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Mr. Douglas Parker
Assistant Secretary of Labor for OSHA
U.S. Department of Labor – OSHA
200 Constitution Avenue, N.W.
Washington, DC 20210

Re: Docket No. OSHA-2021-0009; Comments on a Proposed Rule
Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings

Dear Assistant Secretary Parker:

On behalf of the Employers Heat Illness Prevention Coalition (the "Coalition"), I am pleased to submit these Comments addressing the Occupational Safety and Health Administration's ("OSHA" or "the agency") August 30, 2024, proposed rule on Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings set forth at 29 CFR § 1910.148 (Docket No. OSHA-2021-0009) (hereinafter the "proposed rule").

The Coalition is composed of a broad and diverse group of employers and trade associations representing many industries, including construction, manufacturing, energy, delivery and distribution, retail, warehousing, petroleum refining, liquid terminal operations, recycling, supermarkets and other grocers, automotive manufacturing, and many more, with millions of employees across hundreds of thousands of workplaces in every state in the Nation. In addition to representing a vast array of industries, Coalition members also represent essentially every kind of workplace affected by the proposed rule. For example, we have potential heat illness exposure hazards in outdoor-only, indoor-only, and outdoor/indoor work settings, and represent every size employer, from large international corporations to small businesses with brick-and-mortar locations. As our member organizations would be directly impacted by the proposed rule, the Coalition has a substantial interest in the outcome of this rulemaking.

The common thread among the Coalition's diverse members is that they are responsible and conscientious employers that care deeply about their employees' safety and health. Indeed, although no two are the same, each employer in the Coalition already has in place a heat illness prevention program. Our motivation here is to ensure that if OSHA promulgates a heat injury and illness prevention standard, that it is effective in its purpose–protecting workers from heat illness hazards–and reasonable in the burdens it places on employers.

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I. EXECUTIVE SUMMARY

The Coalition advocates for a flexible, performance-based heat standard to accommodate the variety of workplace conditions and employers' already-existing, effective heat illness prevention programs. Heat illness is not conducive to a one-size-fits-all regulation, which will create unnecessary compliance burdens without improving safety outcomes. At a high level, the Coalition recommends higher heat triggers, simpler monitoring requirements, and excluding indoor environments from the current rule due to their unique challenges. Compliance costs and administrative burdens, particularly for small businesses, have been underestimated in OSHA's analysis, and recordkeeping requirements should be minimized. More specific concerns include the feasibility of mandatory rigid rest breaks, acclimatization protocols, and engineering controls for indoor settings. The Coalition also urges OSHA to clarify definitions such as "shade" and "indoor/indoors" to ensure they drive practical applications.

II. GENERAL COMMENTS

In light of our shared goal of protecting workers and developing an effective heat injury and illness prevention standard, the Coalition urges OSHA to take into consideration the views expressed in the US Supreme Court's decision in *Nat'l Fed'n of Indep. Bus. v. Dep't of Labor*, 142 US 661 (2022). The agency should be mindful of the limitations described by the Supreme Court of OSHA's authority to regulate generalized hazards that are not uniquely "occupational" in nature. The agency must adhere to those guideposts in this rulemaking. To do otherwise would subject OSHA and the regulated community to years wasted and significant resources expended on a rule for naught – because any final rule scoped beyond the guideposts established by the Court would be found impermissible.

Additionally, the Occupational Safety and Health Act ("OSH Act") requires that OSHA standards be "reasonably necessary or appropriate to provide safe or healthful employment." Following the Supreme Court's recent decision in *Loper Bright Enterprises v. Raimondo*, 603 US _ (2024), courts are no longer obliged to defer to OSHA's interpretations of what constitutes "reasonably necessary" or "appropriate." This shift has serious potential implications for OSHA's proposed heat illness rule, which addresses a complex and multifaceted hazard. For example, the proposed rule includes provisions such as rigid rest break requirements, onerous acclimatization protocols, and required engineering controls for indoor work areas. While these measures aim to reduce the potential hazards of heat exposure, reviewing judges may determine they exceed what is "reasonably necessary" or "appropriate" under the OSH Act. Courts are likely to scrutinize whether these provisions are directly tied to demonstrable and material reductions in workplace heat-related injuries and illnesses, or if they impose excessive burdens on employers.

Furthermore, OSHA is likely to face a strong challenge to the cost-benefit analysis included with this Notice of Proposed Rulemaking ("NPRM"). Without the benefit of *Chevron* deference, courts are likely to conclude that OSHA has not sufficiently justified the economic impact of its proposed requirements, particularly on small businesses. For example, mandating frequent rest breaks may be deemed overreach if OSHA cannot provide robust

evidence that this measure is essential. These challenges, combined with the new *Loper Bright* framework, increase OSHA's burden to craft a final rule that courts will accept as clearly within the agency's statutory authority, precisely drafted, and well-supported by analytical and economic data.

With these precautions in mind, there are some "red flags" and overarching alternatives to establishing a standard at this point that OSHA should consider as it moves forward with this rulemaking:

a. Heat exposure in both indoor and outdoor environments is undoubtedly a recognized hazard for which OSHA already has ample authority under the General Duty Clause to address through enforcement (including through its Heat National Emphasis Program);

b. Heat exposure could be viewed as the very type of ubiquitous, generic hazard to which all humans are exposed throughout their daily lives, just as much at work as away from work, rendering any rigid and overly broad standard regulating it, to be the type of agency action that the Supreme Court has cautioned against; and

c. Developing a rigid rule presents challenges to the agency because there are so many personal health conditions and risk factors (e.g., obesity, high blood pressure, diabetes, etc.) that greatly impact the onset of heat-related illness.

It is with these general cautions that we provide the following comprehensive specific comments.

A. Any Final Rule Should Provide Maximum Flexibility for Employers and be Performance-Based.

As has been expressed by nearly all employers throughout this rulemaking, OSHA simply cannot promulgate a one-size-fits-all standard to regulate the potential hazards associated with heat exposure. The hazard itself varies, as do the mitigation measures that can be used to prevent and/or protect against the hazard. Accordingly, promulgating a one-size-fits-all standard, as reflected in the proposed rule, is misguided and will make compliance impossible for numerous employers, including those in the Coalition. Rather, OSHA should provide maximum flexibility to employers and embrace a performance-based approach.

The Coalition notes that, while employers have similar goals, their approaches, by necessity, are very different. In part, crafting the standard as a performance standard makes sense because of the diverse set of industries OSHA intends to regulate. Additionally, the complexity associated with assessing and mitigating heat hazards involves myriad factors relevant to determining whether heat is hazardous. For example, as set forth in the NPRM package, relevant factors include, but are not limited to: geography; air temperature; humidity; wind; direct sunlight; individual risk factors, such as gender, preexisting conditions (e.g., obesity, diabetes, hypertension, cardiac disease), use of certain medications or illicit drugs, age, fitness level, alcohol/caffeine consumption, and prior heat-related illness; physical exertion; personal protective equipment ("PPE"); heat-producing processes and equipment; climate control; and

placement of windows. *See e.g.,* 89 FR 70698, 70726-70728 (August 30, 2024). Based on the factors that OSHA has determined are impactful and relevant to this hazard, a prescriptive standard, to any degree, will not work.

Additionally, there are countless effective approaches to address heat hazards. While Coalition members' existing heat illness prevention programs tend to include elements like water, rest, shade, and training, we recognize that even for those employers in the same industry, the details of these programs may be much different, by necessity. For example, while some employers may be able to implement the "Rule of 20%" for acclimatization, that is not technically or economically feasible for others. Additionally, although some employers may be able to install new or upgrade existing air conditioning systems/units, for others, this is not possible. Consider, for example, employers who have temperature-sensitive environments or those in warehousing with extraordinarily large spaces that can be impossible to effectively cool. Accordingly, we urge OSHA to promulgate a standard that is performance-oriented and gives employers maximum flexible. *See e.g.,* Small Business Advocacy Review ("SBAR") Panel Report for OSHA's Potential Standard for Heat Injury and Illness Prevention in Outdoor and Indoor Work Settings ("SBAR Panel Report") (November 3, 2023) at p. 50 (recommending that "OSHA offer as much flexibility as possible to allow employers to implement engineering and administrative controls that are feasible and appropriate for their workplace and activities.").

The Coalition appreciates OSHA's attempt to build some flexibility into the proposed rule. As OSHA acknowledges: "Organizations affected by heat hazards vary significantly in size and workplace activities. Accordingly, many of the provisions of the proposed standard provide flexibility for affected employers to choose the control measures most suited to their workplace. The flexible nature of the proposed rule may be particularly beneficial to small organizations with limited resources." *See* 89 FR at 70700. However, for flexibility to be meaningful in this way, OSHA must provide options that are viable. While the proposed rule appears to give employers options for purposes of compliance with certain provisions, realistically, that is not the case. For example, OSHA states that employers can choose between heat index or wet bulb globe temperature ("WBGT") as their heat metric to determine their initial and high heat triggers. However, the formulas for calculating the initial and high heat triggers under WBGT are so complex and confusing that it effectively eliminates this as a real "option." Similarly, for purposes of acclimatization, OSHA appears to provide employers with a choice of either implementing the high heat triggers or adopting a gradual exposure schedule. However, for some employers, including those in the Coalition, the option of adopting a gradual exposure schedule is technically and economically infeasible, thereby forcing such employers to "choose" the only alternative – implement the specification-style high heat trigger requirements. The opposite of this might be true as well.

We understand OSHA's possible concerns about maximum flexibility or performance-oriented standards, but we implore OSHA to consider the voices of employers that understand the practical implications of such rulemaking. Coalition members and other employers know firsthand which practices work and what approaches might seem wise on paper but do not work (or do not work as well, or as efficiently) in the field. A performance-

based approach, where the outcome is the regulatory obligation, not the method by which the outcome is achieved, will enhance worker safety. Performance-based standards provide employers with the necessary flexibility to most effectively protect their employees. Employers will still be required to make reasonable decisions, of course. However, they will not be tied to an untailored method that forces an unreasonable or inefficient decision and does not work for their business nor their employees. Flexibility will allow for more – not less – effective programs.

By no means is the Coalition suggesting that the words "flexible" and "performance-based" be taken to mean "vague." Compliance determinations should not be overly complex; employers need clear regulatory language so that they know how to comply. To that end, the Coalition believes that many parts of the proposed rule are concerning precisely because they are too vague.

For example, for purposes of complying with high heat trigger requirements, if employers cannot implement a mandatory buddy system, they generally must require observation by a supervisor or heat safety coordinator, with no more than 20 employees observed per supervisor or safety coordinator, to observe employees for signs and symptoms of heat-related illness. *See* 89 FR at 70774, 70791. Many Coalition members find this language too vague. The Coalition is concerned that there are many signs and symptoms of heat illness that are not outwardly visible, as OSHA acknowledges, which are personal to the specific employee, and/or that are not unique to heat-related illnesses. Do signs/symptoms have to be observed for a set amount of time? Is one minute enough? Sweating is a sign/symptom of heat illness, so how much sweat must be observed before it rises to the level of warranting attention? What if someone is known to sweat more profusely than others?

