



HEALTHIER WORKPLACES | A HEALTHIER WORLD

March 20, 2024

Douglas L. Parker
Assistant Secretary of Labor for Occupational Safety and Health
Occupational Safety and Health Administration

Recommendations from AIHA on the Occupational Safety and Health Administration's proposed Emergency Response Standard

Agency/Docket Numbers: OSHA-2007-0073

RIN: 1218-AC91

Dear Assistant Secretary Parker:

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 the OSHA's proposed Emergency Response Standard. We hope you find our feedback useful and are happy to answer any questions you may have.

(a)–1. OSHA is seeking information about how many private-sector emergency response organizations in States without State Plans (Federal OSHA States) have workers who are called volunteers but who receive substantial benefits, such as a retirement pension, life and/or disability insurance, death benefits, or medical benefits. How many such workers do these organizations have and of what type(s) (fire, EMS, technical rescue)?

AIHA does not have data specific about how many private sector emergency response organizations in the states without State Occupational Safety and Health Plans (i.e., Federal OSHA states) have workers who are called volunteers but receive financial benefits such as retirement 401(k) plans, life or disability insurance, or other death or medical benefits. AIHA

encourages the OSHA to contact or coordinate this request with federal organizations such as AmeriCorps, the federal agency for national service and volunteerism. AmeriCorps' Disaster Services Unit "leads the agency's engagement across the disaster services cycle with federal, state, local, nonprofit, and other partners."ⁱ

(a)–2. OSHA is seeking information about which States with OSHA-approved State Plans expressly cover volunteer emergency responders. In those States, how many emergency response organizations have volunteers? How many volunteers do they have and of what type(s) (fire, EMS, technical rescue)?

Please see AIHA's response under (a)–1.

(a)–3. OSHA is seeking information from States with OSHA-approved State Plans that do not expressly cover volunteer emergency responders. In those States, how many emergency response organizations have workers who are called volunteers but receive substantial benefits, such as a retirement pension, life and/or disability insurance, death benefits, or medical benefits; and as such may be considered employees within the meaning of Federal law? How many such workers do these organizations have and of what type(s) (fire, EMS, technical rescue)? Additionally, OSHA seeks similar input regarding inmate/incarcerated workers.

AIHA encourages the OSHA to coordinate with nonprofit organizations such as the National Fire Protection Association (NFPA) to gather information on emergency response workers who are called volunteers but receive benefits, and as such may be considered employees within the definitions of federal law. The Fire and Emergency Services' Section of the NFPA consists of emergency responders "dedicated to continually improving programs in management, training, and education."ⁱⁱ

(a)–4. OSHA is seeking input regarding what types and levels of search and rescue services and technical search and rescue services should be included or excluded from the rule, and the extent to which those inclusions or exclusions should be specifically listed.

AIHA believes the inclusion of all rescue services and technical search and rescue services personnel, including police and all EMS personnel, should occur to maximize safety and health protection for all persons that fall into these categories. Response plans for these units should concentrate on specific hazards such as confined spaces, high-angle rescue, and trench rescue, rather than a specific location.

(a)–5. OSHA is seeking input whether the agency should consider developing a separate rule for protecting workers involved in the clean-up of disaster sites, and associated recovery efforts? Why or why not?

AIHA supports an OSHA emergency response standard that includes an all-hazards approach with a comprehensive emergency preparedness framework within the context of the current incident command system (ICS), and a standardized all-incident emergency management approach that considers the full scope of emergencies or disasters for all risk mitigation efforts. The ICS is an existing standardized approach to the coordination and organizational structure for disaster response with health and safety integration while providing a common hierarchy within which responders from multiple agencies are most effective.

The OSHA's Hazardous Waste Operations and Emergency Response (HAZWOPER) Standard already applies to the clean-up and release of hazardous substances for emergency response operations. The contents of any new standards should be considered and coordinated with the requirements of HAZWOPER to include protecting clean-up workers from, for example, natural disasters. AIHA further believes any new emergency response standard should include all emergency disaster workers and relevant state, county, municipal, and federal workers.

The OSHA has made a considerable effort in the disaster worker area (including coursework which should be expanded). The primary protection for the inclusion of all construction workers and other government workers covered under 29 CFR 1960 has been an OSHA HAZWOPER requirement. AIHA emphasizes that this new Emergency Response Standard should apply to all emergency disaster workers. The hazards and risks of a disaster site can change with each disaster; therefore, a flexible standard is needed.

(a)–6. OSHA is seeking input on whether the agency should consider excluding other activities besides those in 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response (HAZWOPER)), 29 CFR 1910.146 (Permit-Required Confined Spaces in General Industry).

