAGAGEP) and there is, as yet, no consensus as to what RAGAGEP means in this area. It makes no sense to adopt a standard requiring compliance with RAGAGEP when there is such uncertainty as to what that term means in the context of combustible dust. Furthermore, the NFPA Technical Committee on the Fundamentals of Combustible Dust, currently developing NFPA 652, has clearly stated its intent that the Dust Hazards Analysis that would be required under the standard for combustible dust operations would NOT require compliance with the Process Hazards Analysis required under the OSHA PSM Standard.

At this time, the federal agency with the greatest expertise in the hazards of combustible dust (OSHA) has been working on this issue for over eight years and has determined that responsible development and adoption of an appropriate standard will take almost another five years. Implicit in that OSHA determination is a determination that application of the OSHA PSM Standard and the EPA RMP rule to combustible dust would be inappropriate. Given the OSHA and NFPA determinations on this point, we are at a loss to understand why EPA would be considering coverage of combustible dust under the RMP rule. This is particularly troubling given that, except in very rare and extraordinary cases, the consequences of a combustible dust event would be entirely within OSHA's jurisdiction and have a negligible impact on people or environmental conditions beyond the property line of the affected facility. Finally, in light of the fact that the federal agency with the greatest expertise in the hazards of combustible dust (OSHA) is already conducting a combustible dust rulemaking, EPA efforts in this area would be unnecessary, inappropriate and duplicative.

Item 2. Revising the PSM Standard to Require Additional Management-System Elements

The OSHA PSM Standard is the most comprehensive performance-based standard ever adopted by OSHA. It encompasses all of the essential management elements of a comprehensive safety program as described in OSHA's 1989 Voluntary Safety and Health Program Management Guidelines. 54 FR 3904-3916 (Jan. 26, 1989).⁴ The fact that a number of

⁴https://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=FEDERAL_REGISTER&p_id=12909
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organizations have developed a more extensive list of program elements does not alter the basic principles or justify a change in either the RMP Rule or the PSM Standard.

We are not aware of any scientific studies that show a statistically significant difference in the level of safety at organizations that adopt separate elements for ‘Measurement and Metrics,’ ‘Management Review and Continuous Improvement,’ and/or ‘Process Safety Competency’ over those that have not. The underlying concepts are already adequately addressed in the RMP Rule and the PSM Standard in a way that supports their objectives without creating a situation in which compliance personnel would be empowered to issue notices of violation or citations that: (1) are based on unknowable subjective criteria; (2) create a situation in which EPA or OSHA is micro-managing employers; or (3) require employers to achieve zero risk and perfection. For example, the required consideration of human factors in the PHA, training, audits, and employee participation elements will adequately address complacency without creating a separate management element to avoid complacency that would be subject to additional and highly subjective enforcement measures.

In many cases, we believe the identification of new management system elements reflects the free market incentives to write and sell more books, and market more consulting services, rather than recognition of a deficiency in existing programs. Even if new management system elements adopted on a voluntary basis appear to achieve some meaningful gains in safety at a particular site, we believe the gains are more likely the product of the safety culture at the site that led to the adoption of those elements than to the elements themselves.

EPA and OSHA should avoid any inclination to impose more layers of protection where: (1) the existing layers are adequate when properly implemented; (2) catastrophic results are rare; (3) there would be a huge regulatory burden imposed on all RMP-covered and PSM-covered facilities, the overwhelming number of which are already in substantial compliance, in requiring compliance with these additional mandates in an effort to prevent the rare case where compliance breakdowns led to severe adverse consequences; (4) there is no basis for concluding the additional measures would have been implemented more effectively; and (5) the problem was one that already had been identified under the requirements of the existing standard.

3. Should EPA Define and Require Evaluation of Updates to Applicable recognized and generally accepted good engineering practices (RAGAGEP)?



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We believe the term “**RAGAGEP**” is well understood and does not need to be defined. It was developed after industry groups objected to what appeared to be an effort by OSHA to incorporate by reference all potentially relevant consensus standards into the PSM Standard. It would be inappropriate to adopt any definition of RAGAGEP that might be interpreted as incorporating by reference any requirement from a national consensus standard or any other document that has not been the subject of an EPA or OSHA rulemaking.