Employers should be empowered to tailor their heat illness mitigation measures to the specific needs of their workforces. For example, rest breaks could be scheduled based on temperature, humidity, and worker exertion levels, and take into consideration other hazards that may be introduced by stopping and resuming certain tasks, rather than rigid time intervals, allowing adaptability to fluctuating heat and other working conditions. As a model for a more flexible, performance-oriented standard, OSHA should consider Nevada OSHA's newly adopted heat illness regulation. *See* R131-24AP. At the same time, flexibility must be paired with clarity, ensuring employers can easily determine whether their selected measures meet OSHA's requirements without unnecessary ambiguity. This can be done, for example, using non-mandatory appendices to the standard. The Coalition encourages OSHA to adopt such an approach. Again, OSHA should provide clear, well-defined guidelines emphasizing outcomes, rather than prescribing rigid actions. Balancing flexibility and performance with clarity can be achieved by incorporating limited, essential prescriptive elements within an otherwise performance-oriented framework. By ensuring that employers have the discretion to adapt their methods while maintaining clear, enforceable benchmarks, OSHA can strike the right balance between flexibility and clarity.

B. Certain Provisions in the Proposed Rule are Technically or Economically Infeasible (i.e., OSHA's Time/Cost Estimates are Too Low).

The Coalition believes OSHA's time/cost estimates grossly underestimate the burden on employers, and we encourage OSHA to review the time and cost estimates in its economic analysis and revise as appropriate. OSHA's current time/cost estimates do not accurately represent the technical and/or economic infeasibility of various provisions in the proposed rule. We have mentioned a few examples above, including rest breaks and acclimatization; however, our concerns about inaccurate time/cost estimates extend to other elements of the proposed rule as well. By way of specific example, the estimates for how long it will take to either modify or create a written Heat Illness and Injury Prevention Program ("HIIPP") are exponentially too low. Per the NPRM, OSHA estimates that it will take 2.5 hours to modify existing programs, and six to thirty hours to create a program, depending on whether a model template is used, or the program is created from scratch. *See* 89 FR at 70835.

These numbers are too simplistic and not based in reality. Coalition members emphasize that while they may have to write/update their programs, they also must plan out the programs before any writing even begins. The planning process alone can take months as employers consider input from different stakeholders and numerous factors, which may include how the new program will fit with existing programs, how to implement the various components, how to account for any resources the employer may need, how employees will adjust to the new requirements, etc. Then employers must draft the program, which again, can take months, especially for smaller businesses that must make do with fewer resources. The Coalition notes that, even if members were to use a template, they would want to make sure that its wording is accurate and easy to understand (i.e., not just copied/pasted from the standard), that it tailors certain sections appropriately, that there are no conflicts with existing programs, that it makes appropriate cross references, etc. After writing the program, employers must roll out and implement the program. This typically means that Coalition members have to integrate the program with existing policies and procedures, purchase any necessary supplies and distribute them accordingly, communicate the program to employees and ensure it is effectively understood, modify existing, or create new, training materials (e.g., videos, slides, quizzes, etc.), make sure supervisors are educated on the standard and ready to provide training, make sure follow-up training is conducted if employees do not pick up the material the first time, etc. And that just considers the first go around. Program development is an iterative process; i.e., it is not "one and done." Accordingly, the Coalition urges OSHA to do everything possible to allow employers to maintain their existing effective programs and avoid these unnecessary costs.

Similarly, with respect to acclimatization, OSHA made assumptions that are far too simplistic and provided time and cost estimates that are far too low. OSHA states:

> For new employees, ***OSHA assumes that employers would implement a plan that incorporates the measures required [under the high heat trigger provisions] when the initial heat trigger is met or exceeded during the first week of work***. For purposes of estimating the cost of compliance with this

> provision, OSHA calculated the cost of rest breaks and observation for signs and symptoms during an employee's first week. While [high heat trigger provisions] also require[] a hazard alert, OSHA assumes that the hazard alert can be provided by the designated person while conducting observation or during training (for new employees).
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> ***The cost of rest breaks and observations during the first week of work, assuming 8-hour shifts*** that coincide with heat index measurements that meet or exceed the initial heat trigger but do not meet the high heat trigger, ***equates to roughly 41.75 minutes per day for every new indoor employee and 47.75 minutes per day for every new outdoor employee during the employee's first week on the job***. These estimates are the same for returning employees during their first week after returning to work when the heat index is at or above the initial heat trigger. No additional costs were estimated for new or returning employees when the temperature meets or exceeds the high heat trigger, as employers are already required to follow the high heat procedures.
>
> OSHA did not make an additional adjustment for cost savings [] as the conditions of those additional rest breaks are different (i.e., different temperature range-rest break combination) than those at which the estimates of labor productivity loss due to pacing in the heat were calculated. To the extent that pacing is reduced for employees undergoing acclimatization protocols, this could overstate the costs of acclimatization. OSHA welcomes comments on this issue and whether the agency should extend the potential cost savings from reduced pacing to workers during their acclimatization period.

See 89 FR at 70841 (emphasis added).

These assumptions are incredibly narrow. Equating two 15-minute minimum rest breaks[1] and observation for an eight-hour shift to 41.75 minutes per day for indoor employees and 47.75 minutes per day for outdoor employees is too low, especially in light of the fact that neither the time it takes to travel to/from the break area, nor the time to don/doff PPE are allowed to count towards the 15-minute minimum rest break time periods. For example, Coalition members with large facilities or that are located over sprawling areas anticipate much higher total time per day to meet that requirement, and we have significant concerns about the ability to even locate "readily accessible" break areas (a separate, technical

[1] Per OSHA, "When the high heat trigger is met or exceeded, employers would be required to provide a minimum of 15-minute paid rest breaks at least every two hours. The proposed standard specifies that a meal break may count as a rest break, even if it is not otherwise required by law to be paid. For this analysis, OSHA assumes two paid 15-minute rest breaks and an unpaid meal break per at-risk worker per 8-hour shift where the high heat trigger is met or exceeded. At the high heat trigger, employers must also provide if-needed rest breaks (as part of the requirements of the initial heat trigger). Therefore, OSHA assumes that when the high heat trigger is met or exceeded, in addition to 30 minutes per 8-hour shift of scheduled rest break time, at-risk workers would take a five minute if-needed rest break. The travel time to walk to and from the break area is also accounted for and OSHA assumes two minutes for indoor employees and four minutes for outdoor employees per rest break." *See* 89 FR at 70846.

feasibility concern). It will take much more travel time than OSHA has estimated. Additionally, for Coalition members whose employees must don/doff multiple layers of PPE, including, for example, respiratory protection, many additional minutes (estimated at up to twenty additional minutes) will be required, especially for those with significant potential contamination concerns (e.g., lead exposure), which may cause greater non-compliance by employees with other OSHA standards (e.g., 29 CFR § 1910.1025). Additional time must be included in OSHA's estimates.

OSHA's cost estimates as related to both as-needed and mandatory rest breaks are not realistic and too low. With respect to as-needed, OSHA states:

> ***OSHA assumes that, per 8-hour shift, at risk employees will take one 10-minute if-needed rest break***. ***OSHA estimates, on average, an additional two minutes for indoor employees per break and an additional four minutes for outdoor employees per break to account for the time to walk to and from the break area***. OSHA welcomes feedback on the assumption that an average employee will take one ten-minute if-needed rest break when the temperature is at or above the initial heat trigger and the assumptions for travel time to and from the break area for indoor and outdoor settings.
>
> OSHA has preliminarily determined that when employees are offered rest breaks, cost savings will accrue to employers currently noncompliant with the rest break requirements, as their employees will work more efficiently during the work time not spent on rest breaks (i.e., pace less). At the initial heat trigger, some of the estimated unit cost for if-needed rest breaks (i.e., 10 minutes plus travel time) will be offset by this reduction in pacing, which OSHA considers as cost savings for employers. For the purposes of calculating accrued employer cost savings, OSHA defined three groups of employees with varying existing break levels []. Group 1 corresponds to employees at establishments that do not currently provide rest breaks when the initial heat trigger is met or exceeded. Group 2 corresponds to employees at establishments that do provide if needed rest breaks when the initial heat trigger is met or exceeded, but do not have required rest breaks for when the high heat trigger is met or exceeded. Group 3 captures employees at establishments that have already implemented rest breaks protocols that meet the rest break requirements outlined in this proposed standard.
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> As mentioned in [this preamble], OSHA estimated the minutes spent pacing for each of the three groups when they are working at or above the initial heat trigger. Table VIII.C.12. [below] shows the time (minutes) per 8-hour shift that OSHA estimates employees in each group currently spend pacing when the initial heat trigger is met or exceeded. Using these estimates, OSHA assumes that with the implementation of if-needed rest breaks, all employees in Group 1 (i.e., not currently taking any breaks) will behave like Group 2 (i.e., those currently taking if-needed rest breaks at or above the initial heat trigger but not scheduled rest breaks at or above the high heat trigger), reducing their pacing (working more efficiently) by 14.0 – 11.2 = 2.8 minutes per shift at the initial heat trigger.

For outdoor employees, this reduction in pacing translates into accrued cost savings of 20 percent (2.8 minutes of pacing reduced/14 minutes of if-needed rest break time) of the unit time-cost per break. This effectively reduces the unit cost of if-needed rest breaks for outdoor employees from 14 to 11.2 minutes. Similarly, for indoor employees, this reduction in pacing reduces the unit time-cost by 2.8/12 = 23.33 percent, from 12 to 9.2 minutes per 8-hour shift.

TABLE VIII.C.12—LABOR PRODUCTIVITY LOSS FROM PACING ABOVE INITIAL HEAT TRIGGER BEFORE AND AFTER IMPLEMENTATION OF REQUIRED IF NEEDED REST BREAKS AND LABOR COST SAVINGS PER 8-HOUR SHIFT PER EMPLOYEE

Group	Group description	Labor productivity loss from pacing before required initial heat trigger rest breaks (minutes)	Labor productivity loss from pacing after required initial heat trigger rest breaks (minutes)	Estimated labor cost savings (minutes)
Group 1	Employees at establishments that do not currently provide any rest breaks.	14.0	11.2	2.8
Group 2	Employees at establishments that provide rest breaks that meet the initial heat trigger rest break requirements, but not the high heat trigger rest break requirements.	11.2	11.2	0.0
Group 3	Employees at establishments that provide rest breaks that meet the initial and high heat trigger rest break requirements.	0.0	0.0	0.0

Source: OSHA estimate.
Note: OSHA estimates that approximately 6.1 percent of employees are in Group 1, 46.9 percent are in Group 2, and 47.0 percent are in Group 3.

See 89 FR at 70841-70842 (internal footnotes omitted) (emphasis added).

