October 25, 2022

James S. Frederick,
Deputy Assistant Secretary of Labor for Occupational Safety and Health
Occupational Safety and Health Administration

Comments on OSHA’s Process Safety Management (PSM) Standard Updates
Agency/Docket Number: Docket No. OSHA-2013-0020

Dear Assistant Secretary Frederick:

AIHA, the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety (OEHS), appreciates the opportunity to provide feedback on OSHA’s request for feedback on proposed changes to the PSM standard. We hope you find our feedback useful and are happy to answer any questions you may have.

Comments on Potential Changes to Provisions of the Current PSM Standard that OSHA is Considering

Amending Paragraph (b) to Include a Definition of RAGAGEP
Specifically:

“The PSM Standard, 29 CFR 1910.119, directly references or implies the use of RAGAGEP in three provisions: (d)(3)(ii): Employers must document that all equipment in PSM-covered processes complies with RAGAGEP; (j)(4)(ii): Inspections and tests are performed on process equipment subject to the standard's mechanical integrity requirements in accordance with RAGAGEP; and (j)(4)(iii): Inspection and test frequency follows manufacturer's recommendations and good engineering practice, and more frequently if indicated by operating experience.”
Amending Paragraph (b) to Include a Definition of Critical Equipment
AIHA concurs that OSHA should identify and provide clarification and examples of specific equipment considered “critical” under the revised PSM standard. For example, the Standard Interpretations letter for OSHA’s Standard Process Safety Management of Highly Hazardous Chemicals dated December 7, 1995¹:

“Paragraph (j)(1) of 1910.119 is intended to cover only that equipment associated with a process covered under PSM standard. Equipment covered in this list is considered critical to process safety because of its potential for significant impact on the safety of a process involving highly hazardous chemicals if it does not maintain its mechanical integrity. **If an employer deems additional equipment to be critical, it too should be considered to be covered by 1910.119(j) and should be treated accordingly**.” (underlined for emphasis)

Expanding Paragraph (c) to Strengthen Employee Participation and Include Stop Work Authority
AIHA recommends consistently among standards that the right to stop work is protected, but only if all of the following conditions are met: Where possible, a worker or worker representative has asked the employer to eliminate the perceived and real danger, and the employer has failed to do so; and worker(s) refuse to work in “good faith” meaning that worker(s) must genuinely believe that an imminent danger resulting in death or serious physical injury exists where a “reasonable person” would agree there is a real danger of death or serious physical injury and due to the urgency of the hazard where there is not enough time to get the situation corrected through regular enforcement channels, such as requesting an OSHA inspection.

Additionally, worker(s) must take the following steps: the employer is notified of the process safety hazard with the need to correct the hazard; the employer is notified that worker(s) won’t perform the work unless and until the hazard is corrected; and worker(s) remain at the worksite until ordered to leave by the employer. Stop work authority is clarified by OSHA in a Workers’ Right to Refuse Dangerous Work.²

Amending Paragraph (d) to Require Evaluation of Updates to Applicable Recognized and Generally Accepted as Good Engineering Practices
AIHA agrees that RAGAGEP be used for all steps in the process hazard analysis; for example during the management of change including written procedures to maintain the ongoing integrity of process equipment 1910.119 (j) and as recommended by the American Institute for Chemical Engineers’ (AIChE) Guidelines for the Management of Change for Process Safety and other AIChE recommendations for applicable process safety management.

¹ https://www.osha.gov/laws-regs/standardinterpretations/1995-12-07
² https://www.osha.gov/workers/right-to-refuse
Amending Paragraph (d) to Require Continuous Updating of Collected Information
AIHA recommends incorporating updated information no later than during the five-year process hazard analysis update and revalidation, or more frequently based on continuing operations and reflected in an OSHA update of pamphlet OSHA 3132 for Process Safety Management.

Amending Paragraph (e) to Require Formal Resolution of Process Hazard Analysis Team Recommendations that are Not Utilized
AIHA does not concur with the requirement for formal resolution of Process Hazard Analysis team recommendations that are not utilized. This requirement does not improve the process hazard analysis itself and adds unnecessarily to a complicated process.