There are three concerns raised by this question on updating. First, it would be inappropriate to assume that every update to, for example, established codes, standards, published technical reports, recommended practices or similar documents should be viewed as an update to RAGAGEP.

Second, again, it would be inappropriate to adopt any amendment to the RMP Rule or PSM Standard that might be interpreted as incorporating by reference the most recent version of a national consensus standard or any other requirement that has not been the subject of rulemaking, or to incorporate any type of automatic updating provision.

Third, there must be a way of grandfathering facilities or processes that were designed in accordance with RAGAGEP except in the extraordinary situation where the residual risk of a catastrophic incident is clearly so material that continuation of the status quo is far outside the range of acceptable risks.

To adopt a standard under the OSH Act, or a rule under the Clean Air Act, OSHA or EPA, respectively, must demonstrate, among other things, that compliance is technically and economically feasible. It would not be consistent with the framework of those statutes to have the agencies satisfy those statutory criteria and then later interpret the rule to require a materially different path to compliance that was not contemplated by the initial technical and economic feasibility analyses. There is a need to establish an appropriate balance in employing performance-based standards so that they allow employers to employ the most cost-effective approach to compliance in light of evolving technology, but do not automatically convert every perceived improvement in technology or update to a consensus standard into an EPA or OSHA mandate. That is a dangerous recipe that encourages unnecessary and excessive updates to consensus standards, creates economic disincentives for affected employers to support the activities of the standards developers, and creates economic incentives for those who would financially benefit from numerous updates and/or a movement toward zero risk to seek control over standards development activities.



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Item 4. Should Mechanical Integrity Requirements be Extended to Cover Any Safety-Critical Equipment

Before we are in a position to provide comment, we believe EPA and OSHA should first provide a definition of what it means by “safety critical equipment ,” explain why it is not covered by the categories of the existing RMP Rule and PSM Standard, and identify the types of safety-critical equipment not covered by the existing standard that have been addressed under the General Duty Clause. We assume safety critical equipment in the context of the RMP Rule and the PSM Standard would be equipment that is essential to prevent or limit (in a material way) the severity of a catastrophic release. Any discussion would need to include some practical limits so that the equipment is not viewed, in 20-20 hindsight or through speculation, as critical where it would only be called upon to perform that function as, for example, a third layer of defense and was never intended to serve as a third layer of defense.

We are concerned by EPA’s use of the phrase “could reasonably be judged to be critical to process safety.” That language does not provide the required certainty needed by the regulated community as to what would be considered safety-critical equipment. We are also concerned by the way OSHA posed this question because we believe it was misleading. The issue was identified by OSHA as follows:

Revising paragraph (j) to explicitly apply the mechanical-integrity requirements of the PSM standard to all equipment the **employer identifies as critical** to process safety-critical equipment, in addition to the equipment currently listed in the standard, would provide industry with proper notice regarding coverage of such equipment [emphasis added].

We question whether OSHA would adopt a rule in which the determination as to what was classified as safety-critical equipment was placed entirely in the hands of the employer. Furthermore, we believe any definition needs to be based on what is generally recognized to be safety-critical equipment so that an employer’s determination is not subjected to an unfair enforcement action based on 20-20 hindsight should an incident occur.

Item 5. Owners and Operators of Covered Facilities Should Not be Required to Manage Organizational Changes under the MOC Provisions of the RMP Rule and PSM Standard



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The existing MOC element of the RMP Rule and the PSM Standard -- with its linkage to changes in process chemicals, technology, equipment, procedures, and facilities -- adequately addresses the impact of organizational changes on the safety of the RMP/PSM process. The addition of a new, explicit regulatory requirement that employers manage and address organizational changes under the MOC provisions of the RMP Rule or the PSM Standard is not warranted and would not be appropriate.

As OSHA stated in its March 31, 2009 interpretation memorandum:

[I]f organizational changes necessitate changes to process chemicals, technology, equipment, procedures, or facilities, an MOC procedure would be required to ensure that resulting changes are managed and implemented in a manner that assures continued safe operations. However, management changes that do not impact PSM covered processes are not affected by the MOC provisions of the PSM standard.