Additionally, as for mandatory rest breaks, OSHA states:

> When the high heat trigger is met or exceeded, employers would be required to provide a minimum of 15-minute paid rest breaks at least every two hours. The proposed standard specifies that a meal break may count as a rest break, even if it is not otherwise required by law to be paid. ***For this analysis, OSHA assumes two paid 15-minute rest breaks and an unpaid meal break per at-risk worker per 8-hour shift where the high heat trigger is met or exceeded***. At the high heat trigger, employers must also provide if-needed rest breaks (as part of the requirements of the initial heat trigger). Therefore, ***OSHA assumes*** that when the high heat trigger is met or exceeded, in addition to 30 minutes per 8-hour shift of scheduled rest break time, ***at-risk workers would take a five minute if-needed rest break. The travel time to walk to and from the break area is also accounted for and OSHA assumes two minutes for indoor employees and four minutes for outdoor employees per rest break***.
>
> Similar to the discussion [above], OSHA estimated the amount of time that employees spend pacing themselves when the high heat trigger is met or exceeded over an 8- hour shift []. These estimates reflect three groups of employees based on their respective establishments' estimated compliance with the rest break requirements outlined in this proposed standard. [See above.]
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> Based on the estimates for pacing mentioned in [this preamble], OSHA estimated the reduction in pacing at the high heat trigger; the estimates for

pacing for each group are shown in [T]able VIII.C.15 [below]. OSHA estimated that with the implementation of scheduled rest breaks as well as if-needed rest breaks at the high heat trigger, employees in Group 1 (i.e., that are currently noncompliant with scheduled rest breaks as well as if-needed rest breaks) will behave like those in Group 3 (i.e., rest break protocols are consistent with the requirements of the standard at both triggers) and therefore their pacing reduces by 40.6 – 8.4 = 32.2 minutes. This reduction in pacing translates into 32.2/47 = 68.51 percent of the unit time cost for rest breaks of 47 minutes and 32.2/41 = 78.53 percent out of the unit time-cost for rest breaks of 41 minutes saved for outdoor and indoor employees, respectively.

Based on the estimates for pacing mentioned in [this preamble], OSHA estimates that with the implementation of scheduled rest breaks at the high heat trigger, employees in Group 2 (i.e., that are currently noncompliant with only scheduled rest breaks and currently compliant with if-needed rest breaks) will now behave like those in Group 3 and for those employees pacing is reduced by 39.5 – 8.4 = 31.1 minutes per shift. This reduction in pacing (i.e., increase in worker efficiency) translates into 31.1/47 = 66.17 percent of the unit time-cost of 47 minutes (31.1/41 = 75.85 percent out of the unit time-cost of 41 minutes) saved for outdoor (indoor) employees that are currently in Group 2.

TABLE VIII.C.15—LABOR PRODUCTIVITY LOSS FROM SPENT PACING AT HIGH HEAT TRIGGER BEFORE AND AFTER IMPLEMENTATION OF REQUIRED IF-NEEDED AND SCHEDULED REST BREAKS PER 8-HOUR SHIFT PER EMPLOYEE

Group	Group description	Labor productivity loss from pacing at before required high heat trigger rest breaks (minutes)	Labor productivity loss from pacing after required high heat trigger rest breaks (minutes)	Estimated labor cost savings (minutes)
Group 1	Employees at establishments that do not currently provide any rest breaks.	40.6	8.4	32.2
Group 2	Employees at establishments that provide rest breaks that meet the initial heat trigger rest break requirements.	39.5	8.4	31.1
Group 3	Employees at establishments that provide rest breaks that meet the initial and high heat trigger rest break requirements.	8.4	8.4	0.0

Source: OSHA estimate.
Note: OSHA estimates that approximately 6.1 percent of employees are in Group 1, 46.9 percent are in Group 2, and 47.0 percent are in Group 3.

See 89 FR at 70846-70847(internal footnotes omitted) (emphasis added).

As discussed above, these initial assumptions are far too low. The estimates also grossly overestimate cost savings and underestimate productivity loss. For example, the Coalition questions OSHA's calculations for labor productivity loss from pacing. Additionally, the Coalition raises to OSHA's attention that, with respect to refinery towers in particular, a break can result in more than an hour of total down time, depending on the height of the refinery tower. The time is even greater if any time must be spent to follow decontamination procedures.

To solve these economic and technical feasibility concerns, which, as discussed above, only represent a fraction of our concerns, OSHA should revise the proposed rule so that it provides maximum flexibility for employers and more fully embraces a performance-

oriented approach. Doing so will make the standard more workable and reasonable for employers and will result in more effective and protective heat illness prevention programs for employees.

C. This Rule Should Not Cover Indoor Work Settings.

The Coalition urges OSHA to revise the scope of the standard so that it does not apply to indoor work settings. As difficult as it may be to regulate outdoor heat, it is even more difficult, or maybe even impossible, to regulate indoor heat on a national level. As such, the Coalition recommends that any initial heat injury and illness prevention standard should focus on and be limited in application to outdoor work settings only, segregating regulation of indoor heat for a potential separate rulemaking.

There are a number of sound reasons to segregate regulation of heat focusing first on outdoor environments. First, regulating exposure to heat can require vastly different controls depending on whether the source of the heat is an indoor or outdoor environment. In particular, engineering mechanisms to control indoor and outdoor heat are entirely different and present an entirely disparate set of challenges. OSHA cannot easily regulate both sources of heat with a single regulatory approach.[2]

Second, the large majority of very serious heat-related illnesses occur in outdoor environments. Per OSHA: "In an evaluation of 66 heat-related illness enforcement investigations from 2011-2016, 80% of heat-related fatalities occurred in outdoor work environments." *See* OSHA Advanced Notice of Proposed Rulemaking ("ANPRM"), 86 FR 59309 at 59310 (October 27, 2021). Although OSHA's small entity representative ("SER") background documents go on to state that "61% of non-fatal heat-related illness cases occurred during or after work in an indoor work environment[,]" this data is difficult to interpret since it combines illnesses that occurred during and after work in an indoor work environment. The illnesses that occurred after work in an indoor work environment could just as easily have been attributable to outdoor heat rather than indoor. To be clear, we do not deny that indoor temperatures can reach hazardous levels. We simply highlight this data because it demonstrates the concentration of risk for very serious heat-related illnesses in outdoor environments. Thus, for purposes of this rulemaking, outdoor heat should be OSHA's primary focus.

Third, the standard should be limited in scope to outdoor work environments because there are several major challenges, as reflected in the proposed rule, associated with attempting to regulate indoor heat. For example, the measurement to determine "hazardous heat" is

[2] The Coalition recognizes that, as of December 15, 2024, there are three OSH State Plan states that simultaneously regulate outdoor and indoor heat in one regulation – Oregon, Maryland, and Nevada. However, all three rules are still too new to determine their effectiveness. Indeed, the Nevada regulations only took effect about a month ago, on November 15, 2024, with the Maryland standard taking effect only about a month before that, on September 30, 2024. Even Oregon OSHA's rules took effect only a couple of years ago, on June 15, 2022. It is too soon to tell whether these rules are both protective of employees and reasonable so far as the burdens they place on employers.

inconsistent and difficult to apply in indoor settings. *See* 89 FR at 70775-70777. While employers in the same geographic area can reasonably rely on weather forecasts to determine outdoor temperature, employers must take their own measurements on some periodic basis to determine whether heat has reached hazardous levels in their unique indoor workplaces. Indeed, this is reflected in the proposed rule, where employers are allowed to rely on forecasts for purposes of determining outdoor heat temperatures, but must actively take measurements to determine indoor heat. *See* 89 FR at 70771. As discussed in greater detail below, the proposed rule's requirements regarding indoor heat monitoring are technically and economically infeasible, not to mention, unduly burdensome from a practical perspective.

Additionally, the definition of "indoor/indoors" in the proposed rule is too vague and not based on practical examples. "Indoor/indoors" is defined as "an area under a ceiling or overhead covering that restricts airflow and has along its entire perimeter walls, doors, windows, dividers, or other physical barriers that restrict airflow, whether open or closed." *See* 89 FR at 71069. Although the Coalition acknowledges that OSHA provides some detail for this definition in the NPRM package, it still does not help certain employers, especially those in construction, determine when they are indoors or outdoors for purposes of compliance.[3] For example, what if the roof is partially erected, and restricts some air flow? This concern would be alleviated if OSHA eliminates indoor heat from the scope of any final rule promulgated as a result of this rulemaking, and instead opens a new rulemaking focused on indoor heat. That way, OSHA can focus more on the specific industries targeted by each rule. At the very least, the definition of "indoor/indoors" needs clarification.

Accordingly, for the above reasons, the Coalition urges OSHA to exclude indoor heat from this rulemaking. To the extent that OSHA wishes to expand the application of its rule to indoor settings, it should, like California,[4] do so in a subsequent rulemaking, when more information is available on how to effectively and reasonably regulate indoor heat, and the regulation can focus on the unique aspects of indoor heat sources, how best to establish measurement thresholds, the control mechanisms to manage indoor heat, and the feasibility of these controls. Of course, for purposes of efficiency, any future standard regulating indoor heat should be designed to align with and allow employers to rely on programs established to comply with an outdoor heat standard.

D. The Rule Should Include an Exemption for Increased Air Movement in Vehicles.

Recognizing that OSHA already provides an exemption for "[w]ork activities performed in ... vehicles where air-conditioning consistently keeps the ambient temperature below 80 °F[,]" the Coalition urges OSHA to revise the proposed rule to provide an exemption for increased

[3] OSHA states, "Possible examples for indoors include work in a garage, even if the garage door is open; the interior of a warehouse, even if multiple doors are open on loading docks; and a shed with four walls and a ceiling, even if the windows are open. Construction activity is considered to be work in an indoor environment when performed inside a structure after the outside walls and roof are erected." *See* 89 FR at 70771.

[4] This should not be read as an endorsement of the content of the Cal/OSHA outdoor or indoor heat standards, but merely a process recommendation to address the distinct work environments in successive rulemakings.

air movement in vehicles. *See* 89 FR at 70769. Certain employers cannot, for technical and/or economic feasibility reasons, retrofit existing vehicles that do not have air conditioning. Given that OSHA already recognizes the utility of increased air movement as a mitigation measure for heat-related illnesses, reflected by the fact that it is one option for indoor work area controls, the Coalition believes that the exemption for work activities performed in vehicles where air-conditioning consistently keeps the ambient temperature below 80 °F should be expanded to include work activities performed in vehicles where there is consistent increased air movement (e.g., fans), so long as there is no reasonable expectation of harm from such air movement. *See* 89 FR at 70782. Recognizing increased air movement as a substitute for air conditioning makes sense not only from a mitigation standpoint – air flow is an effective mechanism to cool body temperature – but is an important consideration that should be made in light of concerns regarding the burden on the climate from excess use of air conditioning. Accordingly, we believe that any final standard should include an exemption for or acknowledgement of increased air movement in vehicles.

III. SPECIFIC COMMENTS

A. The Heat Triggers Should be Higher, Include an Option Based on Ambient Temperature, and Account for Local Environmental Conditions.

If a standard is promulgated, its heat triggers – both the Initial Heat Trigger and High Heat Trigger – should be higher than those in the proposed rule, include an option based on ambient temperature, and account for local environmental conditions. Based on feedback from employees, 80° F heat index does not constitute a hazardous level of heat such that it amounts to significant risk. Indeed, the National Weather Service states that, at a Heat Index of 80° F, "[f]atigue [is] possible with prolonged exposure and/or physical activity." *See* National Weather Service Heat Index (last accessed January 13, 2025). Fatigue does not rate as a serious risk, subject to regulation under the OSH Act. If heat triggers are going to be included in the standard, they should correlate with the National Weather Service triggers of 90° F for the initial heat trigger and 105° F for the high heat trigger.