Expanding Paragraph (e) by Requiring Safer Technology and Alternatives Analysis
AIHA agrees that adding the requirement for the evaluation of technology and possible alternatives with a cost/benefit approach to paragraph (e) for process hazard analysis.

Clarifying Paragraph (e) to Require Consideration of Natural Disasters and Extreme Temperatures in their PSM programs in Response to E.O. 13990
AIHA concurs that requiring consideration of natural disasters and extreme environmental events, such as floods and hurricanes, is necessary in any process hazard analysis and the probability of occurrence should be documented.

Expanding Paragraph (j) to Cover the Mechanical Integrity of Any Critical Equipment
AIHA agrees with expanding paragraph (j) to cover the mechanical integrity of any critical equipment which includes a definition of “critical equipment” in the standard.

Clarifying Paragraph (j) to Better Explain “Equipment Deficiencies”
AIHA agrees that OSHA needs to better explain what is operationally defined as “equipment deficiencies.”

Clarifying that Paragraph (l) Covers Organizational Changes
AIHA believes that OSHA needs to clarify what is meant by “organizational changes.” What level of “organizational changes” are covered? Without further clarification, AIHA does not agree with an addition of “organizational change” requirement in the PSM management of change paragraph (l).
Amending Paragraph (m) to Require Root Cause Analysis  
AIHA recommends that OSHA consider a variety of possible incident investigation tools and methods, as major incident root cause analysis is an area of continuing change and research into risk management. For example, incident investigations may incorporate the five why method; the “Tripod Beta” method for understanding human behavioral factors in incidents, which can identify the chain of events preceding the incident consequences, the barriers that could have stopped the chain of events, and the reason of failure for each broken barrier including human factors, environmental conditions, and possible management culture.

Other examples include the “Bowtie risk analysis” combined with a “Tripod” incident analysis; “Fault Tree Analysis” as an incident analysis tool; “Systematic Cause Analysis”; the “Event Tree” for analyzing event sequences after an initiating event; or other possible incident analysis methods used within the engineering and risk management community.

Revising Paragraph (n) to Require Coordination of Emergency Planning with Local Emergency Response Authorities  
AIHA agrees that revising paragraph (n) to require coordination of emergency planning with local emergency response authorities and coordinating Comprehensive Preparedness with FEMA following the Incident Command System with its training requirements.

Amending Paragraph (o) to Require Third-party Compliance Audits  
AIHA is neutral on amending paragraph (o) to require third-party compliance, neither concurring nor opposing this change or addition.

Including Requirements for Employers to Develop a System for Periodic Review of and Necessary Revisions to their PSM Management Systems (Previously Referred to as “Evaluation and Corrective Action”)  
AIHA cautions OSHA in requiring redundancy in this revised standard specifically related to the requirements for compliance audits in paragraph (o).

Requiring the Development of Written Procedures for All Elements Specified in the Standard, and to Identify Records Required by the Standard Along with a Records Retention Policy (Previously Referred to as “Written PSM Management Systems”)  
AIHA believes that developing written procedures for all elements specified in the standard is necessary for internal or external compliance audits. The retention policy for outdated information could be unnecessarily burdensome and may best be handled by adding non-mandatory appendices to the PSM standard, as done in other OSHA standards.

Conclusion and Next Steps  
AIHA thanks you for the opportunity to provide feedback on OSHA’s request for feedback on proposed changes to the PSM standard. We hope you find our feedback useful and look
forward to our continued work together, helping protect the health and safety of all workers and their communities. If you have any questions on these comments or other matters, please contact me at mames@aiha.org or (703) 846-0730.

Sincerely,

Mark Ames
Director, Government Relations
AIHA

About AIHA

AIHA is the association for scientists and professionals committed to preserving and ensuring occupational and environmental health and safety in the workplace and community. Founded in 1939, we support our members with our expertise, networks, comprehensive education programs, and other products and services that help them maintain the highest professional and competency standards. More than half of AIHA’s nearly 8,500 members are Certified Industrial Hygienists and many hold other professional designations. AIHA serves as a resource for those employed across the public and private sectors as well as to the communities in which they work. For more information, please visit www.aiha.org.