In issuing this interpretation, OSHA had good reason for clearly limiting the coverage of the MOC provisions of the PSM Standard.

Organizational change can present complex fact-intensive scenarios that cannot easily be addressed through an expanded or prescriptive regulatory requirement. Any proposed explicit requirements beyond the current RMP/PSM MOC performance-based criteria are likely to create conflicts with the employer's Human Resources (HR) policies, labor management agreements, business-level staffing decisions and organizational redesign initiatives. Expanding the defined boundaries of existing PSM regulatory coverage is likely to result in confusion and unintended labor consequences.

Personnel changes, including changes in staffing levels or staff experience, can also be a complex and a highly variable subject from site to site within a single company, much less across different companies and industry segments. Indeed, personnel changes are based on a multitude of factors, including, but not limited to, local organizational structures, leveraged offsite technical support from the parent company and/or a corporate function such as engineering, the use of a supplemental work force such as contractor services, and service level agreements between companies with an industrial park layout. Staffing levels and expertise needs within the line organization can also fluctuate based on production schedules and maintenance schedules involving both PSM-covered processes and non-PSM-covered processes.



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It is the responsibility of the employer to define specific personnel needs and their levels of experience and competency in order to meet all operating objectives and commitments, including regulatory compliance. The adoption of any qualitative or prescriptive requirements for staffing and experience as part of the MOC element would infringe upon the role and obligations of the operating entity in this arena.

Similarly, “budget cutting,” the act of adjusting organizational operating plans and associated expenditures based on strategic financial (business) objectives, should not be considered a policy or organizational change within the scope of the PSM Standard. Instead, budget cuts are part of the overall business or financial strategic planning processes. Throughout time periods in which budget cuts are enacted, companies have the explicit responsibility to ensure ongoing compliance with all existing regulatory obligations. Companies undergoing budget cuts should not be subject to an expanded or more prescriptive set of RMP/PSM requirements.

In summary, we believe EPA and OSHA currently have adequate tools and authority to regulate the impact of organizational changes as they relate to process safety management systems under the existing MOC element of the RMP Rule and PSM standard. Further expansion of the MOC language with respect to organizational change would be inappropriate.

Item 6. The PSM Standard and RMP Rule Should NOT be revised to require third-party compliance audits.

For a number of reasons, we oppose any requirement for third-party audits under the RMP Rule or PSM Standard. First and foremost, RMP/PSM auditing requires an expertise in the process which is not often possessed by third-party auditors. While proficient at management system auditing, third-party auditors are often not as well qualified when it comes to identifying specific equipment and operational risks. Company employees are typically more familiar with the complex processes used at their facilities and can therefore conduct a more thorough audit.

EPA and OSHA quoted CCPS as stating: “Third party auditors (typically, consulting companies who can provide experienced auditors) potentially provide the highest degree of objectivity.” First, CCPS uses the word “potentially,” not even “likely,” much less “more likely than not.” Second, there is no representation that third party auditors are likely to provide equivalent expertise to in-house personnel or as timely a response.



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EPA and OSHA noted that BSEE's Safety and Environmental Management Systems (SEMS) standard requires audits that may be conducted by either a third party or "by designated and qualified personnel," which is consistent with the RMP Rule and OSHA PSM Standard. According to OSHA, the new phase of that rule would require that the lead individual for compliance audits be independent and represent an accredited audit service provider. We seriously question whether an audit team composed of an outside lead individual and in-house personnel supervised by the outside lead will perform an effective audit.

Second, the pool of available and well-qualified third-party auditors needed for all the RMP/PSM processes (and many are unique) would not be available; nor would it be justifiable to develop such a pool.

Third, moving to an exclusive use of third-party auditors is likely to change the nature of the audit process, and add significant additional cost and time to the audit process (without justifiable benefit). Owing to fear of potential liability for errors and omissions, third parties will add unnecessary complexity to the auditing process, potentially loading audits with trivial findings and causing unnecessary delays in developing audit findings and recommendations and their ultimate implementation. Third party auditors typically have high billing rates and would often be charging the client for the time spent becoming familiar with the process, the process hazard analysis and previous audits, all of which would already be known to in-house personnel.