The OSHA should consider other standards that require an emergency or prompt rescue activity, such as work at heights, logging, or remote work. Rescues should be planned, organized, equipped, and trained in an effective, and often, analogous manner. Response plans for these units should concentrate on specific hazards such as confined spaces, high-angle rescue, and trench rescue rather than a specific location.

(e)–1. OSHA is considering adding to both paragraphs (e)(1) and (2) a requirement to permit employee representatives to be involved in the development and implementation of an ERP, and to paragraph (e)(4) a requirement to allow employee representatives to participate in walkaround inspections, along with team members and responders, and is seeking input from stakeholders on whether employee representative involvement should be added to paragraph (e).

AIHA believes that any ERP requirements should provide flexibility, depending on the complexity of the ICS needed.

(f)–2. OSHA is proposing to have a performance-based infection control program provision in the risk management plan. OSHA is seeking comment on this approach including whether a final standard should incorporate a particular consensus standard or other guidance, or otherwise include specific requirements regarding infection control.

AIHA recommends that the CDC Advisory Committee on Immunization Practices (ACIP) guidelines be included as requirements for infection control, along with all requirements needed for an effective infection control program. The OSHA should develop and publish guidance and direction from the CDC and others, for example the World Health Organizationⁱⁱⁱ, to create a model infection control program that provides for the recommended implementation of infection control procedures.

(g)–1. OSHA is seeking input and data on whether the proposed rule's requirements for medical evaluations are an appropriate minimum screening. Should the minimum screening include more or fewer elements, and if so, what elements? Provide supporting documentation and data that might establish the appropriate minimum screening. OSHA is also seeking additional data and information on the feasibility of the proposed medical evaluation and surveillance requirements for WEREs and ESOs.

AIHA has no data to support this request. However, AIHA believes that the OSHA should address and consider mental health and post-traumatic stress disorder in the proposed rule. Emergency responders have an increased risk for mental health and stress work-related injuries.^{iv}

(g)–2. OSHA is seeking input on whether an action level of 15 exposures to combustion products within a year is too high, too low, or an appropriate threshold. OSHA is also considering action levels of 5, 10, or 30 exposures a year as alternatives and is seeking public input on what action level would be appropriate. Provide supporting documentation and data that would help with identifying an appropriate action level.

Exposures to combustion products are variable and setting a limit for the number of allowable exposures to combustion products within a year is not practical. The number of allowable exposures depends on actual exposures to many different combustion products, including trace gases and other various particulates. Many of these combustion products may contain known human carcinogens. AIHA believes that there is no safe level of exposure to occupational carcinogens. Depending on multiple exposures, any medical response is specific to the situation. Any route of exposure to these combustion products must be kept as low as reasonably possible. (Please refer to AIHA *Synergist* article: “Analysis of Wildfire and Structure Fire Combustion Residues”^v and AIHA’s “Technical Guide for Wildfire Impact Assessments for the Occupational and Environmental Health and Safety Professional”.^{vi})

(g)–4. OSHA is seeking input and data on whether stakeholders support the proposed fitness for duty requirements or whether the requirements pose a burden on or raise concerns for team members, responders, WEREs or ESOs. Commenters should provide explanation and supporting information for their position.

Fitness for duty is a case-by-case medical issue and should be addressed by including medical requirements from a physician or other licensed health care professional (PLHCP) in the final standard. AIHA recommends that the OSHA adopt specific fitness for duty requirements from NFPA.

(g)–5. OSHA is seeking input on whether the health and fitness program in proposed paragraph (g)(6) should be extended to include WEREs and team members.

Please see AIHA's response under (g)–4.

(j)–2. OSHA is seeking input on whether ESO facilities with sleeping facilities should be protected by automatic sprinkler systems, as proposed in paragraph (j)(2)(ii).

AIHA believes that automatic sprinkler systems can save lives.

(k)–1. OSHA is seeking input on whether the agency should specify retirement age(s) for PPE.

NFPA 1851 requires that fire departments remove any gear from service that has a manufacture date of more than 10 years old. NFPA consensus standard 1851, *Standard on Selection, Care, and Maintenance of Protective Ensembles for Structural Fire Fighting and Proximity Fire Fighting* addresses fire fighter selection and care of personal protective equipment. This standard contains chapters on administration, definitions, program, selection, inspection, cleaning and decontamination, repair, storage, retirement, verification, and test procedures. The 2020 revision requires the 10-year mandatory retirement rule for structural elements and a five-year mandatory retirement for reflective outer shells. However, firefighting may not reflect the structural integrity of PPE during other emergencies where PPE becomes contaminated. The final OSHA rule should address PPE decontamination procedures and PPE contamination testing requirements.