Heat Index/Heat Disorders

Heat Index	Possible heat disorders for people in higher risk groups
80-90	Fatigue possible with prolonged exposure and/or physical activity.
90-105	Sunstroke, heat cramps and heat exhaustion possible with prolonged exposure and/or physical activity.
105-130	Sunstroke, heat cramps or heat exhaustion likely, and heat stroke possible with prolonged exposure and/or physical activity.
130 or higher	Heatstroke/sunstroke highly likely with continued exposure.

See id.

With respect to increasing the heat triggers, the Coalition notes that temperatures are trending hotter. The Coalition notes that 2024 was the warmest year on record. *See* United Nations, 2024 to Become Hottest Year on Record (Dec. 12, 2024). While we understand that OSHA pulled from historical data to derive its initial and high heat triggers, this may not be

fully representative because historical data does not reflect the temperatures that the current workforce consider non-hazardous. The workforce/population is adapting, like it always does, and what we can safely tolerate today is much different (i.e., higher, so far as temperature is concerned) from what we could tolerate decades or even a few years ago. This concept is akin to long-term climate-based acclimatization. Accordingly, the Coalition urges OSHA to increase the initial and high heat temperature triggers.

Moreover, the hazard of heat is very dependent on the environment. Coalition members have employees located in every state and know that effective protocols in the arid southwest are different than approaches used in the high humidity Gulf Coast region. What this means is that a federal standard must provide employers the ability to establish programs based on their particularized environments. This comes back to our message that there simply is no "one size fits all" approach to regulating heat exposure.

The Coalition notes that many of its members have heat illness prevention programs that revolve around ambient temperature triggers. Given that this is the most widely-known heat metric, this makes sense, especially from a training and education standpoint. Indeed, setting aside the WBGT option, the Coalition is concerned by the number of news articles that incorrectly reported OSHA's proposed rule to be based on an initial trigger of 80° F ambient temperature, or 80° F without any qualifier about the heat metric (in which case, the metric is commonly assumed to be ambient temperature). While the Coalition is aware that, during the Small Business Regulatory Enforcement Fairness Act ("SBREFA") phase of this rulemaking, OSHA attempted to make ambient temperature an option for purposes of a proposed rule's heat metrics and triggers, and that much of the feedback from SERs during this phase reflected that OSHA should adopt a simpler approach, this was not to say that ambient temperature should not have remained an option. Rather, the common thread was that 30% relative humidity condition associated with that option was too complicated and confusing. The Coalition urges OSHA to make ambient temperature a heat metric option from which employers can choose to base their programs, and to set easy-to-understand, numerical values that are, of course, reasonable and science-based, for the ambient-based heat triggers.

While Coalition members acknowledge that ambient temperature does not account for humidity, like heat index does, or other factors like air movement and radiant heat, like WBGT does, there is nothing inherently unsafe about this approach. Indeed, several OSH State Plan states' heat illness prevention standards use ambient temperature as their heat metrics. This includes California and Washington, two of the country's most stringent State OSH Plans. *See* 89 FR at 70707. Generally, California's outdoor rule sets the initial trigger at 80° F ambient temperature, and Washington's rule (which applies to outdoor workplaces) also sets the initial trigger at 80° F ambient temperature. *See* 8 CCR § 3395; *see also* WAC § 296-62-09530.

Relatedly, although it does not appear that OSHA expressly prohibits this in the proposed rule, the Coalition encourages OSHA to include regulatory text in any final rule, or to develop guidance that indicates that employers may choose multiple heat metrics, so long as doing so is reasonable. For example, an employer may choose to use heat index for its indoor work

settings and WBGT for its outdoor work settings, since WBGT takes into account air movement (e.g., wind) and radiant heat (e.g., solar radiation). Or, an employer may choose heat index as its chosen heat metric, but, on a particularly windy day, or when the wind picks up during the same day, decide to change to WBGT. Similarly, employers may choose heat index in the morning when there is greater cloud coverage and then switch to WBGT later in the day when there is more direct sunlight. While certainly, for the second and third examples, the opposite should not be allowed (assuming all other factors remain stable), OSHA should permit, indeed encourage, employers to take more accurate measurements as indicated by reasonable criteria, including local environmental conditions. Employers should be empowered and encouraged to develop thoughtful and tailored solutions on how to measure heat. Ultimately, this flexibility benefits both employers and employees by allowing for more robust heat illness prevention programs that can address the full spectrum of potential heat-related hazards.

As OSHA is aware, one of the greatest complications associated with issuing a nationwide heat illness prevention standard is geography. Weather varies considerably from coast to coast. Although creating a bright line heat trigger may seem objective and fair, doing so does not take into account the long-term geographical acclimatization of workers. For example, while employees in Florida may be accustomed to working in warmer temperatures for the majority of the year, workers performing the exact same work in Minnesota may not be so accustomed. Accordingly, consideration of local environmental conditions in the standard's temperature threshold is important.

To be clear, the Coalition acknowledges that heat illness hazards can occur anywhere in the country. As set forth in the ANPRM, although Texas and California accounted for a quarter of all heat-related workplace fatalities from 2000-2010, when the size of the worker populations are considered, states like Mississippi, Arkansas, Nevada, West Virginia, and South Carolina, have been found to have the highest rates of heat-related workplace fatalities from 2000–2010. To make this a workable standard, the Coalition urges OSHA to build into the standard heat triggers that make sense for the particular area based on temperatures that are higher than what the average worker (or, member of the public) in that locality is typically exposed. One potential solution, at least for purposes of the heat index metric option, is to include references to National Weather Service excessive heat watches and excessive heat warnings, which are localized, to represent the initial heat trigger and high heat trigger, respectively, in any final standard.

Finally, the formulas to calculate the WBGT initial and high heat triggers, which are equal to the National Institute for Occupational Safety and Health ("NIOSH") Recommended Alert Limit ("RAL") and NIOSH Recommended Exposure Limit ("REL"), respectively, are far too complicated. Indeed, the formulas are so technical and mathematically complex that they render the "option" of WBGT as an employer's chosen heat metric not a legitimate option.[5] Although not a perfect metric, the Coalition understands that WBGT (which takes into account

[5] The formula for calculating the RAL is: [°C – WBGT] = 59.9–14.1 $\log_{10}$M[W], where M is metabolic rate in watts (W). The formula for calculating the REL is: [°C – WBGT]= 56.7–11.5 $\log_{10}$M[W], where M is metabolic rate in watts (W).

ambient temperature, humidity, air movement, and radiant heat) tends to provide greater accuracy than ambient temperature and heat index (which takes into account ambient temperature and humidity) with respect to measuring environmental heat.[6] While the Coalition as a whole does not take a position on whether it would choose WBGT as its heat metric, we believe that such an option should be made available. Thus, to the extent that a final rule is promulgated, OSHA should simplify the WBGT initial and high heat triggers. One potential solution is for OSHA to derive reasonable, science-based numerical values for WBGT alone and eliminate or make options the application of the RAL and REL, which would significantly simplify the WBGT option.

B. OSHA Should Add Flexibility to the Proposed Requirements for Outdoor Heat Monitoring, and if the Final Standard Covers Indoor Work Settings, OSHA Should Add Flexibility to the Proposed Requirements for Indoor Heat Monitoring.

The proposed requirements regarding both outdoor and indoor heat monitoring are extremely problematic. The requirements are economically and technically infeasible. Accordingly, the Coalition urges OSHA to add greater flexibility to the outdoor heat monitoring requirements, and to the extent OSHA does include indoor workplaces in a final standard, to also add greater flexibility to the indoor heat monitoring requirements.

With respect to outdoor heat monitoring, OSHA requires that monitoring be conducted with sufficient frequency in a location at or as close as possible to the work area.[7] Put simply, our concerns relate to time and space. On the issue of time, OSHA states:

> Employers consulting forecasts would need to check the forecast as close to the start of the work shift as possible to determine whether and when the heat index at the work area may be at or above the initial or high heat triggers. Depending on the forecast or conditions at the work site, the employer then may or may not need to conduct further monitoring during the day. ***If, for example, the employer consulted the OSHA–NIOSH Heat Safety Tool before the work shift and it indicated that the heat index would exceed the initial heat trigger but not the***

[6] For example, although WBGT has proven reliable for predicting physiological responses to external heat stress in controlled laboratory settings, it does not account for other key environmental factors, physical exertion, or clothing effects and it fails to address individual variability in heat stress responses or confounding factors such as pre-existing conditions, alcohol or caffeine consumption, drug use, prior heat illnesses, and other stressors. WBGT serves as a screening/threshold tool, but not a true indicator of safe or unsafe conditions.

[7] Although OSHA does not include "as close as possible" language to the requirements regarding forecasts, the concept carries. Specifically, OSHA states, "Employers who choose to track local forecasts would need to consult a reputable source for local heat index forecasts such as their local NWS Weather Forecast Office, the OSHA–NIOSH Heat Safety Tool cell phone application, or another weather forecast website or cell phone application. When using these sources, employers would need to accurately enter the location of the work area. The OSHA–NIOSH Heat Safety Tool (and other cell phone applications) will automatically use GPS to determine the user's location, so the forecast may be inaccurate if using the tool at home and employers will need to manually enter the work area location in these situations." *See* 89 FR at 70776.

> ***high heat trigger during the last four hours of the work shift, the employer would need to either: (1) implement control measures [under the standard's initial heat trigger requirement] for those four hours, or (2) consult the Heat Safety Tool again later in the day and implement control measures [under the standard's initial heat trigger requirement] only for the hours during which real time conditions reported by the application exceed the initial heat trigger*** (which may be more or less than four hours if the forecast earlier in the day underestimated or overestimated the heat index). ***However, if the employer consulted the OSHA–NIOSH Heat Safety Tool before the work shift and it indicated that the heat index would be close to the initial heat trigger but not exceed it, employers would need to check the forecast again later in the day to determine whether the trigger was exceeded*** .... Ultimately, the employer is responsible for ensuring that the controls required at the initial and high heat trigger are in place when those triggers are met, and they should make decisions regarding the frequency of monitoring with this in mind.
>
> Likewise, employers who conduct onsite monitoring in order to comply with [the standard] will need to develop a reasonable measurement strategy that is adapted to the expected conditions. If forecasts provide no suggestion that the initial heat trigger could be reached during the work shift, an employer may not need to take any measurements. ***Where temperatures are expected to approach the initial or high heat triggers, several measurements may be necessary, particularly as the hottest part of the day approaches. For example, if the employer measures at 10 a.m. and the heat index is very close but below the initial heat trigger, the employer would likely need to either check again sometime shortly thereafter or assume that the trigger is exceeded***. WBGT accounts for additional parameters—air speed and radiant heat—so employers using WBGT may need to make additional measurements when these conditions change at the work site.