Given the reality that resources are finite, ineffective use of resources in conducting audits means less resources are available to address the results of the audits and other workplace safety and health issues within the facility.

Finally, third-party party audits cannot facilitate the most critical aspect of the auditing process, which is implementation of the recommendations. This is the responsibility of the audited site.

In its RFI, OSHA seems to suggest that third-party audits would have prevented several recent significant incidents. However, the real shortcoming was not that problems were not identified, but that they were not addressed in a timely manner (if at all), whether identified by internal or external auditors



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The current RMP/PSM language states the site needs to generate a “report of findings” and “promptly determine and document an appropriate response....” That language is appropriate. It is neither practical nor appropriate to mandate specific time frames for responses to audit recommendations. First, in light of finite resources and competing demands for investment in workplace safety and health, the scheduling of the response to audit findings must be prioritized based on both a risk assessment and feasibility considerations. For example, it may take time to identify an apparently appropriate remedial action, and then it may take time to fabricate new equipment, establish a reliable supply of a new raw material, develop and/or update chemical process information, run a pilot test of the modified process, have a customer verify the acceptability of the product, and shut down a process so it can be cleaned out and modified.

B. Separate RMP Issues

1. Issue 1 -- Safer Technology and Alternatives Analysis

We believe EPA got this issue right the first time when it appropriately concluded that there should be programs to encourage use of safer technology, but they needed to remain voluntary.

At the time EPA adopted the RMP Rule in 1996, it addressed this issue as follows:

EPA has decided not to mandate inherently safer technology analyses. EPA does not believe that a requirement that sources conduct searches or analyses of alternative processing technologies for new or existing processes will produce additional benefits beyond those accruing to the rule already. As many commenters, including those that support such analyses, pointed out, an assessment of inherently safer design alternatives has the most benefit in the development of new processes. Industry generally examines new process alternatives to avoid the addition of more costly administrative or engineering controls to mitigate a design that may be more hazardous in nature. Although some existing processes may be superficially judged to be inherently less safe than other processes, EPA believes these processes can be safely operated through management and control of the hazards without spending resources searching for unavailable or unaffordable new process technologies.



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No information has come to light that would justify a change in this approach and we do not believe EPA's statutory authority would permit adoption of such a mandate. Furthermore, we believe a rule requiring examination of inherently safer technology is both beyond the scope of EPA's authority and unenforceable.

We believe EPA acknowledges as much in quoting the report from the Department of Homeland Security that described inherently safer technology "as a philosophy":

Because an option may be inherently safer with regard to some hazards and inherently less safe with regard to others, the decision process must consider the entire life cycle, the full spectrum of hazards and risks, and the potential for transfer of risk from one impacted population to another. This report also noted that there is currently no consensus on either a quantification method for IST or a scientific assessment method for evaluation of IST options.

To require use of inherently safer technology is, in effect, to ban the use of certain chemicals or technology in a given situation. Congress did not provide EPA with such authority. Furthermore, what person or agency would be in a position to determine when safer technology was required? Would EPA somehow conduct quantitative risk assessments and determine a particular risk was too high? How would EPA take into account a situation where a safer technology was available, but the reliability of the process in producing the desired product was significantly reduced? Could EPA ban refrigeration systems that used anhydrous ammonia as the refrigerant because there are alternative refrigerants that are less toxic and are not explosive? In short, the burdens of regulatory compliance, risk management considerations and a variety of other factors will drive covered facilities to install and shift to safer technology, but it cannot be adopted as a regulatory mandate.

2. Emergency Drills to Test a source's Emergency Response Program or Plan

Given the numerous types of emergency drills and training elements that are already conducted by sites covered by the RMP Rule, we do not believe an additional drill requirement would be necessary or appropriate. If EPA were to adopt a requirement in this area, we believe it should specify a drill frequency of no more than once per year. Furthermore, we believe EPA should recognize as adequate for this purpose drills that substantially address the basic elements of a drill identified by EPA, and that these elements might be addressed through the aggregate



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activities of several drills. For example, based on other applicable requirements imposed by federal and state regulatory agencies and insurance carriers, every covered facility is likely to be required to perform (at least annually) fire response and evacuation drills, and permit required confined space entry rescue (29 CFR 1910.146(k)(1) and (2)). In addition, the OSHA Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard requires annual retraining, which is frequently provided in the form of a drill covering some or all elements of an emergency response to a chemical release event.