(k)–3. OSHA is seeking information on whether there is evidence of per- and polyfluoroalkyl substances (PFAS) in PPE causing health issues for team members and responders.

AIHA refers the OSHA to the International Association of Fire Fighters (IAFF)^{vii} for PFAS in fire fighter PPE with consideration of the following references^{viii ix x xi xii xiii}

(k)–4. OSHA is seeking input on whether the scheduled updates to NFPA 1971 will address or alleviate stakeholder's concerns about PFAS in PPE.

Please see AIHA's response under (k)–1.

(l)–1. OSHA is seeking information on whether there are any other situations or vehicles where OSHA should require, or exclude, the use of seat belts and vehicle harnesses. If so, please explain.

Seat belts are needed to protect life from serious injuries in all motor vehicles and other transport vehicles.

(l)–2. OSHA is seeking input on how compliance with (l)(2)(iii) would be achieved in situations where PPE must be donned enroute to an incident. Would the team members or responders stop enroute or wait until arrival at the scene?

AIHA believes the OSHA should provide flexibility in the new rule.

(p)–1. OSHA is seeking stakeholder input on current practices for identifying and communicating the various control zone boundaries. What marking methods are used? How are they communicated to team members and responders? Do the marking methods help or hinder on-scene operations?

AIHA believes the OSHA should provide flexibility in the new rule.

(r)–1. OSHA is considering adding a requirement to permit team members, responders, and their representative to be involved in the review and evaluation of the relevant plans as part of the Post-Incident Analysis and would like stakeholder input on whether to add this requirement.

AIHA believes that all team members should be able to provide reviews and comments on any post-incident analysis.

D. Additional Issues

I. Aligned Organizations

The scope of the proposed rule focuses on employers whose employees respond to emergency incidents to mitigate the incidents. OSHA believes that some employees of aligned employers face similar hazards to those who mitigate incidents. For instance, while some jurisdictions have their own fire investigators as part of the fire department, many more depend on State Fire Marshal's office employees to respond to incident scenes to conduct fire investigations. However, these agencies may not provide a firefighting service. Similarly, many jurisdictions have instructors and training facilities directly within the emergency service organization. However, many more depend on other organizations for training such private entities or State-run training centers that do not perform incident mitigation. Nonetheless, these employees face similar hazards while providing training such as exposure to combustion products, and technical rescue scenarios such as confined spaces, trenches, high angle rope rescue, and swift water. OSHA seeks input and supporting arguments on whether these types of aligned employers should be included within the scope of this rulemaking.

AIHA believes that the OSHA should provide flexibility in the new rule with an all-hazards approach. However, the rule should be geared toward those persons exposed to any workplace hazard, and exposure to any potentially harmful chemical, physical, or biological agent during their employment duties. AIHA recommends that all emergency response workers who face personal injury producing events at work must receive classroom and on-the-job instruction on how to recognize and avoid or minimize these dangers.

AIHA further recommends that all harmful occupational exposures be evaluated and controlled on a case-by-case basis under the supervision of an experienced and trained industrial hygienist.

II. Portable Fire Extinguishers

OSHA's current standard, 29 CFR 1910.157, Portable Fire Extinguishers, is based on the 1978 edition of NFPA 10, Standard for Portable Fire Extinguisher, and was last updated more than 20 years ago. OSHA's current standard does not include Class K extinguishers or wet chemical agents. Because Class K extinguishers are provided by employers, and the proposed rule would require employers to provide training for team members and responders on all portable fire extinguishers in the workplace, OSHA is proposing to update the standard to include Class K portable extinguishers and wet chemical agents. OSHA is seeking stakeholder input and data regarding whether the agency should consider updating the standard to improve consistency with a version of the national consensus standard, NFPA 10, Standard for Portable Fire Extinguishers, that is current when the final rule is being developed.

The OSHA standards should be consistent with the most recent consensus standards from NFPA.

III. Heat

OSHA is in the preliminary stages of developing a proposed rule for Heat Illness Prevention in Outdoor and Indoor Work Settings (for additional information, see <https://www.osha.gov/heat-exposure/rulemaking>). OSHA recognizes that emergency response workers must perform their duties regardless of the outdoor environmental conditions. However, some activities, such as exercising for physical fitness and vocational training could be modified based on external temperatures. OSHA is seeking stakeholder input and supporting documentation on whether it should include requirements for operating in external environments with elevated temperature in situations that are not emergency incidents.