See 89 FR at 70776 (emphasis added). OSHA's economic analysis, as discussed below, grievously underestimates the cost and time associated with these requirements, this level of monitoring essentially puts employers in the position of becoming full-time weathermen. Many employers, especially small businesses, do not have the technical or economic resources to dedicate staff completely to this task. Reading and interpreting the weather, particularly heat index and WBGT at this level, requires technical knowledge and especially if measurements are taken with a device or values are entered into a calculator, require some level of expertise, such as industrial hygiene, which many employers lack and cannot afford. It should be sufficient for employers to read the forecast once for the whole day, or to take measurements twice (once at the start/end of day, and once mid-day), and implement measures per the initial/high heat trigger requirements accordingly. Where the proposed rule seems to be more focused on compliance with rigid technical requirements (i.e., giving the agency the ability to issue "gotcha" citations to employers for not catching a temperature rise to at or right above the initial heat trigger), the Coalition's suggested approach is more focused on employee safety.

As to space for outdoor (and indoor) work settings, the Coalition recognizes that OSHA

intends the phrase "as close as possible" to mean the closest possible location that will not otherwise create inaccurate measurements. *See* 89 FR at 70777. Although the Coalition appreciates OSHA's attempt to craft seemingly flexible language here, the use of the words "possible" and "inaccurate" is concerning. Given the vast differences in impacted industries and workplaces, it will be impossible for many employers to comply with this provision as written. OSHA must consider employers with large facilities, or employers who may not be able to access certain areas in their facilities. The Coalition urges OSHA to adopt an approach that results in consistency throughout a single workplace. In many cases, it will not be feasible to evaluate each "work area" multiple times per day. This could result in some parts of the facility triggering the Initial or High-Heat Trigger, while some other parts do not. At worst, the standard should be reworded to "as close as reasonably feasible," and to clarify in the preamble to a final rule that OSHA interprets this to mean "the closest feasible location that would not otherwise create materially inaccurate measurements." As non-mandatory guidance, OSHA should explicitly state that the use of fixed monitoring devices placed in reasonable locations (e.g., a central office parking lot for employers with outdoor mobile workforces, or the middle of the affected areas of a manufacturing plant) is compliant.

To the extent OSHA does include indoor work environments in a final standard, OSHA should add greater flexibility to the proposed requirements for indoor heat monitoring because the requirements are technically and economically infeasible. Per the proposed rule, in indoor work areas, employers must conduct heat-related hazard assessments to identify areas where employees may reasonably be expected to be exposed to heat at or above the initial heat trigger. *See* 89 FR at 71070. Based on these indoor assessments, employers must implement monitoring plans for each affected work area to determine when employees are exposed to heat at or above the initial and high heat triggers, using the same monitoring and measuring methods as those for outdoor areas, with the exception of the option to rely on weather service forecasts. *See id.* These methods include measuring the heat index, measuring ambient temperature and humidity separately to calculate the heat index, or obtaining a WBGT. *See id.* Additionally, employers must be proactive in responding to changes in processes, controls, production, equipment, or substantial increases in outdoor temperatures, such as during a local heat wave, which could increase indoor heat exposure. *See id.* In these cases, employers must re-evaluate the affected work areas to identify areas with a reasonable expectation of exposure to heat at or above the initial heat trigger and update the monitoring plan accordingly. *See id.*

Although there are numerous issues associated with these proposed requirements, the Coalition is particularly concerned with practical limitations and the technical and economic feasibility of these requirements. From a technical perspective, indoor heat monitoring will require some level of active monitoring. Unlike the use of forecasts, which can be accessed and more easily understood from a variety of user-friendly sources like phone apps, the internet, and television, active indoor heat monitoring will require the use of certain monitoring devices to derive ambient temperature and humidity, heat index, or WBGT. However, as discussed above, not all employers have industrial hygienists familiar with the use of such devices readily on-hand. Thus, it will take time for supervisors to learn how to use the devices and interpret the readings.

Moreover, these devices will increase the economic burden for employers, as such devices impose upfront acquisition and ongoing maintenance costs. Not to mention costs associated with time taken away from employees' regular work duties both to ensure that they know how to use the devices, as well as conducting the regular and frequent monitoring required by the proposed rule. This ties into the practical concerns associated with indoor heat monitoring. Even more so than with outdoor monitoring, the proposed indoor heat monitoring requirements are so unduly burdensome as to make weathermen out of employers. The frequency and number of locations from which monitoring might be required is dizzying.

Despite these real-world concerns, OSHA provides an economic analysis that significantly underestimates the time and costs associated with the proposed rule's outdoor and indoor heat monitoring requirements. OSHA states:

> OSHA assumes that all outdoor employers without current monitoring practices will choose the option to monitor local forecasts since the time necessary to do so would be minimal (and many individuals check local forecasts regularly without regard to this proposed standard). Employers may have a designated person at each work site track local forecasts of ambient temperature and humidity provided by the National Weather Service (NWS) (or others) to determine the daily maximum heat index, which the employer would then use to determine which protocols are triggered, if any. For this analysis, ***OSHA assumes that employers, on average, will take approximately 15 seconds twice a day to monitor the local forecast via a smart phone app***.
>
> Alternatively, employers can set up monitoring devices as close as possible to the work area to conduct on-site monitoring. Employers may choose between measuring the heat index or WBGT using monitoring devices. Employers with indoor work sites do not have the option of monitoring local weather forecasts. The first approach, measuring the heat index, would require the employer to designate someone to take measurements of the heat index, or to measure separately the ambient temperature and humidity to calculate heat index (if needed, using the OSHA– NIOSH Heat Safety Tool App as a calculator or the online calculator available from the NWS). ***OSHA estimates that on average, it will take the designated person 1 minute each time they measure the heat index or ambient temperature and humidity, including calculating the heat index (e.g., by consulting the OSHA–NIOSH App or NWS's online calculator)***. OSHA also assumes that measurements will be taken on average twice per work day (260 days per year) and that employers using this approach will use a temperature and humidity logger that is capable of automatically uploading relevant environmental information for recordkeeping purposes. ***OSHA assumes that the designated person will spend 15 minutes reading the logger's user manual***. OSHA also assumes that all indoor employers without current monitoring in place will adopt this option.

> The second approach, measuring the WBGT, would require the employer to designate someone to take measurements of wet bulb globe temperature. This approach would require the purchase of one WBGT thermometer for each worksite and some of a designated person's time to read the thermometer manual. ***OSHA assumes that no employers will adopt this option, however some employers may already be using this method***. Those employers can continue to use this method under this proposed standard and are not estimated to incur any costs to do so since they are already in compliance.
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> Employers with indoor work sites would be required to conduct a hazard evaluation to identify the work areas where there is a reasonable expectation that employees are or may be exposed to heat at or above the initial heat trigger. ***OSHA estimates that conducting the hazard evaluation would require about 3 hours in total***.

See 89 FR at 70837-38 (emphasis added). There is a clear disconnect between OSHA's explanation of the proposed monitoring requirements and the agency's economic analysis. Indeed, Coalition members estimate that for a large industrial site the initial assessment to characterize indoor and outdoor areas, tasks, and PPE requirements could require three to seven dedicated full-time staff members' time. After the initial assessment, ongoing monitoring could still demand 10-20% of those three to seven dedicated staff members' time, amounting to hours and hours of time spent solely on monitoring. Per another estimate, monitoring requirements could demand one to four hours per day from a designated heat safety coordinator, amounting to 200-800 hours annually on monitoring alone. Such requirements will impose substantial costs on employers, especially small businesses, without evidence of commensurate safety benefits and increased protection for employees. As set forth above, the Coalition urges OSHA to revise the proposed monitoring requirements.

While the Coalition acknowledges that OSHA included an exemption from monitoring in the proposed rule, this is not so much an exemption as it is an optional assumption employers can make that the temperature at a work area is at or above both the initial and high heat triggers. Although this may be the administratively easier option to monitoring, the fact is that OSHA has put employers between a rock and a hard place – either comply with a complicated web of monitoring requirements, or assume all of the other complicated web of requirements of the standard apply. This "all or nothing" approach does not reflect the flexibility OSHA intended. Rather, OSHA should ease the requirements by more narrowly tailoring the number of times and locations from which employers must monitor. Emphasizing methods that align with existing standards, tailoring monitoring requirements to specific environments, and accounting for the real-world technical, economic, and administrative impacts will help achieve OSHA's intended safety goals without placing unnecessary burdens on employers.

C. OSHA Should Add Flexibility to Any HIIPP Requirement and Reasonably Limit Any HIIPP Review Cycles.

Per the proposed rule, employers must develop and implement comprehensive, site-specific written HIIPP. *See* 89 FR at 70700. Among other requirements, this plan must include: (1) a comprehensive list of the types of work activities covered by the HIIPP; (2) all policies and

procedures necessary to comply with the rule; (3) **t**he employer's chosen heat metric (e.g., heat index or WBGT); and (4) the identification of one or more designated heat safety coordinator(s). *See* 89 FR at 70834. Additionally, HIIPPs must be reviewed annually and whenever a heat-related illness occurs that requires medical treatment beyond first aid. *See* 89 FR at 70835. The Coalition encourages OSHA to add more flexibility to the HIIPP requirement and to limit any HIIPP review cycles, so they are reviewed when reasonably necessary.

As discussed above, OSHA should allow greater flexibility for employers to retain their current, effective HIIPPs, even if those plans do not contain every element outlined in the proposed rule. Indeed, OSHA seems to suggest as much in the NPRM, but then goes on to require employers to conduct gap analyses to ensure their existing programs contain all the prescriptive HIIPP elements in the proposed rule.[8] OSHA states:

> An employer may have already developed and implemented a HIIPP. Existing plans may fulfill some of the requirements in [the proposed rule]. ***It is not OSHA's intent for employers to duplicate current effective HIIPPs, but each employer with a current HIIPP would have to evaluate that plan for completeness to ensure it satisfies all the requirements of this [proposed rule]***. Employers with existing plans would be required to modify and/or update their current HIIPP plans to incorporate any missing required elements and provide training on these new updates or modifications to all employees . . .

See 89 FR at 70774 (emphasis added). As discussed above, imposing a one-size-fits-all approach in this way is inefficient and unnecessary. Instead, OSHA should recognize that programs can be effective in various forms and give credit to those employers who have already developed effective programs.

Additionally, the proposed cadence for reviewing HIIPPs places unnecessary burden on employers without clear benefits to worker safety. Unlike hazards such as bloodborne pathogens, where technological advancements and updated practices justify more frequent reviews, heat-related mitigation strategies are well-established and do not require the same level of constant reassessment. Requiring annual reviews of HIIPPs, regardless of whether significant workplace changes have occurred, is not likely ever to lead to material improvements to the programs, and certainly not improvement commensurate with the burden. For example, reviewing standards across all U.S. sites can take significant time, ranging from 10 to 120 hours, depending on the complexity of the sites and plans.

A more reasonable approach would limit mandatory reviews to situations where there are substantial changes in workplace conditions, such as shifts in tasks, schedules, or physical environments, that meaningfully increase heat exposure risks. This follows similar language

[8] The Coalition notes that, although the list of prescriptive HIIPP elements in the proposed rule appears to be short, one of those elements requires employers to include all policies and procedures necessary to comply with the rule, which basically entails writing the entire rule into the plan. This is not an easy feat by any means.

in OSHA's respiratory protection standard. *See* 29 CFR § 1910.134(c)(1) ("The program shall be updated as necessary to reflect those changes in workplace conditions that affect respirator use."). The key is that HIIPP reviews should be based on meaningful information, trends, and data, rather than an arbitrary annual review cycle or isolated incidents.

