



January 10, 2025

Mr. Stephen Schayer
Director, Office of Physical Hazards and Others
OSHA Directorate of Standards and Guidance
200 Constitution Ave NW,
Washington, DC 20210

Submitted via regulations.gov

RE: OSHA-2021-0009

Dear Mr. Shayer:

The Society of Chemical Manufacturers & Affiliates (SOCMA) appreciates this opportunity to provide comments on the Proposed OSHA Heat Injury and Illness Rule on behalf of its members.

SOCMA is the national trade association dedicated to the specialty and fine chemical industry. Founded in 1921, SOCMA represents a diverse membership of chemical companies who batch manufacture innovative chemistries used in a wide range of commercial, industrial and consumer products. SOCMA maintains a strong record of member service through programs that maximize commercial opportunities, enhance regulatory and legal compliance, and promote industry stewardship. Over 70% of SOCMA's membership are small businesses.

SOCMA member companies operate in both outdoor and indoor work settings, and also use heat-generating processes, machinery, and equipment, and would therefore be affected by a revised standard. As such, SOCMA provides the following recommendations regarding the Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings Proposed Rule:

I. Scope and Application

SOCMA commends OSHA for exempting short-duration exposures in the proposal, such as 15 minutes of work in hazardous heat conditions every 60 minutes, as numerous members have hybrid manufacturing sites, where employees may only be exposed to hazardous heat conditions outdoors for short duration tasks like retrieving materials from warehousing or travelling between different locations of the site.

SOCMA also agrees that OSHA should exempt activities covered under other OSHA standards such as 29 CFR 1910.156 (Fire Brigades) or 29 CFR 1910.120 (Hazardous Waste Operations and Emergency

Response), to avoid duplicative or conflicting regulations. SOCMA also encourages OSHA, as it develops its rulemaking on Emergency Response, to exempt those activities as appropriate.

II. Heat Injury and Illness Prevention Program

SOCMA members overwhelmingly report that they already have heat illness prevention plans in place which encompass most of the elements OSHA contemplates in its regulatory framework. The frequency at which these plans are updated varies, but most companies report that they are updated when material changes are made to the facility or to work processes that would impact heat injury or illness risk. This allows them to effectively manage their heat illness prevention programs without expending resources on unnecessary reviews. Updating the process at least annually, as the proposed rule states now, would cause unnecessary waste of staff time, as weather does not shift drastically in regions year over year. As such, SOCMA recommends that OSHA require plans to be updated as necessary due to facility and/or work process modifications, rather than on an annual basis, to ensure ongoing effectiveness.

III. Hazard Identification and Assessment

a. Monitoring of Weather Conditions

Of the member companies with outdoor work sites, the majority currently measure temperatures onsite daily using ambient temperature readings, with more frequent measuring during the warmer months. Many companies with indoor facilities also monitor the outdoor heat as it impacts the indoor temperature/heat index at their work site. Several member companies make use of the OSHA-NIOSH Heat Safety Tool App, and some rely on weather forecasts or advisories.

The option to measure wet bulb globe temperature at regular intervals poses a challenge to smaller companies, as these units are significantly more expensive than standard thermometers, and manually measuring them at regular intervals is time consuming. Even a small manufacturing site may have dozens of distinct work areas, each requiring their own temperature reading, making the initial installation costly and hourly monitoring a significant time drain on site safety professionals. SOCMA commends OSHA for providing flexibility for monitoring heat in the facility, providing wet bulb monitoring as one of the three options to monitor the heat index in the workplace.

b. Heat Triggers

SOCMA members largely employ a two-tiered system, whereby safety measures are put in place when temperatures warrant, and additional measures are triggered on higher heat days. However, many companies expressed concern that the high-heat triggers suggested in the regulatory framework are too low, particularly in regions that have a warmer, more humid climate. Employees working in high heat regions work and live in this heat for the majority of the year. As one member company noted, their facilities located in Georgia would exceed the high-heat trigger nearly continuously from mid-April to mid-September. This constant state of heightened procedures may lead to complacency or desensitization to the requirements, and therefore diminish effectiveness when summer temperatures routinely exceed 100°F. Employees that work in such regions, therefore, are acclimatized to heat of 90°F, since they encounter this type of heat on a daily basis for most of the year.

Many of the companies consulted currently use an ambient temperature of 95°F as their high heat trigger and have found this appropriate to safely manage increased heat risks. As mentioned in previous comments, SOCMA encourages OSHA to draw from the California standard, which uses an ambient temperature high-heat trigger of 95°F as opposed to 90°F in the proposed rule.¹ As an alternative, SOCMA suggests that a region-based high-heat trigger may be more appropriate than a single nationwide high-heat trigger.

IV. Hazard Prevention and Control Measures

a. Engineering and Administrative Controls

SOCMA members already make use of a combination of engineering and administrative controls to reduce the risk of heat illness and injury, such as air-conditioned spaces, artificial shade, access to cooled break rooms and chilled water close to work areas.

There are, however, some controls that are not appropriate in a chemical manufacturing environment, as they may cause other risks of harm to employees. For example, fans or cooled air directed at the work areas may increase worker exposure to airborne contaminants or render finely calibrated scales inaccurate. As such, SOCMA encourages OSHA to maintain flexibility in the final rule to allow facilities to employ the appropriate administrative and engineering controls, as to maximize employee safety in each individual facility.

b. Acclimatization of New and Returning Employees

While SOCMA acknowledges the increased susceptibility of new employees to heat illness², acclimatization requirements should balance employee safety with effectiveness, while avoiding undue burdens for businesses.