Heat illness prevention should be addressed in a separately issued OSHA standard, like the one adopted by Cal/OSHA. However, due to the unique nature of emergency response work

activities, the OSHA should consider including requirements for heat illness prevention for persons working in extreme environments or those persons who must wear impervious protective clothing during emergency response events.

IV. Consensus Standards

OSHA is seeking input on the potential impacts of incorporating by reference of various NFPA standards, and how equivalency or consistency could be achieved if the NFPA standards were not incorporated by reference.

AIHA believes it may not be possible to regulate all facets of all the referenced NFPA standards, many of which are well beyond the OSHA requirements.

V. Timeline for Compliance

AIHA believes that the OSHA should provide flexibility in the new rule.

Conclusion

If you have any questions about AIHA's comments on the OSHA's proposed Emergency Response Standard or other matters, please contact me at mames@aiha.org or (703) 846-0730. Thank you for your time and consideration.

Sincerely,



Mark Ames
Chief Advocacy Officer
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.

ⁱ Disaster Services Unit. (n.d.). AmeriCorps. <https://americorps.gov/about/what-we-do/disaster-services-unit>

ⁱⁱ Fire and Emergency Services Member Section | NFPA. (n.d.). <https://www.nfpa.org/membership/member-sections/fire-service>

ⁱⁱⁱ Infection prevention & control. (2023, May 12). WHO. <https://www.who.int/teams/integrated-health-services/infection-prevention-control>

^{iv} Bryant, R. A. (2022). The nature of posttraumatic stress disorder in treatment-seeking first responders. *European Journal of Psychotraumatology*, 13(1). <https://doi.org/10.1080/20008198.2021.2011602>

^v A. P. (2024, January 26). Analysis of wildfire and structure fire combustion residues. *The Synergist*. <https://synergist.aiha.org/202208-fire-combustion-residues>

^{vi} Medina, E. (Ed.). (2018). Technical guide for wildfire impact assessments for the OEHS professional. American Industrial Hygiene Association (AIHA).

^{vii} International Association of Fire Fighters, Metropolitan Fire Chiefs Association, Muensterman, D., Jr, Titaley, I., Peaslee, G., Minc, L., Cahuas, L., Rodowa, A., Horiuchi, Y., Yamane, S., Fouquet, T., Kissel, J., Carignan, C., Field, J., Wilkinson, J., McGuinness, S., Tighe, M., Caterisano, N., Lee, S., . . . Mitchell, K. (n.d.). Joint Statement regarding PFAS in fire Fighter turnout gear. <https://www.iaff.org/wp-content/uploads/PFASadvisory.pdf>

^{viii} Muensterman, D. J., Titaley, I. A., Peaslee, G. F., Minc, L. D., Cahuas, L., Rodowa, A. E., Horiuchi, Y., Yamane, S., Fouquet, T., Kissel, J. C., Carignan, C. C., & Field, J. A. (2021). Disposition of fluorine on new firefighter turnout gear. *Environmental Science & Technology*, 56(2), 974–983. <https://doi.org/10.1021/acs.est.1c06322>

^{ix} Peaslee, G. F., Wilkinson, J., McGuinness, S., Tighe, M., Caterisano, N., Lee, S., Gonzales, A. S., Roddy, M., Mills, S., & Mitchell, K. (2020). Another pathway for firefighter exposure to per- and polyfluoroalkyl substances: firefighter textiles. *Environmental Science and Technology Letters*, 7(8), 594–599. <https://doi.org/10.1021/acs.estlett.0c00410>

^x PFAS explained | US EPA. (2023, October 25). US EPA. <https://www.epa.gov/pfas/pfas-explained>

^{xi} Per- and Polyfluorinated Substances (PFAS) Factsheet | National Biomonitoring Program | CDC. (n.d.). https://www.cdc.gov/biomonitoring/PFAS_FactSheet.html

^{xii} PFAS Exposure Assessment | ATSDR. (n.d.). <https://www.atsdr.cdc.gov/pfas/activities/assessments.html>

^{xiii} Maizel AC, Thompson A, Tighe M, Escobar Veras S, Rodowa AE, Falkenstein-Smith R, Benner B, Hoffman K, Donnelly M, Hernandez O, Wetzler N, Ngu T, Reiner J, Place B, Kucklick J, Rimmer C, Davis RD (2023) Per- and Polyfluoroalkyl Substances in New Firefighter Turnout Gear Textiles. (National Institute of Standards and Technology, Gaithersburg, MD), NIST Technical Note (TN) NIST TN 2248. <https://doi.org/10.6028/NIST.TN.2248>