3. Automated Detection and Monitoring Systems

The existing rule already requires a covered site to determine (A) whether automated detection and monitoring systems are necessary for a particular process, and, (B) if so, (1) where they are necessary, (2) what characteristics, functions or parameters of the process will be monitored, and (3) how the system will respond when a triggering condition is detected. There is no justification for adoption of a universal mandate to install automated detection and monitoring systems, nor a mandate specifying the location, characteristics, functions, parameters and/or response of systems that are installed. EPA seems to acknowledge this in the RFI in stating:

[T]he Agency understands that the need for and appropriate deployment of such systems is likely to be highly site-specific, and that facilities may already have appropriate incentives to deploy such systems where warranted and cost-effective.

With regards to vinyl chloride and/or polyvinyl chloride manufacture, appropriate monitoring systems to detect and respond to significant releases of vinyl chloride are likely to be already in place and may include one or more of the following: rupture disk indicators; process parameter monitors for flow, pressure, and temperature conditions; and ambient air monitoring systems. Where these monitoring systems already exist, additional requirements under EPA's proposed RMP, for example requiring monitoring of pressure relief devices, would be unnecessary and functionally redundant with the aforementioned systems that have been effectively used for years.

As far as cost-effectiveness, EPA continues to use flawed cost information for determining costs to retrofit pressure relief devices with continuous monitors. EPA misapplied the "six-tenths" adjustor to a monitoring device when this factor is only used for variances in size of equipment, not number of units. This incorrect factor application resulted in erroneously reducing the cost estimate for PRD monitors by 86% in the PVC MACT rule. The VI



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recommends that EPA discontinue its application of the “six-tenths” adjuster for estimating large number of monitoring units when considering cost effectiveness of automated detection and monitoring systems.

In addition, VI stresses the concern that wireless monitoring systems may not be a workable system within most chemical facilities. The concern regards the continuous reliability of wireless technology. Examples of reliability concerns include signal loss, intermittent signal, battery failure, and exposure to severe weather (e.g., electrical storm). A data collection and transmission system that is known to be unreliable would not satisfy Clean Air Act requirements if continuous compliance demonstration obligations are mandated.

4. Additional Stationary Source Location Requirements

We do not believe experience to date indicates there is a widespread problem in this area that would justify adoption of more specific siting criteria. Nor do we believe those additional siting criteria could be written in a way that would avoid an overly burdensome set of generally applicable requirements that goes well beyond what is needed for the overwhelming majority of covered sites. If EPA does proceed in this area, it would be essential to address these concerns, and to avoid adopting requirements that would have a retroactive effect on either the placement of a facility or the placement of a process or equipment in an existing facility

5. Compliance with Emergency Response Program Requirements in Coordination with Local Responders

We believe it is essential to preserve the option for each covered site to determine whether it will be a “responding” or “non-responding” facility in the event of a chemical incident, and to recognize that those labels do not establish black and white lines on how a facility will respond to a particular incident. For example, a “responding” facility might respond to one type of chemical release and call for outside help with respect to others. A “responding” facility might respond to a release on first shift, but not on other shifts when critical personnel would not be available. For many events, the site would be required to call the local fire department and the local fire department will exercise its authority to take control of the site. Local emergency response units, such as a local fire department, are not going to enter into binding contracts committing to respond to an incident within a particular time frame or to perform a specified set of response tasks. When a call comes in, they will assess the situation and



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decide how to respond. Their ability to respond may be affected by whether their personnel and equipment are also responding to another incident. In some cases, the safest response may be to allow the chemical release to disperse rather than attempting to contain it.

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VI appreciates the opportunity to submit these comments. Please contact me at if you have any questions.

Sincerely,

/s/Richard P. Krock/rmt

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