D. OSHA Should Eliminate Vapor Impermeable Clothing Requirements as Redundant and Unnecessary.

Per the proposed rule, "If [an] employer has employees who wear vapor-impermeable clothing, the employer must evaluate heat stress hazards resulting from these clothing and implement policies and procedures based on reputable sources to protect employees while wearing these clothing. The employer must include these policies and procedures and document the evaluation in the HIIPP." *See* 89 FR at 71070. Although OSHA leaves the proposed regulatory text relatively open-ended, the NPRM package includes unnecessary prescriptive language about this requirement. OSHA states, "Although OSHA is not specifying a particular form for the required hazard evaluation, an effective hazard evaluation would include a review of environmental heat exposures, a review of the high-risk area(s), tasks, and occupations, and an evaluation of the length of time and intensity of task when wearing vapor-impermeable clothing." *See* 89 FR at 70774. The assessment of any hazards, including heat-related exposure, associated with such PPE is already covered under OSHA's PPE standards, including 29 CFR § 1910.132. Therefore, OSHA should eliminate any requirements regarding vapor-impermeable clothing as redundant and unnecessary. However, if OSHA does not eliminate these requirements, it should provide more flexibility for employers to decide how to evaluate and document any hazards related to vapor-impermeable clothing by eliminating the NPRM package language, or by clarifying that it is non-mandatory. That is, at the very least, OSHA's NPRM package language regarding the evaluation of hazards related to vapor-impermeable clothing should prioritize flexibility and be performance-based rather than prescriptive.

E. Hydration Requirements Should be Limited to Making Cool Potable Water Readily Accessible and Training Employees on Dehydration Hazards.

Per the proposed rule, upon reaching the initial heat trigger, employers must provide access to potable drinking water that is: (i) placed in locations readily accessible to the employee; (ii) suitably cool; and (iii) of sufficient quantity to provide access to 1 quart of drinking water per employee per hour. *See* 89 FR at 70800. While the Coalition fully supports the idea of including hydration requirements in any final standard, the requirement cannot be as prescriptive as in the proposed rule. Rather, OSHA should instead require employers to ensure that cool potable water is readily accessible while work is being performed, and to train employees on dehydration hazards. The agency must take care in establishing this requirement because, ultimately, an employer cannot ensure that employees drink enough water to stay hydrated. As the saying goes, you can lead a horse to water, but you cannot make it drink. There are limitations to the authority and power supervisors have over their employees. Robust training on the importance of hydration, providing ready access to water and/or other hydrating options as a supplement, and encouraging regular hydration in hot

environments should be the limit of what is required in any final standard. Building on any expectation or requirement that employers actually monitor either the amount of water consumed by each employee, or the specific amount of water available per employee, is unreasonable and unnecessary.

For example, the Coalition notes that any provision specifying a quantity of water that must be made available will almost certainly be misapplied by CSHOs to be an amount that employers must ensure that employees drink. Although OSHA mentions this in the NPRM package, the agency should expressly clarify either in the standard itself or through enforcement guidance, that employers are not required to track employees' consumption or force employees to drink one quart of water per hour (or any amount of water, for that matter). A generalized requirement pertaining to water quantity would be preferable and more realistic for employers and employees. This is in part because a rigid, fixed amount does not account for the dynamic factors that influence hydration needs, such as environmental conditions, workload intensity, or individual worker health. This will also alleviate the technical and administrative burdens of rigid calculations while still achieving the goal of worker hydration.

As a separate note, OSHA suggests that to comply with the proposed standard, employers can provide food-grade jugs, bottled water, or refillable water bottles to employees, ensuring they always have access to water. *See* 89 FR at 70778. For its economic analysis, OSHA assumes that only one 40-quart cooler is needed for every 40 employees. *See* 89 FR at 70840. Employers are assumed to purchase one reusable water bottle per employee. *See id.* Both of these are significant underestimates. For the larger workplace cooler, employers would be required to refill the cooler potentially up to 8 times a day, which becomes another full time employee duty. For employee-specific drinking bottles, OSHA's estimate assumes only a single water bottle for each employee would be purchased over the entire 10-year period of the economic analysis. That is not remotely realistic, as any employer would be lucky to go one year without having to replace a bottle used in an industrial setting. The analysis also fails to account at all for sanitation requirements for individual bottles or larger workplace coolers, or for the cost of providing food-grade jugs, bottled water, or refillable water bottles to each employee who operates a vehicle, as would be required by many employers. For employers with employees on the road, the Coalition requests that OSHA clarify that employers can require these employees to refill their own personal water bottles, and that compliance would certainly be met if employers elect to provide refillable water bottles and offer employees the opportunity to stop and refill them, and educate employees about the importance of hydration, and encourage employees to stay hydrated.

F. OSHA Should Expand and Simplify its Definition of Shade.

OSHA defines "shade" to mean the blockage of direct sunlight, such that objects do not cast a shadow in the area of blocked sunlight. *See* 89 FR at 71069. The goal of shade is simple – to provide a space where workers can escape direct sunlight and cool down – reducing their risk of heat stress. The current definition, which essentially requires shade to have "no sub-shadow," does not align with how shade works in the real world. *See* 89 FR at 70780. Even full-grown trees allow for some sunlight to filter through the leaves, creating smaller

patterns (shadows) on the ground, yet still provide relief from the sun/heat. Similarly, synthetic shade structures like tarps or canopies often allow some light to pass through due to the weave of the fabric or design choices like ventilation holes.

These structures significantly lower temperatures and UV exposure underneath them, making them highly effective, despite the presence of some (very minor and faint) sub-shadows. A perfectly uniform shadow might be ideal in theory, but in practice, it is unnecessary. Workers (or people, for that matter) do not need a perfect, completely shadowed area to cool off; they need a space that reduces their exposure to heat and allows them to rest and regulate their core body temperature comfortably. This requirement also creates challenges from a compliance perspective. How can employers (and, in enforcement actions, CSHOs) determine whether a space has "no sub-shadow" at any given time? By nature, light conditions change constantly throughout the day as the sun moves, and small variations in shadowing are inevitable. Accordingly, the Coalition urges OSHA to simplify its definition of shade to "the blockage of direct sunlight."

G. If OSHA Does Not Include an Exemption for Increased Air Movement in Vehicles, OSHA Should Clarify That Such Vehicles Can be Used as Break Areas.

The proposed rule requires employers to provide, at outdoor work areas, one or more area(s) for employees to take breaks that can accommodate the number of employees on break, that is reasonably accessible to the work area(s), and which has at least one of the following: (i) artificial shade (e.g., tent, pavilion) or natural shade (e.g., trees), but not shade from equipment, that provides blockage of direct sunlight and is open to the outside air; or (ii) air-conditioning, if in an enclosed space like a trailer, vehicle, or structure. *See* 89 FR at 71070. OSHA clarifies that large vehicles such as trucks and vans used to transport employees or goods to the work site but not as part of the work itself may be used as shade, provided the vehicle is not running. *See* 89 FR at 70780. Additionally, OSHA's proposed provision indicates that, for mobile employees, such as delivery drivers, employers could allow employees to take breaks in air-conditioned establishments like convenience stores or restaurants, provided all other break area requirements are met. *See* 89 FR at 70780-70781. It is not clear from OSHA's proposal whether vehicles with increased air movement may be used as break areas – either because they provide adequate shade or because they provide another method of decreasing core body temperature, akin to air conditioning. To the extent that OSHA does not include an exemption for increased air movement in vehicles, as discussed above, OSHA should clarify that such vehicles can be used as break areas, at least in part for the reasons set forth below.

First, under the right conditions, vehicles with increased air movement provide adequate shade. Indeed, OSHA experts on heat stress have testified that sitting in a vehicle parked in a shady spot with the windows and/or doors open provides sufficient shade for rest breaks. *See* Post-Hearing Brief of the United States Postal Service (OSHRC Docket No. 16-1713), p. 33; *see also Secretary Of Labor, U.S. Department Of Labor v. U.S. Postal Service, and the National Association of Letter Carriers, and the National Rural Letter Carriers Association*, OSHRC DOCKET NOS. 16-1713, 17-0023, 16-1872, 16-1813, 17-0279, Hearing Transcript

(Vol. 4), February 28, 2019, 1092:4-14. The Coalition does not suggest that vehicles with increased air movement that are themselves hot (e.g., because they might have been sitting in high heat conditions over a long duration of time) be used as break areas. However, as OSHA's own experts have testified, if the vehicles are parked in a shady spot, or are otherwise effectively in the shade (i.e., at cooler/neutral temperatures), then they too should be considered adequate break areas, provided that the other break area conditions are met. If OSHA wishes to add certain limiting language to reasonably set forth the conditions under which such vehicles can be used, the Coalition does not oppose OSHA doing so. However, eliminating this as a compliance option is misplaced.

Second, to the extent that OSHA is not satisfied that vehicles with increased air movement provide adequate shade, despite OSHA's own testifying experts confirming as much, then such vehicles should be considered break areas because they may provide increased air movement. As discussed above, OSHA's proposed rule allows indoor work areas to implement controls that include, but are not limited to, air conditioning and increased air movement. In this sense, OSHA acknowledges that increased air movement provides a sufficient means of cooling. It does not then follow that only vehicles or other enclosed spaces with air conditioning can be used as compliant outdoor break areas. Again, the Coalition does not suggest that vehicles with increased air movement that indicate harmful air movement (e.g., where humidity may be a contributing factor) be used as break areas. However, for OSHA seemingly to not even allow this as a compliance option in any circumstance is misguided.

Third, the Coalition notes that it is also unreasonable and inappropriate to fully rely on third parties to provide establishments for drivers to take breaks. Many convenience stores and restaurants require customers to make purchases to remain on the premises, and employees who do not comply could be accused of loitering. Additionally, by necessity, convenience stores and restaurants may not always be "reasonably accessible" to employees' work areas. Depending on the route, employees may find themselves in very remote locations. Relying on external establishments is neither reasonable nor necessary when vehicles with increased air movement can provide adequate shade / cooling qualities.

H. OSHA Does Not Have Authority to Require Employers to Pay for Rest Breaks.

The proposed rule would require that all rest breaks be paid time. However, OSHA does not have statutory authority under the OSH Act and jurisdiction to require employers to pay for such rest breaks. Instead, the issue is covered by state labor and employment laws and the Fair Labor Standards Act ("FLSA"), which is implemented by the U.S. Department of Labor's Wage and Hour Division ("WHD"). A March 10, 2014 OSHA interpretation letter confirms that "questions of pay for rest/bathroom breaks are not within OSHA's jurisdiction." *See* OSHA Letter of Interpretation to Mr. Ryan Wiens (Mar. 10, 2014). The letter references 29 CFR § 785.18, which outlines the FLSA treatment of short rest breaks – breaks up to 20 minutes are compensable as they are considered part of the workday and beneficial to both the employee and the employer. Congress already explicitly rejected an interpretation of OSHA's General Duty Clause that would mandate that employers pay employees for time not

spent performing work.[9] The OSH Review Commission also lacks the authority to order employers to pay compensation to employees, as required by the Administrative Procedure Act ("APA"). Imposing paid breaks would effectively mandate paid sick leave, which would contravene the federal policy established by the Family and Medical Leave Act ("FMLA"), 29 U.S.C. § 2601 et seq., especially § 2612. The FMLA does not require paid leave, even for serious health conditions that prevent employees from performing their job duties. For work-related illnesses, workers' compensation, protected by the OSH Act § 4(b)(4), applies.