By its nature, the batch chemical manufacturing industry has an ever-changing workflow, as different production campaigns vary in size, scope, and frequency. To manage staffing more effectively, some employers bring in temporary workers to supplement their workforce during busier times, for roles such as shipping and warehouse work.

The proposed rule's provision for re-acclimatization for returning employees after a 14-day time-away period is reasonable and aligns with the NIOSH recommendations for acclimatization³. SOCMA also believes it is important to retain both options for acclimatization, the 50/60/80/ 3-day gradual acclimatization or the following of the standards above the high heat trigger and the standards required for workers above the heat trigger. Workers that take 14 or more days leave from work will have taken that leave in assortment of different climates, and different manufacturing sites will have different exposures to heat, therefore the discretion of the employer when deciding which provision to use is necessary. SOCMA commends OSHA for providing regulatory flexibility when addressing acclimatization, providing either gradual acclimatization or using the standards of a facility is above the high heat trigger.

¹ California Code of Regulations (CCR), tit. 8 § 3395 (2005). <https://www.dir.ca.gov/title8/3395.html>

² OSHA Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings, SER Background Document, p. 18.

³ Centers for Disease Control and Prevention (CDC), "Acclimatization Recommendations," NIOSH Workplace Safety and Health Topics: Heat Stress, <https://www.cdc.gov/niosh/heat-stress/recommendations/acclimatization.html>.

c. Personal Protective Equipment (PPE)

SOCMA members choose PPE which is most appropriate to the risks and hazards of the specific chemicals in their production processes. While protective suits, coveralls or vapor-barrier PPE may increase heat risks, they are integral to employee safety in a chemical manufacturing environment.

This proposed rule states that: “the employer must evaluate heat stress hazards resulting from these clothing [PPE] and implement policies and procedures based on reputable sources to protect employees while wearing these clothing.” Many SOCMA members companies already employ administrative controls like a rotation system, making sure employees only work short durations in heavier PPE before cycling out to a different position in the work site where heavier PPE is not required. Many members also schedule processes that require heavier PPE during cooler months of the year or cooler times of day to the extent practicable. SOCMA commends OSHA on the approach to require employers to evaluate heat stress hazards resulting from these clothing and implement policies and procedures based on reputable sources to protect employees while wearing these clothing. This will provide employer with flexibility to find solutions that are most appropriate for their unique circumstances.

Regarding cooling PPE, many member companies noted the potential risks posed by some of these technologies. For example, bulky cooling vests may affect the fit and dexterity in a protective suit, or wetted garments may put employees at risk around water-reactive chemistries. As such, SOCMA commends OSHA for not expressly requiring the use of cooling PPE, once again allowing employers to use the solutions that are most appropriate to keep employees safe in their unique circumstances.

V. Medical Treatment and Heat-Related Emergency Response

SOCMA members already have robust emergency medical and incident response procedures in place, particularly as these are required by other OSHA standards that they are subject to, such as 29 CFR 1910.120 (Hazardous Waste Operations and Emergency Response). Most of their procedures already satisfy the requirements described in the regulatory framework. The proposed minimum requirements for these procedures seem in alignment with current industry practices.

VI. Worker Training

SOCMA members, particularly those in regions prone to high heat, report a variety of activities and trainings to raise awareness around heat illness and injury. Most new hires receive training on the signs and symptoms of heat illness, though the frequency at which employees are retrained varies. Most companies report that full retraining is not offered annually, but that an abbreviated annual refresher course is generally sufficient. As such, SOCMA supports a requirement for training upon hire and refresher courses annually, after a death or injury beyond first aid, as well as to employees who did not understand the training initially.

VII. Recordkeeping

The proposed recordkeeping standards would be burdensome for SOCMA members. Many specialty chemical manufacturers have large manufacturing plants with multiple work sites, which would require taking and logging temperature measurements daily in a vast number of workspaces. Requiring written documentation to be maintained on the recorded temperature would take time away from plant

managers and safety professionals or require manufacturers to hire additional employees to monitor the heat and record it to simply remain complaint, while yielding little to no safety benefit or retrospective value. As such, SOCMA recommends against requiring written documentation of environmental conditions.

Further, the proposed requirement for employers to document first aid related to heat illness is contradictory to OSHA's January 1, 2022, recordkeeping rule, which specifies that employers are not required to document first aid cases.⁴ SOCMA therefore recommends that to maintain harmonization between standards, OSHA not require documentation of first aid cases related to heat illness or injury.

VIII. Communication on Multi-Employer Sites

Few SOCMA members have multiple employers on site, but SOCMA believes that the OSHA proposals for coordination on multi-employer sites seem reasonable and would not be overly burdensome to employers.

IX. Conclusion

SOCMA has appreciated the opportunity to provide input and looks forward to continued engagement with OSHA as it develops this standard. Should you have any questions about these comments, please feel free to contact me at gstrand@socma.org or 571-348-5123.

Respectfully submitted,



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⁴ <https://www.osha.gov/medical-first-aid/recognition>