I. OSHA Should Include Non-Mandatory Guidance Regarding the Frequency and Length of As-Needed Rest Breaks.

Per the proposed rule, employers must allow and encourage employees to take paid rest breaks in designated break areas if needed to prevent overheating. *See* 89 FR at 70741. Per the NPRM package, "OSHA assumes that, per each 8-hour shift, employees will take one 10-minute if-needed rest break." *See id*. The Coalition urges OSHA to consider offering non-mandatory guidance, as a limiting factor (e.g., one or two additional 10-minute rest breaks), on the frequency and length of as-needed rest breaks, because not including some guardrails might lead to potential abuse. For the most part, Coalition members have successfully implemented self-paced rest breaks without significant issues. Indeed, they have found that allowing employees to take breaks based on individual needs can encourage more effective hydration, reduced fatigue, and better overall safety without leading to abuse. However, on occasion, Coalition members have found that employees might take advantage of more liberal informal policies such as these. To the extent that employers would be precluded or hindered from addressing suspected abuse, OSHA should offer non-mandatory guidance regarding the frequency and length of as-needed rest breaks. For example, Department of Labor regulations provide that short rest breaks lasting between 5-20 minutes are compensable work hours and must be included in total hours worked. *See* 29 C.F.R. § 785.18. Thus, absent applicable state, county, local law stating otherwise, longer breaks lasting more than 20 minutes need not be considered work time and need not be compensated (provided employees are completely relieved of duty during such periods). To the extent that employers want to set rest break rules centered around these DOL regulations for employees who are physically capable of going back to work, such that breaks over 20 minutes are not paid, OSHA should not (and likely cannot) prevent employers from doing so.

J. Mandatory Rest Break Requirements are Unnecessary Given That Employees Can Already Take Rest Breaks on an As-Needed Basis.

The implementation of additional mandatory rest breaks (beyond the as-needed breaks

[9] In 1970, a House committee bill would have granted a right to be paid while not performing allegedly dangerous work. *See* H.R. REP. 91-1291 at 30 (1970), reprinted in Legislative History at 860: "There is still a real danger that an employee may be economically coerced into self-exposure in order to earn his livelihood, so the bill allows an employee to absent himself from that specific danger for the period of its duration without loss of pay." The provision was rejected. *See Whirlpool Corp. v. Marshall*, 445 U.S. 1, 18-19 (1980) ("Congress very clearly meant to reject a law unconditionally imposing upon employers an obligation to continue to pay their employees their regular paychecks when they absented themselves from work for reasons of safety.").

already provided to employees) at the proposed frequency will require constant scheduling adjustments and create significant operational challenges. Indeed, stopping work every two hours for a 15-minute minimum break leads to significant downtime over the course of a day. To accommodate these breaks while maintaining essential operations, employers might need to hire additional workers to cover tasks during high-heat periods. This would result in increased labor costs and logistical challenges, including managing overlapping shifts and tasks. Coordinating breaks for large teams or across multiple locations becomes even more complex, requiring additional oversight and administrative resources to ensure compliance.

Concerns about mandatory, frequent rest breaks apply to employers in all industries but are especially concerning in industries where such breaks can cause greater hazards. For example, telecommunications workers who climb poles or towers to install or maintain equipment, as well as construction workers, face significant risks due to fall hazards, especially during the climb up and down. According to the Bureau of Labor Statistics ("BLS"), falls are one of the leading causes of injury and death in the construction and telecommunications sectors. *See* Bureau of Labor Statistics, A Look at Falls, Slips, and Trips in the Construction Industry (May 6, 2024). The physical demands and frequent climbs up and down poles and other structures, introduce serious risks, especially in adverse weather conditions or unstable environments. Frequent breaks for such workers will increase their exposure to risks of falling – the direct result of more breaks is more climbing. Flexibility for when and how long these breaks can be, could provide for a longer break spaced further apart to avoid that.

Additionally, for workers involved in loading and unloading tanker trucks, especially those transporting hazardous materials, compliance with Department of Transportation ("DOT") regulations is a key consideration that this rule does not consider. DOT regulations are designed to ensure safe handling of materials, including protocols for the correct and safe loading, securing, and unloading of tanker trucks, and often the continuous presence of the employee. *See e.g.,* 49 CFR § 177.834(i)(3)(i). Tanker truck loading/unloading requires precision and adherence to safety standards, which will be compromised if the workflow is disrupted by new regulations mandating rest breaks at impractical intervals.

Similarly, certain tasks, such as critical lifts, start-up or shutdown of process equipment, and working in tight spaces or at elevations, present additional complexities. These activities often require continuous presence and continuous focus and effort for more than two hours, but mandatory breaks on a rigid schedule could disrupt workflow or create greater hazards and/or be impractical and potentially unsafe. For example, if a work activity is in the final phase of rebolting piping when the two-hour mark is reached, workers may have to "undo" some steps to put the equipment back into a safe state before they can leave for their break. Then they will have to redo some of their work before continuing to finish. Without the rigid two-hour limit, the employees could finish the last steps and then break – likely for a longer period as they transition to a new work activity – without compromising safety. Likewise, accessing and exiting tight spaces, or having to descend numerous flights of stairs or ladders, can add significant time and effort, making frequent breaks impractical and potentially unsafe. Accordingly, to ensure a reasonable and workable standard, the Coalition urges

OSHA to reconsider whether mandatory rest breaks are necessary at all, given that employees can already take as-needed rest breaks under the proposed rule. Further, the cost estimates associated with "pacing" do not incorporate any costs for the inefficiencies associated with work interruptions at inopportune times like in this example.

K. The Proposed Requirements for Engineering Controls for Indoor Work Settings are Infeasible.

Per the proposed rule, employers must provide one of the following at each affected indoor work area: (i) increased air movement, such as fans or comparable natural ventilation, and, if appropriate, de-humidification; (ii) air-conditioned work area; or (iii) in cases of radiant heat sources, other measures that effectively reduce employee exposure to radiant heat in the work area (e.g., shielding/barriers, isolating heat sources). *See* 89 FR at 71070. Although certain Coalition members can and do implement a variety of engineering controls in indoor work areas, others simply cannot due to technical and/or economic feasibility concerns. For example, Coalition members expressed that there are certain applications where increasing air movement, air-conditioning, and otherwise reducing radiant heat exposure, such as through isolating heat sources, are not options because they have facilities that are too large to be effectively cooled through such means, temperature-sensitive equipment, concerns about cross-contamination and/or interference with calibration of certain operating equipment, such as scales, and/or processes that inherently need to be conducted in the heat. In other contexts, one or two options might not be available (e.g., inability to isolate a machine due to lack of power outlets or windows, lack of capacity to install more airflow, etc.), but in many circumstances, the remaining option(s) are still infeasible, present greater hazard(s), or are otherwise impossible to implement. Accordingly, an "if feasible" or "where feasible" qualifier should be added to the regulatory text for all engineering control options.

Any requirement about engineering controls should also be based on the length of time a worker is expected to be in the subject work area. The hazard that may warrant the investment in engineering controls differs for someone walking through an area, for example, just to perform a quick check once or twice an hour (e.g., transient) versus a worker assigned to perform manual tasks on an assembly line in a single location for the full work shift (stationary). Engineering controls should not be required for the short duration, transient example, but may be more appropriate for the second, longer term stationary work context.

L. OSHA Should Not Tie Evaluations of Fan Usage to Humidity and Should Clarify That There are Multiple Ways to Evaluate Fan Use.

Per the proposed rule, at ambient temperatures above 102 °F, employers who use fans must evaluate humidity to determine if fan use is harmful, and if so, to discontinue fan use. *See* 89 FR at 71070. Additionally, OSHA has included the following table in the NPRM package to identify scenarios where the agency believes fan use would or would not be harmful:

	Fan speed: 3.5 m/s	
Ambient temperature	Humidity range: fan use allowed	Humidity range: turn off fans
102.2 °F (39 °C)	15–85%	<15% or >85%.
104.0 °F (40 °C)	20–80%	<20% or >80%.
105.8 °F (41 °C)	30–65%	<30% or >65%.
107.6 °F (42 °C)	30–65%	<30% or >65%.
109.4 °F (43 °C)	35–60%	<35% or >60%.
111.2 °F (44 °C)	35–55%	<35% or >55%.
113.0 °F (45 °C)	40–55%	<40% or >55%.
>113.0 °F (>45 °C)	Discontinue all fan use	Discontinue all fan use.

See 89 FR at 70783. This table is overly complex and confusing. Instead, the Coalition urges OSHA to eliminate the requirement that employers evaluate humidity and clarify that there are multiple ways to evaluate fan use. For example, Coalition members stated that they think evaluations can be based on temperature alone. There are reputable sources that suggest the same. Indeed, the CDC states, "When you are indoors, you can[] [u]se fans, but only if indoor temperatures are less than 90°F. In temperatures above 90°F, a fan can increase body temperature." *See* CDC, "About Heat and Your Health" (June 25, 2024). To be clear, we are not suggesting that this be the standard, but rather, that an ambient temperature-based limit should be an option, based on employers' reasonable determinations of harmful fan use.

M. Any Final Standard Should Provide Flexible Acclimatization Requirements and Allow for Self-Managed Acclimatization.

Per the proposed rule, when the initial heat trigger is met, for new employees, during the first week on the job, employers must implement either: (1) a plan that incorporates all high heat trigger requirements; or (2) gradual acclimatization to heat so employees are only exposed to the initial regulated level of heat no more than: 20% on Day 1; 40% on Day 2; 60% on Day 3; and 80% on Day 4. *See* 89 FR at 70800. Similarly, when the initial heat trigger is met, for returning employees (i.e., those who return after being away from the job for more than 14 days), the employer must implement: (1) a plan that incorporates all high heat trigger requirements; or (2) gradual acclimatization to heat so employees are only exposed to the initial regulated level of heat no more than: 50% on Day 1; 60% on Day 2; and 80% on Day 3. *See id.* As discussed above, "options" are good, but the reality with this proposed term is that neither of these options is viable for many employers or under many circumstances. Accordingly, the Coalition urges OSHA to provide more flexible acclimatization requirements and allow for self-managed acclimatization.

First, the technical, economic, and administrative burdens associated with acclimatization protocols are unnecessary, overwhelming, and impractical. These protocols require significant administrative oversight to ensure compliance. Managing such complex processes across a large workforce, for example, is costly and demands significant resources. The associated costs can be substantial, described as "high impact," with some industries estimating an average of thousands of dollars per employee in direct expenses, not including the impact on productivity, as discussed below. Indeed, the administrative burdens are so extensive that full compliance may be impossible in most circumstances. These challenges underscore the need for more practical, adaptable solutions.

Moreover, beyond the administrative costs associated with these protocols, there are significant costs associated with the time lost when employees are acclimatizing under gradual exposure schedules at least in part because, during these time periods, workers cannot perform their regular duties. And, although OSHA makes clear that employees can perform other duties/tasks (e.g., housekeeping, training, etc.) so long as they are not exposed to temperatures at or above the initial heat trigger, the reality is that many employers do not have other jobs/tasks to backfill. Thus, these employers would very likely be required to send employees home (with pay, as set forth in the NPRM package) and hire additional staff or shutdown.[10]

OSHA should, therefore, provide more flexible acclimatization requirements and allow for self-managed acclimatization because, by its nature, acclimatization is unique and individualized, and depends on an employee's personal health and his/her background, experience, and exposure to hot environments. Indeed, as OSHA acknowledges, workers with underlying medical conditions may need more time to fully adapt to the heat. Not to mention, acclimatization periods will be different due to variations in the physical demands of work and the duration/intensity of hazardous heat to which each employee is exposed. This makes it impossible for OSHA to regulate heat using a one-size-fits-all approach. Employers need flexibility and discretion in developing acclimatization plans that will be most effective for their workplace/workforce.

Among the options to address acclimatization should be an allowance for employers, through training, to empower their employees to self-manage their acclimatization periods. Allowing for more self-managed acclimatization through health awareness training is key. Prioritizing employee training on recognizing signs and symptoms of exertional heat-related illness, prevention strategies, and emergency response procedures is more likely to prevent heat-related illness than rigid acclimatization schedules. Proactive monitoring, including job site visits, shadowing, and communication, can ensure workers are comfortably and safely acclimatizing during the initial weeks (back) on the job. Additionally, OSHA should consider allowing employers to implement alternative effective methods, such as wearable technology to monitor individual physiological responses to heat exposure.

Finally, the Coalition recommends that OSHA include an exemption for circumstances when acclimatization requirements reduce staffing levels/capacity that would negatively impact emergency response capabilities or other critical operations. To the extent that acclimatization protocols force workplace emergency response teams to not be able to adequately function (e.g., because emergency response team members have been sent home), OSHA should provide a limited exemption to allow the teams to provide the life-saving services they perform.

[10] The Coalition notes that, unlike other employers that might be able to freely reduce operational capacity, certain Coalition members would not be able to do so as they provide essential services (critical infrastructure).

N. OSHA Should Not Include Recordkeeping Requirements in the Final Rule.

The proposed rule's recordkeeping requirements require employers that conduct indoor measurements to have written or electronic records of those measurements and retain them for six months. *See* 89 FR at 70799. The requirement for employers to document and retain records of indoor heat measurements for six months introduces significant administrative challenges that could hinder operational efficiency, particularly in industries with variable workflows, remote sites, or limited administrative resources. *See id.* With the exception of training records, keeping track of any other types of heat-related illness data is unduly burdensome, with literally no commensurate safety benefit. As such, documenting indoor heat measurements, whether in written or electronic form, places an undue administrative burden on employers, especially those with limited resources, such as small businesses. For many employers, this task would necessitate adding responsibilities to existing personnel, which may not be sustainable in industries where workers are already stretched thin. The time required to document heat measurements is highly variable but could entail anywhere from 10 to 30 minutes per shift per work area. When scaled across multiple work areas or shifts, this task becomes a considerable paperwork drain, diverting focus from other important safety initiatives.

O. OSHA Should Recognize Employers' Good Faith Efforts to Make HIIPPs and Training Available in Languages and Literacy Levels of All Employees.

The requirement for making HIIPPs and training available in all languages and literacy levels for employees, supervisors, and Heat Safety Coordinators, though well-intentioned, presents significant challenges for employers with diverse workforces. *See* 89 FR at 70775. Indeed, OSHA has not accounted for the costs and difficulty of ensuring accurate translations. A 2021 study conducted by UCLA Medical Center found that Google Translate preserved the overall meaning for 82.5% of the translations, but the accuracy between languages spanned 55% to 94%. *See* Taira, Brian R., Vanessa Kreger, Andrew Orue & Lisa C. Diamond, A Pragmatic Assessment of Google Translate for Emergency Department Instructions, 36 J. Gen. Intern. Med. 3361 (2021). If companies translate to an unfamiliar language, the accuracy of the critical safety information cannot be ensured without significant expense.

Furthermore, OSHA should grant enforcement relief for employers that make good faith efforts to meet these requirements but face practical limitations. Ensuring that HIIPPs and related training materials are available in *every* possible language and tailored to *every* literacy level can be complex, especially if employees join the workforce after programs are developed and do not reveal, for one reason or another, their primary language. Good faith efforts to comply, such as making programs available in the predominant languages spoken by the workforce and updating materials as new needs arise, should be recognized and acceptable to OSHA. For example, if an employer makes its HIIPP available in the three languages spoken by its employees, but inadvertently misses a language spoken by a new hire, this should not result in penalties if the employer promptly addresses the gap upon discovery. Ultimately, the focus should remain on ensuring employees have access to the critical safety information they need in a format they can understand, while recognizing and

supporting the practical efforts of employers to meet these goals. This balanced approach will promote compliance without creating undue burdens on employers.

Additionally, OSHA should amend the proposed rule to allow for verbal communication of its HIIPP and training in a different language, if the workplace has only 10 or fewer employees who speak that different language, regardless of the size of the workforce at the facility. In sum, the employer should be required to provide a written program and written training materials for the most dominant languages, but for a single or small group of employees who speak another language, the HIIPP and training could be relayed verbally only.

P. Representatives Accompanying OSHA CSHOs During an Inspection Under a Final Heat Rule Should be Limited to Those with Expertise in Heat Illness.

We incorporate by reference Conn Maciel Carey LLP's comments about the NPRM for the Worker Walkaround Rulemaking that were submitted to the rulemaking docket on November 13, 2023 on behalf of the Employers Walkaround Representative Rulemaking Coalition. *See* 88 FR 59825 (August 30, 2023). Specifically, we reemphasize the position presented in that rulemaking that employee representatives involved in OSHA inspections must possess expertise directly related to the issues under review.

That feedback is just as important in the context of this proposed rule, in connection with a potential definition of the term "employee representative." We are aware that OSHA solicits comment on this very topic, stating, "OSHA requests comments and evidence regarding . . . [w]hether OSHA should define [']employee representative[’] and, if so, whether the agency should specify that non-union employees can designate a non-employee third-party (e.g., a safety and health specialist, a worker advocacy group, or a community organization) to provide expertise and input on their behalf." *See* 89 FR at 70775. In this rule, "employee representative" should be defined in such a way to ensure that any representatives accompanying OSHA CSHOs during heat injury or illness related inspections have relevant technical expertise about heat illness. This should not include general community organizers, union representatives, or attorneys, but rather individuals with specialized credentials, such as a Certified Industrial Hygienist.

Q. OSHA Should Expand the Proposed "Sedentary Activities" Exemption

OSHA has proposed an exemption for sedentary work activities in indoor work areas that involve some combination of sitting, occasional standing and walking for brief periods, and occasional lifting of objects weighing less than ten pounds. *See* 89 FR at 71069. The exemption is intended to apply to work environments such as offices, where employees perform sedentary tasks for the majority of the workday. According to OSHA, "occasional" refers to activities performed up to one-third of the workday. However, these activities could only be performed for brief periods of time over the course of the day for the exemption to apply. *See* 89 FR at 70770-70771.

The restriction limiting the exemption to occasional lifting of objects weighing less than 10 pounds is overly restrictive and does not account for the realities of common office tasks. Regular workplace activities often require lifting objects heavier than 10 pounds, even if such tasks are rare and brief. For example, a standard 24-pack of 12-ounce water bottles weighs more than 20 pounds. If an office employee lifts such a pack of water from the floor to a counter, even just once, the exemption would no longer apply, despite the activity being brief and infrequent. Many standard eight-cup coffee makers weigh more than 10 pounds. Lifting such an appliance, whether for cleaning or repositioning, would again disqualify the activity from the exemption. A single ream of copy paper weighs approximately five pounds, so carrying two reams at once – an efficient and common practice for restocking office supplies – would exceed the weight limit, and therefore, would be subject to the proposed rule. Infrequent activities like this should not disqualify an employee or workplace from being exempt under the proposed standard.

Accordingly, the weight limit for occasional lifting should be increased to a more practical threshold to better align with real-world indoor workplace practices. By adopting a more reasonable weight limit, the proposed standard would ensure that the exemption remains applicable to true sedentary work environments without imposing unnecessary constraints on routine, low-exertion activities.

R. OSHA Should Clarify in Enforcement Guidance That the Rule Applies Only to an Employer's Own Employees

The NPRM package references "employee" over 2,000 times without clearly specifying for which/whose employees an employer is responsible. Employers should be responsible solely for ensuring compliance with the standard vis-à-vis their own employees. Extending this responsibility to employees of other employers is both impractical and creates unnecessary legal and logistical challenges, including potential joint employer issues.

Many of the requirements outlined in the standard, such as providing rest breaks, adjusting work schedules to avoid heat exposure, and implementing gradual acclimatization protocols, are directly tied to an employer's authority to control their own workforce, including but not limited to their employees' work schedules. Employers generally do not have authority over the work schedules, break times, or job assignments of other employers' employees, including contractors, subcontractors, or workers from different organizations operating at the same worksite. Without this control, enforcing compliance with a heat illness prevention standard for non-employees would be impossible. At multi-employer worksites, therefore, enforcing the standard across employees of multiple employers would lead to confusion, inefficiency, and conflicts over responsibility.[11] Each employer must have the autonomy to manage compliance for their own workforce without interference or overlap. Accordingly,

[11] The Coalition is aware of OSHA's Multi-Employer Citation Policy ("MECP"). However, as discussed in this section, it would be misguided for OSHA to apply the MECP for purposes of enforcing any final heat injury or illness prevention standard. Additionally, as mentioned above, the Coalition notes that OSHA should proceed cautiously with respect to applying policies like the MECP, which are likely to come under greater scrutiny given the decision in the Supreme Court's *Loper Bright*.

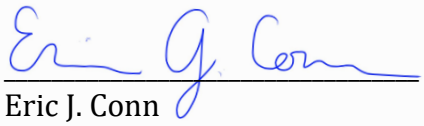
the standard should explicitly state that each employer is responsible only for enforcing compliance with the standard with respect to their own employees.

IV. CONCLUSION

The Coalition will remain deeply involved in this rulemaking process, and will do our best to provide information, data, thoughts, and insights based on our members' existing programs and work practices, and our views about how to best ensure U.S. workers are adequately protected from the hazards of heat exposure. OSHA similarly will no doubt continue to devote significant of its scarce personnel and other resources to this effort. This exercise should not be in vain. OSHA should, therefore, proceed carefully in this rulemaking.

The Coalition respectfully urges OSHA to take into consideration and adopt the recommended changes proposed above. We appreciate this opportunity and your consideration of these important issues. If you have any questions or need further information, please do not hesitate to contact me at econn@connmaciel.com/202.909.2737.

Sincerely,



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